

## A Study on Production and Marketing Challenges of Betel Leaf Cultivation in Namakkal District Tamil Nadu

**Dr. R. Ravikumar**

Associate Professor & Head  
Department of Economics  
PSG College of Arts & Science  
Coimbatore – 14  
Tamil Nadu

**Mr. A. Munusamy**

Ph.D Research Scholar  
Department of Economics  
PSG College of Arts & Science  
Coimbatore – 14  
Tamil Nadu

**Mr. G. Ezhilarasan**

Assistant Professor &  
Ph.D Research Scholar  
Department of Economics  
PSG College of Arts & Science  
Coimbatore – 14, Tamil Nadu

**Abstract**

The Betel is the leaf of the vine. Betel leaf is a cash crop. In India, it is known as "paan". Betel Leaf cultivation is a type of agricultural activity that provides livelihood to rural farmers. Betel leaves are cultivated in the Cauvery basin areas of Namakkal district. This gives substantial income to the farmers. Namakkal district ranks first in betel leaf cultivation in Tamil Nadu. However on the dark side betel farmers are found to be facing various problems at the production and marketing level. Thus, an attempt has been made through the present study to study the betel leaf growers in Namakkal district of Tamil Nadu. Three blocks were purposively selected based on the highest production of betel leaf to make a sample size of 385. The collected problems were analyzed using Garret's ranking methodology to develop a quantitative position of each problem. The findings show that production and marketing problems are very acute for betel growers. Among the production problems, heavy investment, no research station, no crop loans, excessive disease attack. Similarly, in the case of marketing problems, excessive commission, no regulated sales market, improper payments, improper bidding system etc. were ranked at top. As betel leaf cultivation is the main source of livelihood of the farmers, various policy measures by the central and state governments are urgently needed to overcome the difficulties.

**Keywords:** Agriculture, Betel Leaf, Cultivation, Production, Marketing, Challenges, Livelihood, Policy Measures.

**Introduction**

Betel leaf popularly known as "Paan" in India and the betel vine leaves are in deep green color with heart shape which is widely used in India and the scientific name of betel vine is Piper betleL. Paan belongs to the family of Piperaceae. There are more than 90 varieties of betel vine in the world, of which about 45 are found in India and 30 varieties in West Bengal (<https://www.agrifarming.in> 2023). Betel vine is a perennial, evergreen

climber which grows in tropics and subtropics. Betel leaf is mostly consumed in Asia and elsewhere in the world by some Asian emigrants. Today, betel is grown for local consumption and exports. Major betel leaf growing countries are Sri Lanka, India, Thailand and Bangladesh (<https://apeda.gov.in> 2023).

### **Betel Leaf Cultivation in India**

Betel leaf is grown as a cash crop in southern parts of India, mostly in the states of Andhra Pradesh, Telangana, Karnataka, Kerala, and Tamil Nadu. Betel leaf is also cultivated in Bihar, Assam, Madhya Pradesh, Orissa, Maharashtra, Tripura, Uttar Pradesh, and West Bengal. Betel leaves have good export potential and India exports betel leaves to the neighboring countries. The country has exported 3,440.08 Metric Tonnes of Betel Leaves to the world, worth Rs. 49.68 crores in 2022-23. Major Export Destinations Vietnam, United Arab Emirates, Bangladesh, Myanmar and Bhutan in 2022-23 (<https://www.agrifarming.in> 2023).

### **Betel Leaf Cultivation in Tamil Nadu**

Tamil Nadu is one of the leading betel leaf cultivating state. Classified as a plantation crop, betel leaf occupies two per cent of net cultivated area in the state (**Hasan Banu and SahayaPrincy2019**). In Tamil Nadu betel vine is grown largely along with the river basins on the basis of the districts of Namakkal, Karur, Tanjavur, Dharmapuri, Tiruchirappalli, Madurai, Krishanagiri, Salem, Thuthukudi and Cuddalore. Betel leaf is a lucrative crop as it fetches attractive price in the market. Around 1,560.76 Hectares, more than 24,932.52 Metric Tonnes of betel leaves are cultivated in Tamil Nadu in the year of 2021-2022 (<https://www.tnhorticulture.tn.gov.in> 2022).

### **Betel Leaf Cultivation in Namakkal District**

Production Status of Betel vine in Namakkal District Betel leaves are famous. Due to strength and freshness, betel leaves produced in Namakkal district are regarded as the best in the entire state. Namakkal district is first place in betel leaf production wise. Namakkal District in Kabilarmalai, Paramathi, Mohanur, Puthuchatram and Rasipuram these are five blocks cultivation of betel leaves. But highly producing blocks likely Kabilarmalai, Paramathi, and Mohanur. Rich sandy loam, a cool climate, and irrigation from the Cauvery river are all favorable for growing betel vines. In these areas both Vellaikodi and Karpurakodi are important cultivars of betel vine. In contrast to other crops like paddy, sugarcane, banana and turmeric however, betel leaf production requires less area. According to Tamil Nadu Horticulture Department statistics for 2021-22, the betel cultivation area and production of Namakkal district is 301 Hectares and 4,966.50 Metric Tonnes respectively. It is Namakkal district in total betel production of Tamil Nadu in 2021-22 contributing 19.28 percent(<https://www.tnhorticulture.tn.gov.in> 2022).

### Statement of the Research Problem

The present study found problems of betel leaf production and marketing in Namakkal district, lack of technical guidance from the government, lack of research station, high disease incidence, unlearned cannals, excessive commission, improper auction, lack of proper marketing system, no support price from the government. Thus there is a need to save the farmers from these impacts, the problems that need immediate attention. Considering the situations effective actions are needed to address the grievances of betel leaf farmers permanently. At the situations, a study is felt necessary, the results of which will help the policy makers to understand the pressing issues related to betel leaf production and marketing in Namakkal district. The present study has been undertaken to identify the major problems of betel leaf production and marketing and to provide suitable suggestions to overcome the problems.

### Review of Literature

**Ibrahim Lashari and Ali Muhammad Khushk(2004)** found that high initial cost, lack of knowledge among growers, poor management operations, un-balanced chemical fertilizer and lack of trained labourers were the major problems in cultivation of betel leaves. **Vivek Mishra and Archana Mishra(2005)** stated that the betel leaf prices to be organized and cultivation systems to be simplified. **Hasan Banu and SahayaPrincy (2019)** categorized betel leaf market by high dominance of market intermediaries, non-availability of the storage facility, lack of market information, no proper organized market, high transportation cost. They suggested that sale of products through e-portal would only pay the good price for the agricultural products. **Sakthivel (2020)** found low price to be the main problem in marketing of betel leaf, followed by other problems. The government should fix the standard price for the product. Concessional transport facilities should be provided to the farmers to reduce the transport cost and he also suggested that the government could organize organic production training for betel leaf farmers. **Anwasha Dey et al., (2022)** found that the disease severity and price volatility are major constraints faced by farmers during production and marketing respectively. **Ajay Kumar et al., (2023)** high perishability, price fluctuations, unauthorized deductions, lack of storage facilities, lack of market knowledge, high commission charges and high transportation costs it is production and marketing problems of betel leaf cultivation they suggested that.

### Objectives of the Study

1. To study the production and marketing related problems faced by betel leaf farmers
2. To offer suggestions to improve the production and marketing of betel leaf

### Scope of the Study

This study deals with the production and marketing problems faced by betel leaf farmers located only in three blocks of namely Kabilarmalai, Paramathi and Mohanur in Namakkal District, Tamil Nadu.

### Research Design

The study is both descriptive and analytical based on the primary data. A well structured interview schedule is used to collect data. Based on the pilot study necessary changes have been incorporated and field survey method and personal interview technique were adopted. Multistage sampling technique has been adopted for the present study with Namakkal district as the universe, the block as the stratum, the village as the primary unit of sampling and the betel leaf farmers as the ultimate unit. 25 percent farmers out of 1541 total farmers in Namakkal district thus that total came to 385 study the production and marketing problems of farmers. Primary data required for the study were collected from the selected farmers. The data collected from the sample farmers were analyzed using percentage analysis and Henry Garrett rank analysis.

### Results and Discussions

Betel leaf cultivation has faced many problems to the farmers like production problems and marketing problems. These issues are discussed in Table 1 and 2.

**Table 1 Production Problems**

Sl. No.	Problems	Mean Score	Rank
1	Heavy Investment	66.86	I
2	Lack of manpower and high wages	49.29	VIII
3	Bank do not provide crop loans	63.68	III
4	No crop insurance in betel leaf cultivation	52.18	VI
5	Lack of awareness about pesticides and fertilizers	40.93	XI
6	No research station	64.1	II
7	No welfare board for betel growers	51.37	VII
8	Lack of adequate technical guidance from government	43.12	X
9	Drought problem	28.04	XIII
10	No clean of canal	29.42	XII
11	Agricultural trainings and seminars are not conducted	55.32	V
12	Excessive disease attack	57.81	IV
13	High cost of pesticides and fertilizers	48.81	IX

**Source:** Primary Survey

As can be seen from the table, high investment (66.86%) tops the list. Betel Leaf cultivation, from the beginning till the end, it requires heavy investment. And year after year the expenses are increasing. And also no loan is given to them from the part of the government. So they have to borrow from outsiders for high interest.

The most of the farmers, (64.1%) responded that there is no research facility. Soil is the important constraint in producing betel leaf. In the study area soil is not at good condition at present. So to improve the quality of soil, a research centre is needed and also, the growers are not aware of the pests, insects, diseases, and fertilizers to be used in the field. So research centre is very essential, element to develop the betel vine production.

The betel crops require heavy capital investment, from the beginning, till the end. So credit availability attracts the attention of the cultivators. A crop loan from the government or institutional agencies for cultivation of this crop. Majority of the respondents (63.68%) reported that they obtained loans for cultivating this crop from non-institutional agencies, such as traders, middlemen, neighbor, friends and others who exploit them by charging high interests. Such a practice is detrimental to their economic interest.

About 58 percent of the respondent farmers reported high incidence of diseases (root rot disease, wilt disease, leaf curl disease and leaf spot disease) in betel leaf crop in the study area. Agricultural trainings and seminars are not conducted (55.32%). As a result, there is little awareness among the farmers of the area about betel leaf production, marketing, fertilizer and pesticide management.

According to the ranking (52.18%) no crop insurance in betel leaf cultivation. It is to be noted that despite being a highly vulnerable crop, there is no insurance facility available for the crop. The problem of absence of welfare board for betel farmers (51.37%). There is no welfare board for betel farmers. If there is a welfare board, it will be convenient for the betel farmers and their families to get the necessary welfare assistance from the government.

About 49 percent of the farmers were of the opinion that shortage of manpower and high wages. Were the another problem they face in this agriculture, there are only hereditary farmers and no new farmers and youth come forward, resulting in shortage of manpower and high wage costs.

According to the sample farmers the following were the other problems the face with the production of betel leaf they are; high cost of pesticide and fertilizers (48.81%), lack of adequate technical guidance (43.12%) from government and lack of proper irrigation system and frequent drought (29%) hinders the production of betel leaf.

**Table 2 Marketing Problems**

Sl. No.	Problems	Mean Score	Rank
1	Excessive commission (10% to 20%)	60.14	I
2	No sale in the association after the arrival of auction market	35.09	XI
3	No storage facility	42.85	VIII

<b>4</b>	Improper auction process	57.78	<b>IV</b>
<b>5</b>	Improper payment	58.49	<b>III</b>
<b>6</b>	No determination exact pricing	51.48	<b>VI</b>
<b>7</b>	Auction market is problem for farmers	38.77	<b>X</b>
<b>8</b>	No unity of among farmers in marketing	49.69	<b>VII</b>
<b>9</b>	Lack of awareness in market information	42.48	<b>IX</b>
<b>10</b>	Regulated sales market should be set up	58.51	<b>II</b>
<b>11</b>	No supporting price from the government	55.67	<b>V</b>

**Source:** Primary Survey

According to the farmers, the problem of excessive commission (60.14%), that is 10 to 20 percent. An excessive commission is charged by the auction market in the region during marketing.

In the study area the exact price is not available in the sale of betel leaf. The reason is because there are interruptions like the auction market. Hence, majority of the farmers (58.51%) were insisted to set up a regulated market. Improper payment (58.49%). Farmers are paid improper amount in the auction market. The problem of improper auction process (57.78%). Auction market does not follow a formal auction system. The problem of no support price from the government (55.67%).Lack of proper pricing (51.48%). Due to lack of proper pricing system, proper pricing is not done.

According to the sample farmers the following were the other problems they face with the marketing of betel leaf they are; the problem of lack of unity among farmers in marketing (49.69%), the problem of lack of storage facility (42.85%), the problem of lack of awareness (42.48%) of market information, auction market is problem for farmers 39 percent, the problem of no sale in the association after auction market (35.09%).

### **Conclusion**

It is concluded that heavy Investment, no research station, no crop loan is an important production major problems and excessive commission, no regulated market, improper payment these are the major marketing problems faced by the betel leaf cultivators. A well coordination between farmers, traders, scientists, administrators and policy makers must be initiated to boost up the national economy through proper exploration of this leaves. The central and state government should jointly take necessary steps. If the central and state governments find a permanent solution to the problems of betel farmers, it will help the livelihood of betel farmers to rise.

### **Suggestions**

It is believed that these recommendations will solve the problems caused by production and marketing problem factors during betel cultivation in the study area and will be of great help to the farmers.

### **Production Suggestions**

1. Cultivation of betel leaf requires a lot of investment. Betel leaves are mostly cultivated on leasehold basis. Since the land is not theirs, Commercial Banks and Primary Co-operative Banks refuse to provide agricultural loans to betel farmers. In order to protect the employment of farmers and improve their livelihood, the government should take steps to provide crop loans to farmers.
2. Research center is essential to protect betel vine crop from diseases and increase production. Namakkal district is the leading betel leaf producer in Tamil Nadu. But there is no research center for betel leaf. If there is research facility, production is likely to increase further. Therefore, the government should establish a research center in Namakkal district. This is the long-standing dream of the betel farmers of the region.
3. Diseases are common in betel leaf farming. Due to this, the production of farmers is affected and crop loss occurs every time. Therefore, the government should take action with the help of the horticulture department for research on the disease in betel vine farming.
4. The study revealed that there is no awareness about pesticides and fertilizers in betel leaf cultivation in the study area. Hence, government should help the farmers by conducting periodic seminars and monthly meetings to provide general technical advice on production methods, awareness about fertilizer and pesticides. If that is done then betel cultivation will be even more prosperous than it is now.
5. Crop insurance is essential to cover natural and man-made damage in agriculture. But the study reveals that there is no crop insurance in betel cultivation. Therefore, through the Department of Agriculture, the government should document the betel farmers to benefit from the crop insurance scheme.
6. There is no welfare board for betel growers. Having a welfare board will facilitate the betel farmers and their families to get government welfare assistance. So the government should immediately set up a welfare board for betel farmers to help them.
7. Since the cost of fertilizers and pesticides in the study area is high, the government should make suitable arrangements to make fertilizers and pesticides available at subsidized rates to the betel farmers.
8. According to the respondent farmers, occasional drought problem due to lack of canal cleaning also hinders betel leaf production in the study area. Hence, the government should take appropriate steps to clean the canals of the Cauvery branch properly. By doing this, the betel leaf gets the water it needs without interruption.

### **Marketing Suggestions**

1. Not only the betel leaf produced in Namakkal district, but also from nearby Karur and Tiruchirappalli districts are brought to Paramathi-Vellore auction market. A high commission (10% to 20%) is taken from the farmers at the auction. Almost all auctions operating in the region operate in a monopolistic system. So the government should regulate the auction markets. Also support price for betel leaf in the study area should be fixed and regulated market should be established to sell betel leaf to help the betel leaf farmers.
2. Due to non-availability of proper price for betel leaf in the study area. The livelihood of betel leaf farmers is affected. Are heavily affected by the dominance of middlemen. Farmers also report that illegal bidding is being done in the auction markets and there is a problem in getting proper amount for betel. Therefore, the government should directly intervene and establish support price system for betel leaf to improve the livelihood of the farmers.
3. In case of delay in collecting the harvested betel leaves and transporting them to other places and states, since betel leaf is a perishable commodity. The government should provide storage facilities so that it does not rot easily.
4. The information given by the farmer's shows that there is not enough awareness in marketing betel leaves in the study area. So it would be better if the government provides training in betel leaf marketing.
5. It is evident from the overall respondent farmers that there is not enough unity among the betel farmers in the marketing of betel in the region. It is because of this problem that the auctioneer takes excessive commission. "Tamil Nadu Betel Leaf Farmers Association" working in Paramathi-Vellore is making great efforts to unite the farmers. Unity of farmers is possible when the government works together with this association.

### **References**

1. Ajay Kumar, Sudheer Kumar Yadav, Rakesh Jangid, Gupta.A. K., Amit Kumar, Deepak Kumar and Kripa Shankar(2023). Challenges and Economic Feasibility of Betelvine Cultivation in Uttar Pradesh, *International Journal of Economic Plants*, 10(2):160-169.
2. Anwasha Dey, Avdhesh Sharma, Yash Gautam, Krishna Gopal Swain and Singh.H. P(2022). Production and Marketing of Betel Leaf in Odisha: An Economic Analysis, *Asian Journal of Agricultural Extension, Economics & Sociology*, 40(12):1-8.
3. Hasan Banu. S and SahayaPrincy. P (2019). Marketing Problems of Betal Leaf A Study with Reference to Sholavandan, *International Journal of Commerce*, 7(2):38-42.
4. Hiralal Jana. and DebabrataBasu. (2017). Problems Faced by Betelvine Growers and Suggestions Provided to Mitigate Those in Midnapur (East) District of West Bengal, *International Journal of Current Research*, 9(5):49761-49767.
5. Ibrahim Lashari. M and Muhammad Khushk. A (2004). Study on Betel Leaf Cultivation in Coastal Area of Sindh: An Economic Analysis, *Sarhad Journal of Agric.*, 20(2):313-318.
6. Kathirvel. N(2015). Production Problems Faced by Betel Leaf Farmers in Karur District, *Journal of Management and Science*, 5(4):46-51.

7. Minati Sahoo. and Dibya Ranjan Sahoo. (2017). Betel Leaf Cultivation in Odisha: Problems and Prospects, *Asian Review of Social Sciences*, 7(1):10-15.
8. Mohanasundaram. P (2015). Marketing Problems Faced by Betel Leaf Cultivators, *International Journal of Advanced Research*, 3(5):1447-1451.
9. Ritesh Chand. A., Pawar. B.R and Krishna. M. (2016). Constraints Faced in Production and Marketing of Sugarcane in Parbhani District of Maharashtra, *Agriculture Update*, 11(3):209-213.
10. Sakthivel. A (2020). Satisfaction and Marketing Problems of Betel Leafs cultivators in Namakkal District of Tamil Nadu, *Our Heritage*, 68(30):10643-10647.
11. Sathya. K.N., VenkatesaPalanichamy. N., Rohini. A and PangayarSelvi. R (2022). An Economic Analysis on Production of Betel Vine in Thanjavur District of Tamil Nadu, *Asian Journal of Agricultural Extension, Economics & Sociology*, 40(10):703-709.
12. ShivanandaYarazari. P., Arun Kumar Singh. and SaikatMaji. (2022). Production and Marketing Problems Faced by Dry Grape Producers of Karnataka, *Indian Journal of Extension Education*, 58(1):183-185.
13. Vivek Mishra. and Archana Mishra. (2005). A Study of Betel Leaf Microflora, *Asian J. Exp. Sci.*, 19(2):59-62.