

# Marketable Surplus of Banana in Dindigul District of Tamilnadu

Selvaraj N\*

Assistant Professor of Commerce, Saraswathi Narayanan College, Madurai, India

## Abstract

Banana may be a significant food crop and its greater economic importance among the food crops, since it's one among the leading commodities in agricultural exports. Hence, the assembly performance of the crop is of critical importance in improving the efficient use of resources. Farmers raise the crops with a hope of receiving fair returns for his or her hard labour. For this, they depend on the market conditions, which aren't very conducive to fulfill their hopes and expectations. Forced sales, multiplicity of market charges, malpractices in unregulated markets and superfluous middlemen are the issues faced by the farmers. These problems of selling get further added up by the special features of agricultural commodities namely, their inelastic demand, seasonality in supply, spatially scattered production, bulkiness and perishability. The study covered to spot the determinants of marketable surplus in banana. To review the issues faced by the banana cultivators within the production and marketing of banana. During this study area farmers, were found to not attach importance to fertilizers and pesticides. The farmers are cognizant of their importance but thanks to insufficient funds, they're unable to use fertilizers and pesticides as per the recommendations of the agricultural scientists. Besides, per annum the prices of fertilizers and pesticides keep increasing. Hence, it's suggested that costs of fertilizer and pesticides should be reduced, or they'll be applied to farmers at subsidized rates.

**Keywords:** Marketable surplus • Farmers • Determinants • Marketing channel • Middlemen and Village Traders

## Introduction

In the wake of trade liberalization and globalization, the agriculture sector in India faces an uphill task of worldwide competition, reducing unemployment and enhancing income within the rural areas. This task has got to be accomplished in milieu of stagnant productivity across crops and other agricultural enterprises, declining investments in agriculture, silent neglect of agricultural research and in particular increasingly degrading natural resources base. Diversification of agriculture towards selective high value crops has been recommended together of the strategies for meeting these challenges.

## Statement of the Problems

Banana may be a significant food crop and its greater economic importance among the food crops, since it's one among the leading commodities in agricultural exports. Hence, the assembly performance of the crop is of critical importance in improving the efficient use of resources. The value of production and net returns obtained per unit would determine the profitability of the crop. The profitability of an enterprise depends upon the efficient use of the resource in production. Further, the study of cost and returns structure of banana would help the farmers in ensuring proper resource combinations to reinforce the banana yield, thereby increasing the profits.

Though production is that the initiation of the developmental process, it could provide less gain to the producers unless there exists an efficient marketing system. Agricultural marketing is therefore, of greater importance. Commercialization of agriculture has further increased the importance of selling. Farmers raise the crops with a hope of receiving fair returns for his or her hard labor. For this, they depend on the market conditions, which aren't

very conducive to fulfill their hopes and expectations. Forced sales, multiplicity of market charges, malpractices in unregulated markets and superfluous middlemen are the issues faced by the farmers. These problems of selling get further added up by the special features of agricultural commodities namely, their inelastic demand, seasonality in supply, spatially scattered production, bulkiness and perishability.

## Objectives of the Study

The most aim of the study is to analyze marketing channels of banana in Dindigul district. The precise objectives are:

1. To review the characteristics of the sample farmers within the study area namely Dindigul district.
2. To spot the determinants of marketable surplus in banana.
3. To review the issues faced by the banana cultivators within the production and marketing of banana.

## Scope of the Study

This study is an effort to analyze the resource use efficiency and various issues related to it. The results of the study would guide in reallocation of scarce resources with a view to extend the economic efficiency of banana farming within the study region.

The issues encountered in production would pave way for furthering research efforts within the desired direction. An in depth analysis of selling of banana would identify the ways and means of augmenting the producer's share in consumer's rupee. Hence, the results would be useful particularly to policy decisions on production and marketing for the advantage of the producers and therefore the ultimate consumers.

## Limitations

This study had however some important limitations. First, it's a micro level study covering the main banana producing taluks and villages. Hence, the matter of generalization was indeed real and formidable even through such generalization is desired and attempted for.

\*Address for Correspondence: Selvaraj N, Assistant Professor of Commerce, Saraswathi Narayanan College, Madurai, India; Tel: + 919843727975, Email: selvaraj\_narayanan@yahoo.com

**Copyright:** © 2021 Selvaraj N. This is an open-access article distributed under the terms of the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited.

Second problem relates to the info. Quantitative information needed during this study was admittedly difficult to get and it had been often impossible to work out the reliability of the secondary and even primary data. Too often agencies that collected and distributed agricultural data didn't use consistent definitions and methods and sometimes presented aggregated data without listing the characteristics and limitations of knowledge. Primary data could even be incorrect or biased as producers were frequently found not very communicative about costs, income and costs. They didn't maintain records of transactions and data supported their memory would be subject to recall bias. Middlemen were even less communicative and weren't much cooperative.

Finally, the sample was small to assist policy decisions but it had been large enough to point general trends and characteristics of the banana market. At the best the study would reveal the travails of a tutorial effort in unraveling the vicissitudes of market problems and individual efforts to assemble and analyze information for deriving meaningful conclusions. With all the restrictions for generalization, the results might be used as indicative to generalize with caution.

## Review of Literature

Nassul Kabunga, Thomas Dubois and Matin Qaim [1] analyzed within their article that the yield effects of tissue culture (TC) banana technology in the Kenyan small farm sector, using recent survey data and an endogenous switching regression approach. TC banana plantlets, which are free from pests and diseases, are introduced in East Africa since the late 1990s. Although field experiments show significant yield advantages over traditional banana suckers, a rigorous assessment of impacts in farmers' fields remains outstanding. A comparison of mean yield levels between TC adopters and non-adopters in our sample shows no significant difference. However, we discover evidence of negative selection bias, indicating that farmers with less than average yields are more likely to adopt TC. Controlling for this bias leads to a positive and significant TC net yield gain of seven. We also find that TC technology is more knowledge intensive and more aware of irrigation than traditional bananas. Simulations show that improving access to irrigation could lift TC productivity gains to above 20%. The analytical approach developed and applied here and therefore the finding of negative selection bias can also be relevant for the evaluation of other agricultural technologies

Mungai et al., [2] stated that the banana industry in Kenya is threatened by the presence of Banana Streak Virus (BSV). The Jomo Kenyatta University of Agriculture and Technology (JKUAT) commercial banana laboratory uses tissue culture (TC) technique for mass propagation of plantlets which are free from most disease causing organisms for commercial purposes. To gauge in vitro protocols for production of Banana Streak Virus-free TC banana planting materials for farmers, leaf samples were collected from Thika, Kisii, and JKUAT orchards for indexing. The corms were taken through the TC procedure up to the 2nd subculture stage after which they were subjected to 3 virus elimination techniques; chemotherapy, meristem tip culture and thermotherapy for evaluation. Indexing for BSV using PCR BSV indicated 90, 80 and 40% infection levels for Kisii, JKUAT and Thika orchards, respectively. For chemotherapy evaluation, concentrations of between 10 and 40 mg/l were used leading to 0 to 90% virus elimination. For thermotherapy, 27°C (control), 32°C, 34°C, 36°C and 38°C for 10 days, resulted in 0 and 90% virus elimination. Meristem tip culture at 1, 2, 3, 4 and 5mm (control) gave between 0 and 90% virus elimination, respectively. The study indicates that BSV are often eliminated using chemotherapy, thermotherapy and meristem tip culture. Chemotherapy using 2-hydroxybenzoic acid at 20mg/l is often wont to eliminate BSV up 90%. it's also easy to implement since it's incorporated into the medium.

Anna Folke Larsen [3] investigated that the role of networks for diffusion of improved banana cultivation introduced by an agricultural project in Tanzania. Within the existing literature on networks and technology adoption, network effects are interpreted as learning. it had been showed

that a farmer's network can affect the adoption of a replacement crop not only through social learning, but also by providing necessary inputs for adoption. the straightforward model was found out for adoption and derives similar model implications for the supply of either inputs or information through the network. Empirically, it had been found that a farmer is 37 percentage points more likely to adopt banana cultivation if there's a minimum of one project participant growing bananas within the farmer's network. The three falsification tests was wont to support causal interpretation of the network effect on adoption. Provision of inputs (banana seedlings) through networks is found to play a crucial role for the network effects found.

Brian Machovina and Kenneth J. Feeley [4] in their study used the Species Distribution Modeling (SDM) to map areas predicted to be suitable for commercial banana production in Central and northwestern South America. Using the downscaled climate projections for 2060 from seven leading global climate models we then predict the geographical shifts in areas suitable for banana production. This process was for conventional and organic banana production. Approximately half the prevailing conventional plantations included within the analysis are located in areas predicted to become unsuitable for banana production by 2060. The general extent of areas suitable for conventional banana cultivation is predicted to decrease by 19%, but all countries are predicted to take care of some suitable areas [5]. The extent of areas suitable for organic banana cultivation is predicted to just about double due primarily to climatic drying. Several countries (e.g., Colombia and Honduras) are predicted to experience large net decreases within the extent of areas suitable for banana cultivation. Some countries (e.g., Mexico) are predicted to experience large net increases within the extent of suitable areas [6]. The shifts within the location of areas which will be suitable for banana cultivation are predicted to occur mainly within areas outside of protected areas which are already under agricultural production.

## Study of the Period

A pre survey was conducted within the study area during April 2019 so as to check the interview schedule and therefore the data associated with the agricultural year 2019-20 were collected.

### Collection of knowledge

So as to urge an insight into physical and economic environments of the blocks, a reconnaissance survey of the district and therefore the blocks were undertaken. The first data required for the study were collected through personal interview with the assistance of pre-tested and comprehensive interview schedule. Two separate schedules were prepared, one for the farmers and therefore the other for the functionaries. The schedule for the farmers covered aspects like family size, educational status, assets position, cropping pattern, availability of land, labour, machine and animal power, cost of cultivation of banana, input - output relationships, net return from the crops, problems in production and method of selling, problems encountered in marketing. Within the marketing schedule, operation of the merchants, expenses incurred in marketing and problems in marketing were collected from the market functionaries. Besides information about the value incurred and profit realized by the various market functionaries were also collected for understanding the cost and price spread. The info collected were tabulated, processed and subjected to statistical analysis.

To understand the essential agricultural system within the study area, data on soil condition, land utilization, cropping pattern, agro climatic features and other available facilities were collected from published and unpublished records available at various government and quasi government departments

### Marketable Surplus of Banana

Marketable Surplus is that the estimated quantity to be marketed by producer and is received after providing some percentage for various items of retention. These things include provision for seed purpose, payment of wages in a similar way, domestic consumption and therefore the like. Hence, this section makes an effort to analyze the retention and marketable surplus of the chosen farmers producing banana. Further the functional analysis was

made to spot the determinants of marketable surplus of banana.

### Marketable Surplus and Retention

The marketable surplus and percentage of retention of the chosen farmers producing banana are furnished in Table 1.

The total production in sample farms was 47.85 quintals with retention of 4.78 quintals per acre. The variation within the percentage of marketable surplus to production among the group was found to be minimum. The utmost was 92.26 per cent in small farms and therefore the minimum was 87.61 per cent in large farms.

### Purpose-wise Retention

The farmers retain a particular portion of banana harvested for the domestic use, seeds and other purposes like giving to relatives, friends and labourers. The analysis of retention would offer a thought of marketable surplus of banana. The purpose-wise retention of banana within the selected farms is presented in Table 2.

It is observed from table 2 that farmers have retained 1.91 quintals to 2.87 quintals of banana per acre. The number of banana retained for several purposes by small and enormous farmers constitutes 7.74 and 12.39 per cent respectively of the entire production of banana. Out of total retention, 80.34 per cent is for domestic use and 19.66 per cent is for other purposes. The marketable surplus is that the difference between the entire production and total retention per acre. The marketable surplus creates its own effect on the marketable decisions of the farmers.

### Determinants of Marketable Surplus

So as to spot the determinants of marketable surplus of banana within the study area, a Multiple rectilinear regression Model of the subsequent type was used for this study:

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + U$$

Where,

Y = Marketable surplus per farm in quintals

X1 = Area under banana in acres

X2 = Family size

X3 = Price received in rupees per quintal

U = Error term

$\beta_0, \beta_1, \dots, \beta_3$  are the parameters to be estimated. The above 1 model was estimated by the tactic of method of least squares and therefore the results are furnished in Table 3.

According to Table 3, R2 value is indicates that each one the three explanatory are jointly liable for 81 per cent variation within the marketable surplus of banana expressed in quintals per farm. Further, R2 value indicates that the function was considered to be an honest fit and therefore the interpretation was made for the many variables only. The F value shows that the fitted regression is statistically significant at one per cent level.

Out of three variables included within the regression model, the world under banana and price of banana were statistically significant at the 5 per cent level which was also found to be positively associated with the marketable surplus. It indicates that an acre increase in area under banana cultivation, 'other things being equal' would increase the marketable surplus by 75.69 quintals. Similarly, one rupee increase in price of banana per quintal would end in a rise of 0.79 quintals of marketable surplus per farm.

Thus, it's going to be concluded from the analysis that the world under banana was found to be highly significant and it had greater influence on marketable surplus compared to the variable, price per quintal.

### Marketing Channels

The marketing channel is that the route taken by the title to the products as they move from producer to ultimate consumer. Marketing channels are combinations of agencies through which the vendor who is usually, though not necessarily manufacturers, markets his product to the last word consumer. Parashwar has defined market channel because the vehicle of selling system, the unit within which all marketing activity takes place. Bilgrani has defined market channel as a distributor that's involved in direct and indirect transfer of title to a product because it moved from producers to consumers or industrial users. Within the present study, marketing channel refers to the gathering of agencies and movements related to the exchange of banana from the first producer to the last word consumer.

The banana in Dindigul district is sold through middlemen namely commission agents, village traders, wholesalers cum retailers and commission agents. The marketing channels identified are,

Channel I = Producer – Village Traders – Consumer

**Table 1.** Marketable Surplus of Banana (Quintals per Acre).

Sl. No.	Size of Farmers	Total Production	Total Retention	Total Marketable Surplus	Percentage to Total Production
1.	Small	24.69 (100)	1.91 (7.74)	22.78 (92.26)	92.26
2.	Large	23.16 (100)	2.87 (12.39)	20.97 (87.61)	87.61
3.	Overall	47.85 (100)	4.78 (9.99)	43.07 (90.01)	90.01

Source: Primary data.

Note: Figures in brackets represent percentages to total.

**Table 2.** Purpose-Wise Retention of Banana in Sample Farms (Quintals per acre).

Sl. No.	Purpose	Small Farmers	Large Farmers	Total
1.	Domestic use	1.56 (81.68)	2.28 (79.44)	3.84 (80.34)
2.	Others	0.35 (18.320)	10.59 (20.56)	0.94 (16.66)
	Total Retention	1.91 (100)	2.87 (100)	4.78 (100)

Source: Survey data.

Note: Figures in parentheses are percentages of the total.

**Table 3.** Determinants of Marketable Surplus of Banana.

Number of Observations	Regression Coefficients				R <sup>2</sup>	F
	$\beta_0$	$\beta_1$	$\beta_2$	$\beta_3$		
300	3.51	75.69* (5.033)	-0.49 (-0.893)	0.81* (2.903)	0.09	29.14**

Source: Computed.

Note: Figures in parentheses are the t-values.

\* Indicates that the coefficients are statistically significant at the 5 per cent level.

\*\*F-value is statistically significant at the 1 per cent level.

**Table 4.** Middlemen Chosen by the Sample Farmers.

Sl. No.	Middlemen	Small Farmers	Large Farmers	Total
1.	Village Traders	14 (7.37)	14 (12.73)	28 (9.33)
2.	Wholesaler cum Retailers	30 (15.79)	28 (25.45)	58 (19.33)
3.	Commission Agents	146 (76.84)	68 (61.82)	214 (71.34)
	Total	190 (100)	110 (100)	300 (100)

Source: Primary data.

Note: Figures in parentheses are the percentages of the total

Channel II = Producer – Wholesaler cum Retailers– Consumer

Channel III = Producer- Commission Agent – Retailer - Consumer.

The farmers within the study area have chosen only the commission agents in most cases because the main intermediary. Eighty per cent of the entire produce is skilled the commission agents and wholesalers cum retailers.

**Choice of the Middlemen**

It's not only the amount of days stored but also the agent or the merchant middlemen through or to whom the produce sold influences internet price realised by the farmers. Table 4 shows the various sorts of middlemen through whom the sample farmers are selling their banana.

It is observed from Table 4 that 71.34 per cent of farmers sold their produce through the commission agents within the study area. The remaining 19.33 and 9.33 per cent sold their produce through wholesaler cum retailers and village traders respectively. The commission agents are the foremost preferred middlemen by the tiny farmers than the massive farmers due to the facilities offered by them. The massive farmers are more or less equally distributed altogether the three channels.

**Sale to Village Traders**

The amount of farmers selling and therefore the quantity of banana sold through village traders are analyzed and presented in Table 5.

It is seen from Table 5 that in total, 28 farmers are selling their banana through the village traders. Out of 28 farmers, 16 are small farmers and therefore the remaining 12 are large farmers. The odds of quantity sold to the marketed surplus to the group concerned are 16.72 and 5.96 per cent of their respective totals.

So as to rank the explanations for selling banana through various middlemen like village traders, commission agents and wholesalers and retailers, the Garrett's Ranking Technique was adopted.

The respondents got the explanations and asked to rank them consistent with their choice. The order of merit given by the respondents was converted into ranks by using the formula:

$$\text{Per cent Position} = \frac{100 (R_{ij} - 0.50)}{N_i}$$

Where,

R<sub>ij</sub> = Rank given for (ith factor by jth farmer)

N<sub>i</sub> = Number of constraints ranked by jth households.

The per cent position of every rank thus obtained was converted into scores using the table given by Garrett. The many individuals representing each reason were added together and divided by the entire number of farmers for whom the scores were added. The mean scores for all the explanations were analyzed within the ascending order, ranks assigned and therefore the important factors identified.

The explanations for selling the banana through village traders are analyzed and presented in Table 6.

Table 6 shows that among the explanations to sell the banana through village traders, no transport cost ranks first followed by no price difference, no commission charges, no storage cost, easy method of sale, future practice and cash.

**Wholesaler cum Retailers**

The number of farmers and quantity of banana sold to the wholesalers cum retailers are analyzed and presented in Table 7.

It is observed from Table 7 that 38.10 and 9.23 per cent of huge and little farmers sold their produce through wholesaler cum retailers respectively. The typical quantity of banana sold per acre by small and enormous farmers is 4.30 and 6.03 quintals respectively. The share to the marketed surplus of the group concerned namely small and enormous farmers is eighteen.88 and 29.72 per cent respectively.

The explanations for selling banana through wholesaler cum retailer are ranked and presented in Table 8.

Table 8 shows that among the explanations, no commission charge ranks first followed by the explanations namely, easy method of sale, future practice and more off-take are ranked II, III and IV whereas the Vth and VIth ranks are assigned to reasons namely better price and credit facilities.

**Sale to Commission Agent**

The foremost popular and dominant channel within the district is that the commission agent. The commission agent advances loans with or without interest to the farmers whenever they have it. The commission agent recovers the whole amount from the farmers at the time of sale. The amount of farmers and quantity of banana sold through commission agent are

**Table 5.** Number of Farmers and Quantity of Banana Sold through Village Traders (Tonnes per acre).

Sl. No.	Size of Farmers	Number of Farmers	Percentage to Group Concerned	Average Quantity of Banana sold (in quintals per acre)	Percentage of marketed surplus of the group concerned
1.	Small	16	8.21	3.81 (8.85)	16.72
2.	Large	12	6.15	1.21 (2.81)	5.96
3.	Overall	28	9.33	5.02 (11.66)	11.66

Source: Primary data.

Note: Figures in parentheses are the percentages of the total

**Table 6.** Reasons for Selling Banana through Village Traders.

Sl.No.	Reasons	Score	Rank
1.	Easy method of sale	52.66	V
2.	No price difference	71.16	II
3.	Long-term practice	44.22	IV
4.	No transport cost	73.11	I
5.	No commission charges	67.15	III
6.	Immediate payment	31.26	VI

Source: Primary data.

**Table 7.** Number of Farmers and Quantity of Banana Sold through Wholesaler Cum Retailers (Tonnes per acre).

Sl. No.	Size of Farmers	Number of Farmers	Percentage to Group Concerned	Average Quantity of Banana sold (in quintals per acre)	Percentage of marketed surplus of the group concerned
1.	Small	18	9.23	4.30 (9.98)	18.88
2.	Large	40	38.10	6.03 (14.00)	29.72
3.	Overall	58	19.33	10.33 (23.98)	23.98

Source: Primary data.

Note: Figures in parentheses are the percentages of the total

**Table 8.** Reasons for Selling Banana through Wholesaler Cum Retailers.

Sl.No.	Reasons	Score	Rank
1.	Easy method of sale	71.66	II
2.	Long term practice	66.24	III
3.	No commission charge	75.14	I
4.	Credit facilities	31.22	VI
5.	Better price	57.13	V
6.	More off-take	62.24	IV

Source: Primary data.

discussed and presented in Table 9.

It is observed from Table 9 that 71.33 per cent of the farmers selected commission agent to sell their produce. Out of the tiny farmers 82.56 per cent sold through the commission agents. Within the case of huge farmers, 50.48 per cent have selected the commission agents. The typical quantity sold per acre varied from 14.67 tonnes to 13.05 tonnes with reference to small and enormous farmers. the odds of quantity sold to marketed surplus are 64.40 and 64.32 per cent of their respective total within the case of small and enormous farmers.

The explanations for the selection of commission agents are presented in Table 10.

Most of the farmers prefer the commission agents as their intermediary because the commission agents provide credit facilities to the farmers whenever they have. Therefore it's ranked first. Other reasons namely immediate cash after sale, better price, high off-take and future practice are ranked II, III, IV and V.

## Suggestions

Heavy wind, flood and incidence of pest and disease end in low yield which badly affect the financial position of the farmers. at the present there's no crop insurance facility for this particular crop. So, the govt should introduce crop insurance scheme for this crop also and it should be made compulsory

**Table 9.** Number of Farmers and Quantity of Banana Sold through Commission Agent (Tonnes per acre).

Sl. No.	Size of Farmers	Number of Farmers	Percentage to Group Concerned	Average Quantity of Banana sold (in quintals per acre)	Percentage of marketed surplus of the group concerned
1.	Small	161	82.56	6.81 (15.81)	64.40
2.	Large	53	50.48	9.52 (22.11)	64.32
3.	Overall	214	71.33	16.33 (37.92)	64.36

Source: Primary data.

**Note:** Figures in parentheses are the percentages of the total

**Table 10.** Reasons for Selling Banana through Commission Agent.

Sl.No.	Reasons	Score	Rank
1.	Availability of credit facilities	79.66	I
2.	Better price	51.43	III
3.	Immediate cash after sale	69.26	II
4.	Long term practice	36.26	V
5.	Higher off-take	41.22	IV

Source: Primary data.

for banana growers to utilize the insurance scheme. Often banana crop was badly suffering from the cyclones and floods within the area. Hence, the affected farmers should get due compensation from the insurance firm because it is completed for paddy lately.

It's suggested that casuarina could also be planted round the banana's place of cultivation as a windbreaker to save lots of the banana plants from lodging thanks to heavy wind.

As banana yields food fibre, fibre production and papermaking from banana pseudostems are commercial possibilities. Hence, it's going to be profitable to established paper, dye from pseudostem juice and crude rope industries in Dindigul district to unravel the agricultural unemployment problem to some extent.

Allied agro-based industries are often established in and round the areas of banana cultivation. Food articles like banana crops, jams, flour and powder are often made up of banana. This may solve the food problem to a substantial extent as within the state of Kerala (India) where majority of individuals consume banana in several forms.

During this study area farmers, were found to not attach importance to fertilizers and pesticides. The farmers are cognizant of their importance but thanks to insufficient funds, they're unable to use fertilizers and pesticides as per the recommendations of the agricultural scientists. Besides, per annum the prices of fertilizers and pesticides keep increasing. Hence, it's suggested that costs of fertilizer and pesticides should be reduced, or they'll be applied to farmers at subsidized rates.

New techniques and scientific farming haven't yet reached this area fully. Agricultural extensive officers should help the farmers in cultivating banana on a scientific basis. So, that the assembly are often increased.

Loans given by the banks to the farmers aren't adequate thanks to the rise within the cost of production. The banks and co-operatives should make necessary arrangements to extend the loan amount to satisfy the need of the cultivators.

## Policy Implications

Agriculture plays a dominant role in accelerating the speed of economic development. Agricultural commodities are produced on a mass scale thanks to technological diffusion in Indian agriculture. During this study, the researcher had acknowledged some major problems faced by the banana-

growing farmers. The researcher has made some suggestions, which can be followed by the govt of Tamil Nadu. the brilliant way forward for the banana grower depends upon his courage to satisfy risks and also adopt modern cultivation practices. Crop insurance, subsidies by the govt, assured water supply; remunerative prices through regulated markets, adequate compensation for loss thanks to heavy wind and pest attack could also be provided by the govt. Such measures would help during large thanks to encourage the cultivation of the banana crop. Since banana cultivation is very labor intensive the govt may encourage banana growers announcing 'manium' (gift) and incentives to bring more land under banana cultivation. This will solve rural unemployment and disguised unemployment to an outsized extent.

## Conclusion

The researcher feels happy and satisfied as she gives the ultimate touches to the present work. She could study a big agricultural problem. Agriculture has been considered the backbone of India's economy and as Gandhi, our esteemed Father of the state wont to say, "India lives in her villages". The contribution made by the vast commercial sector has been one among the most reasons for the emergence of India as a world economic super power. in particular, this is often an area then a true problem. This is often a modest and humble research work, but it'll be useful and increase creative sort of knowledge. There are problems in banana cultivation but because the renowned Management Guru, Peter Drucker says, "Every problem has solution". A couple of suggestions are submitted with optimism. If they're given a try, it'll pave the way for greater success.

## References

- Kabunga N, Dubois T and M. "Yield Effects of Tissue Culture Bananas in Kenya: Accounting for Selection Bias and therefore the Role of Complementary Inputs." *J Agri Econ* 63 (2012): 444-464.
- Mungai G, Ateka E, Nyende A and Miano D. "Evaluation of In Vitro Protocols for Elimination of Banana Streak Virus from Tissue Cultured Explants in Banana Seedling Production." *Current Res Agri Sci* (2015): 81-89.
- Larsen AF. "The network at work: Diffusion of Banana Cultivation in Tanzania", CAM Working Papers from University of Copenhagen." Centre for Applied Micro econometrics (2015).
- Machovina B, Kenneth J, Feeley J. "Climate Change Driven Shifts within the Extent and site of Areas Suitable for Export Banana Production." *Ecological Econ* 95 (2013): 83-95
- Singh L. "Relationship between Apex and first Co-operative selling in Bihar." *The Co-operator* 22 (1984): 245.
- Nayyar H and Ramasamy P. "Globalization and Agricultural Marketing." Rawat Publications, New Delhi (1995).

**How to cite this article:** Selvaraj N. "Marketable Surplus of Banana in Dindigul District of Tamilnadu." *J Entrepren Organiz Manag* 10 (2021): 312.