Study on Assessing the Socio-economic Characters of Banana Cultivating Farmers in Coimbatore and Erode Districts of Tamil Nadu

M. Malarkodi1*, V. M. Indumathi2, K. Divya3, B. Navaneetham4 and B. Krishnakumare1

1Directorate of Agri-Business Development, Tamil Nadu Agricultural University, Coimbatore, India.  
2Krishi Vigyan Kendras, Vamban, India.  
3Agricultural Engineering College and Research Institute, Tamil Nadu Agricultural University, Madurai, India.  
4Karunya University, Tamil Nadu Agricultural University, Coimbatore, India.

Authors’ contributions

This work was carried out in collaboration among all authors. Author MM designed the study, performed the statistical analysis, wrote the protocol and wrote the first draft of the manuscript. Authors VMI and KD managed the analyses of the study. Authors BN and BK managed the literature searches. All authors read and approved the final manuscript.

Article Information

DOI: 10.9734/CJAST/2020/v39i3631069  
Editor(s):  
(1) Dr. Orlando Manuel da Costa Gomes, Lisbon Accounting and Business School (ISCAL), Lisbon Polytechnic Institute, Portugal.  
Reviewers:  
(1) Tazdik Patwary Plateau, Bangladesh University of Engineering and Technology, Bangladesh.  
(2) Saravanan Gengan, K L University Hyderabad, India.  
Complete Peer review History: http://www.sdiarticle4.com/review-history/63028

Received 05 September 2020  
Accepted 11 November 2020  
Published 28 November 2020

ABSTRACT

Banana is a staple fruit in almost every Indian meal and also an important commercial crop that adds a considerable amount of dollar in country’s export revenues column. But in recent years the share is in decreasing trend due to some inevitable reasons. So understanding factors influencing banana exporting farmer’s especially among small and marginal farmers is a necessary one. This study tries to understand the socio-economic characteristics of banana farmers in Coimbatore and Erode district. 120 samples were selected randomly and well-structured interview schedule is used to collect data. The results show that most of the farmers were in the age group of 41 – 50 (32.50%) and are illiterate (28.33%) with farm experience of about 26-35 years (35%). Sample
farmers largely live as a nuclear family (69.17%) and follow agriculture as a sole occupation (36.67%). Most of the sample farmers were marginal farmers (40.8%) with the annual income range of about 1 lakh to 3 lakh (35.83%). As many of them are small and marginal farmers and are illiterate, it is suggested to conduct number of training programs, tour visit and exhibition to increase the awareness about the export of banana.

Keywords: Small and marginal farmers; export; attitude and socio-economic characters.

1. INTRODUCTION

Banana (Musa sp.) has its origin in the tropical region in South East Asia. Banana is a nutritious gold mine, rich in Vitamin B6, potassium and also is a great source of fiber. In 2007-08, the area under banana was 533 (’000 ha) and produced 17647 (’000 Mt) with the productivity of 33.1 (Mt/ha). And it has been raised by 847 (’000 ha) with the production of 29285 (’000 Mt) and productivity about 34.5 (Mt/ha). (Source: India Stat). India ranks first in production of banana and it is also an important commercial fruit crop fetching considerable export returns. India’s exports amounted to USD 48 million in 2017, which declined from 60 million USD in 2016. (Source: Export Genius). So understanding the Socio economic factors is important to know the economic activity of the farmers in banana cultivation. In this vein, this study tries to analyze the socio-economic characteristics of banana growing farmers.

2. REVIEW OF LITERATURE

Priyanka Kumari et al. [1] stated that the illiteracy (11.54 per cent) was found in marginal and small category growers only. Illiteracy percentage in semi-medium and medium and large was zero. Among marginal and small category of banana grower highest percentage (19.23) in primary education. In terms of graduate and above level of education, medium size growers had highest (33.33 per cent) proportion while the semi-medium farmers with 24.0 per cent. The higher secondary level was highest (36.0 per cent) under semi-medium category while high school (38.46 per cent) on marginal and small category.

Shah Kamal et al. [2] concluded that the average family sizes were 6.78, 4.71, 6.67 and 5.80 for small, medium, large and all farms respectively. About 50.93% farm owners belong to age group of 31 to 40 years. Only 12.67% of banana growers were illiterate. About 62% of farm owners dealt with agriculture as their main occupation. The overall average farm size was 237.29 decimal. However, for small, medium and large farms, the farm sizes were 83, 224 and 405 decimals respectively. Family income derived from non-farm sources was greater than those from farm income.

About 20.77% of the sample household heads were not attained any formal education. However, 50.09% and 19.47% had joined primary and secondary school respectively while as 9.74% are post secondary trained. This increased educational entitlement has also improved the ability to acquire new idea in relation to improved production of the households, due to that the educational background of the sample household heads is believed to be an important feature that determines the readiness of the household heads to accept new ideas and innovations.

Amen Diakon Debebe and Desalegn Dagne [3]. Age of farmers is often hypothesized to have an impact upon adoption of Sustainable Agriculture Practices (SAPs). Some studies found farmers’ age had a significant influence on the adoption of SAPs in Nguyen and Chinawat Yapwattanaphuna, [4].

Formal education of farmers is expected to associate with the adoption of Sustainable Agriculture Practices. Numerous studies found that education of farmers tends to positively influence their decision to adopt SAPs Ngombe et al. [5].

3. MATERIALS AND METHODOLOGY

The primary data was collected from banana growers in two districts of Erode and Coimbatore in Western zone of Tamil Nadu. These districts were selected purposively as they hold a higher share in total area covered under banana farming. The respondent farmers were selected randomly from villages (three villages from each selected blocks) wherein banana farming was in operation. A sample of total 120 banana growing farmers was drawn randomly with 10 farmers
from each village. The data were collected from these farmers by personal interview method using well-structured questionnaire during January to March 2018.

4. RESULTS AND DISCUSSION

The result furnished in the Table 1 showed that majority of the sample farmers 32.50% belonged to the age group of 41-50 years, followed by 26.61% and 25.00% of the sample farmers were in the category group of 31-40 years and more than 50 years respectively. A meager of 15.83% was found in the age group of fewer than 30 years. Hence, it could be concluded that majority of the sample farmers in the study area were a middle-aged group. Since most of the respondents are middle-aged persons, there is a wide scope to encourage the younger farmers in banana export business. Similar results were in line with Ramesh et al. [6] in their study of farmer’s attitude towards grape cultivation.

Analysis on the educational status above Table 1 showed that majority of the sample respondents (28.33%) were illiterates, followed by 25.83% of the respondents had secondary education, 19.17% of them had primary education and 17.50% of them had higher secondary. Only 9.17% of the respondents had completed graduation. Similar results were observed from Mahalakshmi et al. [7] on analysis of banana cultivation in Theni district. As the majority of the respondents were illiterates; so the respondents should be given necessary training to educate farmers.

Table 1. Socio-economic characteristics of the profile farmers

| Factors                        | Category               | No. of respondents | Percentage |
|--------------------------------|------------------------|--------------------|------------|
| Age (years)                    | Less than 30           | 19                 | 15.83      |
|                                | 31-40                  | 32                 | 26.67      |
|                                | 41-50                  | 39                 | 32.50      |
|                                | Above 50               | 30                 | 25.00      |
|                                | Total                  | 120                | 100.00     |
| Education                      | Illiterate             | 34                 | 28.33      |
|                                | Primary                | 23                 | 19.17      |
|                                | Secondary              | 31                 | 25.83      |
|                                | Higher Secondary       | 21                 | 17.50      |
|                                | Graduate               | 11                 | 9.17       |
|                                | Total                  | 120                | 100.00     |
| Experience (In years)          | Less than 15           | 27                 | 22.50      |
|                                | 16-25                  | 38                 | 31.67      |
|                                | 26-35                  | 42                 | 35.00      |
|                                | Above 35               | 13                 | 10.83      |
|                                | Total                  | 120                | 100.00     |
| Family Type                    | Nuclear                | 83                 | 69.17      |
|                                | Joint                  | 37                 | 30.83      |
|                                | Total                  | 120                | 100.00     |
| Occupation                     | Agriculture alone      | 44                 | 36.67      |
|                                | Agriculture + Own business | 20            | 16.67      |
|                                | Agriculture + Allied Activities | 31      | 25.83      |
|                                | Agriculture +Government employee | 25 | 20.83  |
|                                | Total                  | 120                | 100.00     |
| Annual Income                  | Less than 50,000       | 11                 | 9.17       |
|                                | 50,000 – 1,00,000      | 26                 | 21.67      |
|                                | 1,00,000 – 3,00,000    | 43                 | 35.83      |
|                                | 3,00,000 – 5,00,000    | 31                 | 25.83      |
|                                | Above 5,00,000         | 09                 | 7.50       |
|                                | Total                  | 120                | 100.00     |
| Size of Land Holdings (In ac)  | Small (>2)             | 29                 | 24.17      |
|                                | Medium (2-5)           | 49                 | 40.83      |
|                                | Large (<5)             | 42                 | 35.00      |
|                                | Total                  | 120                | 100.00     |
Exploring the experience level of farmers on banana cultivation showed that 35.00% of the sample farmers had 16-25 years of farming experience followed by 31.67% and 22.50% of them had 26-35 years and less than 15 years of farming experience respectively. It could be concluded that the sample farmers would have enough experience on the various aspects of banana cultivation.

Studying on family type reveals that 69.16% of the sample respondents were living as a nuclear family, and only 30.83 percent belonged to joint family type in farming households across different districts.

The occupational status study showed that 36.67% of the farmers were doing agriculture alone as their major occupation, followed by 25.83% of them in agriculture and allied activities and 20.83% of them in agriculture and as government servants. Though, agriculture being commercialized due to problems such as shortage of water, diversification of labour, agriculture has been practiced as lone occupation by farmers. Similar findings were also found in the studies of Persis [8] and Sathiyakala [9].

Annual income results depicted in the Table 1 showed that 35.83% the sample respondent's annual income ranged from 1,00,000-3,00,000, followed by 25.83% of them within the range of 3,00,000-5,00,000, 21.67% of the respondent's in 5,00,000-1,00,000 range and only 9.17% of the respondent's with income less than 50,000. Only 7.50% of the respondent's income was above 5,00,000. It could be inferred that the majority of the sample farmers were under medium income group followed by high and low-income group respectively. Respondents whom involved in animal husbandry and its allied activities helps them in earning medium to higher income. This might be the reason to get medium and higher income. Elakkia [10] and Sathiyachitradevi [11] concluded the similar results.

It could be seen from the Table 1 that 40.83% of the sample respondents size had a medium size of land holdings (2.5 to 5.0 ac), followed by 35.00% of the respondents possessed more than 5 ac of land and 24.17% of them had 1.0 to 2.5 ac of land. Since a major share of the farmers were medium size landholding farmers, there is a wide chance to encourage cooperative farming among the respondents which will encourage them to share their knowledge and experience.

The results are in conformity with Balasubramani [12] who also reported that the majority of banana farmers belonged to medium and large size categories.

5. CONCLUSION

Thus, from the study, it is understandable that many of the banana growing farmers are of medium aged, illiterate and more importantly had small or marginal level of land holdings. Since many of them are illiterate hands-on exercise on steps involving in export, tour and training session can be conducted to increase the awareness on export among banana growing farmers. As many of them practicing agriculture as their sole occupation promoting export among them will help in increasing their income level to a considerable level.

CONSENT

As per international standard or university standard, respondents’ written consent has been collected and preserved by the author(s).

COMPETING INTERESTS

Authors have declared that no competing interests exist.

REFERENCES

1. Priyanka Kumari KM, Singh, Santosh Kumar Atre. Problems and constraints in banana cultivation: a case study in Bhagalpur District of Bihar. International Journal of Current Microbiology and Applied Sciences. 2018;7(07):1752-1759.
2. Md. Shah Kamal, Md. Arshad Ali, Md. Ferdous Alam. Socio-economic status and problems of banana growers in Bangladesh. International Journal of Natural and Social Sciences. 2014;1:91-99.
3. Amen Diakon Debebe, Desalegn Dagne. Analysis of socio-economic factors affecting banana production: Evidences from lowlands of Uba Debretsehay Woreda, Gamo Gofa Zone, SNNPRS. Journal of Economics and Sustainable Development. 2018;9(9):1-7.
4. Nguyen Van Thanha B, Chinawat Yapwattanaphuna. Banana farmers' adoption of sustainable agriculture practices in the vietnam uplands: the Case of Quang Tri Province. Agriculture and
5. Ngombe J, Kalinda T, Tembo G, Kuntashula E. Econometric analysis of the factors that affect adoption of conservation farming practices by smallholder farmers in Zambia. Sustainable Development. 2014;7:124-138.

6. Ramesh Singh P, Chahal V. Attitude of farmers towards grape cultivation and export. Indian Journal of Agricultural Sciences. 2015;85(4):592-595.

7. Mahalakshmi VKS, Maneesh P, Syed Ali Fathima. J. An Analysis of Banana Cultivation in Theni District, Tamil Nadu. Indian Journal of Economics and Development. 2016;4(9):1-12.

8. Persis V. Retrospects and prospects of farm mechanization in tribal agriculture. Unpub. M. Sc. (Ag.) Thesis, AC&RI, TNAU, Coimbatore; 2007.

9. Sathiyakala P. Developing training strategy to rural youth on rice-based farm implements. Unpub. M. Sc. (Ag.) Thesis, AC&RI, TNAU, Coimbatore; 2008.

10. Elakkia N. Training needs of vegetable growers on organic farming practices in Western Zone of Tamil Nadu. Unpub. M. Sc. (Ag.) Thesis, AC & RI, TNAU, Coimbatore; 2007.

11. Sathiyachitradevi M. Spread and acceptance of low cost technologies of major crops by resource poor farmers. Unpublished M. Sc. (Ag.) Thesis, Agricultural College and Research Institute. TNAU, Coimbatore; 2006.

12. Balasubramani N, Swathi Lekshmi P, Chandrakandan K. A study on the yield gap analysis in paddy, in the Erode district of Tamil Nadu. Asian Journal of Extension Education. 2005;24:44-51.