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PROBLEMS FACED BY BETEL LEAF CULTIVATORS IN TRIBAL AREAS OF WEST JAINTIA HILLS DISTRICTS, MEGHALAYA

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Abstract

Betevine (Piper betel L) is known by its many names across the country and abroad. In the Indian subcontinent, it is known as pan in Hindi, Tambula in Sanskrit, Villayadela in Kannada, Vettilakkoti in Malayalam, Vettilai in Tamil, Tamalapaku in Telugu, Videch-pan in Marathi, Nagarbel in Gujarati and pan in Bengali, paana in Odia. In foreign languages, it is known as Tanbol in Arabic and Burg-e-Tanbol in Persian. It is a perennial climber cultivated for its leaf. Historically, the word pan in Hindi and other Indian languages is probably a derivative of the Sanskrit word „pan" meaning leaf. The leaves of the pan plant have been traditionally used for chewing. Pan chewing is considered as a good and cheap source of dietary calcium. It increases digestive capacity when used with lime. Besides, it neutralizes the acidity and acts as a blood purifier. Except above discussed problems betel leaf cultivators of the study area are also faces few other problems. The study area has no proper irrigation system from government side. Farmers have to arrange irrigation facility with their won interest. Betel leaf production also hampers many time due pest and fungus infection on betel vine and leaf. Moreover, Farmers are not aware about crop insurance. Most of them have no proper knowledge of applying fertilizer and pesticide in betel leaf cultivation.

Keywords: Betal Leaf**,** Blood Purifier, Production, Fertilizer, Pesticide Problem, etc.

1. INTRODUCTION

The problem of betel cultivation is its susceptibility to various diseases often causing huge economic loss to the farmers. The most humid shaded condition favorable for crop growth also favors diseases development. A larger section of the people of northern districts of the West Bengal is regular chewer of betel leaves. However, due to non-availability of improved variety and lack of proper management practices, the huge market is dependent on the supply received from the Southern district of West Bengal. Various Government and non-government national level organizations like National Horticulture Mission, National horticulture Board, are providing subsidies to the growers for encouraging betel vine cultivation in various districts of West Bengal for boosting production as well as income of the farming communities. The study area is surrounded by West Jaintia Hills Districts, Meghalaya. The main problem faced by the farmers of these areas is that their temporary bunds do not last but have to be reconstructed every year as they are washed away during the monsoon season and most of the water is lost during conveyance due to seepage as it is conveyed for long distances through earthen channels. It is in this area that the Water Resources Department of the Government of Meghalaya has supported the farmers of these areas. The department constructs permanent c.c diversion weirs across streams then convey the water through pipelines to RCC distribution

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tanks located at strategic locations of the command area. From these distribution tanks, the farmers themselves then take the water through bamboos and distribution of water is done by them in the traditional way as usual. This assistance given by the department has been of great benefit to the farmers as irrigation water is assured and they do not have to waste their money and energy in construction of bunds and earthen channels year after year. Their only duty now is to maintain the project and to distribute the water amongst themselves. After production, marketing is most important or necessary factor in the cultivation process. It involves activities like harvesting & selling of betel leaf. The mature betel leaves are plucked by hand along with a portion of petiole. Harvested betel leaves are washed, cleaned and graded according to their quality and size for marketing. An average annual yield of a good betel leaves crop is about 60 to 75 leaves/ plant and 6 to 7 million leaves. Then they are packed after cutting a portion of the petiole and rejecting the damaged leaves. The picked leaves are sorted into different grades according to size, color, texture and maturity. For packing mostly bamboo baskets are used and in many places straw, fresh or dried banana leaves, wet cloth etc. are used for inner lining. Betelvine cultivators faced the problem of packing, transportation, price-policy, commission and taxes imposed by the mediators, unfair marketing etc. various problems of distribution and marketing faced by betel leaves cultivators

2. REVIEW OF LITERATURE

Sangeetha Karunanithiet.al (**2023**) This study stated the Nutrient and Health Benefits of Betel leaf as a Noval Food Product as it is a rich source of nutrients which attracts attention. Betel leaves utilized in various form like extract, extract oil and essential oil which contains 20 to 60 major and minor chemical compounds like eugenol (48.41%), estragole (16.12%), α-copaene (6.43%), anethol (2.62%) and eucalyptol (1.58%). This oil has been reported by several clinical studies to have potential roles in disease management. However, 35-70% of betel leaves are lost duringprocessing. Therefore, extraction of valuable compounds from surplus leaves act as one ofthe post-harvest loss reduction methods and Its importance to explore the application of betel leaves in traditional and modern food system.

Dipak Nath (2022) The study was conducted in East Garo Hills district of Meghalaya. Altogether 110 randomly selected rural women were included as sample of respondents for the study. The study reveals that more than 50 per cent tribal farm women participated jointly with family members in harvesting (63.34 %), intercultural operation (58.18 %), storing of harvested crops (55.45 %), In addition to this, a large percentage of tribal farm women (70.91%) did not contributed labour at all in application of pesticides, 68.18 per cent in land preparation and 64.55 per cent in seed treatment, It is also found that more than 50 per cent of tribal farm women contributed labour independently in cooking, care of children & elderly persons and washing clothes.

HoihnuHauzel (2022) For the Khasis, kwai is an integral part of their lives. Visit Meghalaya, and nearly every Khasi household will offer you betel nuts even before the customary glass of water arrives. The Khasis bond over kwai, start their meal with kwai and end it with kwai. In fact, when anybody dies, they say the person has gone to heaven to have

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kwai with God. There is a reason for this. In Khasi society, the betel nut is supposed to remove the disparity between the haves and have nots, because even the poor can afford to buy it and offer it to guests. The betel nut, thus, is a great social leveller.

HaripadaPaul(2021) This paper shows the study on Agriculture, Betel, Cultivation, Livelihood, Poverty Betel leaf is grown in tropic and sub-tropic. It is a cash crop. It is one type of horticulture farming through which farmers can earn huge money from a piece of land. Betel vine cultivation produced income throughout the year. Huge capital investment is also required for betel leaf cultivation. In return farmer also gets maximum profit in comparison to other cultivation but sometimes farmers face loss by natural calamity and insect disease. In India, West Bengal is a leading betel leaf-producing state. Many farmers of West Bengal maintain their livelihood by betel-leave cultivation. The present paper is to examine the problems and prospects of the betel leaves cultivation and also suggest some suggestions to overcome the problems.

Ranjeet D. More, et.al (2021) The work in this paper focus on Piper betleactivity and diseases. Leaves of Piper betlepossess severalbioactivities and are used in traditional medicinal systems. Many research studies on Piper betlehas reported that it contains important chemical constituents and are acts to arouse action for its medicinal properties like anticancer, anti-allergic, antimalaria, anti-filarial**,** antibacterial, antifungal study, insecticidal, antioxidant, anti-diabetic, gastro-protective, cytotoxic, wound healing activity, chlorophyllase activity, oral hygiene and anti-asthmatic effect. This study indicates that Piper betle L. leaves contain a number and are a source of different phytoconstituents for medicinal reasons. Additional crucial leaf extract research should thus be required to improve their usage in diverse medicines. Betel vine is damaged during cultivation by several diseases which causes considerable farmers loss. Therefore, early detection of the disease needs to take preventative measures before the sickness starts to spread.

Dr. Dhirendra kumarjena (2021) This work highlights the betel vine farming under Bhograi block. It studied how betel vine farming contributed for rural economy of Bhograiinparticular and state of Odisha in general. By interaction with the farmers their researcher experienced the problems faced by betel vine farmers presently regarding production, marketing, and also some general constraints.

The work is produced by the data from both primary and secondary sources. And to make it more scientific, both quantitative and qualitative methods are applied. From the work, it is experienced that the infrastructural assistance provided by the Government are not sufficient enough. It is also experienced that there is inaction of the government for its development and preservation during natural disasters and post natural disaster period. In the study, the researcher suggested some measures out of which recognition of betelvine (Pann) and tigertail (Khadi) as agricultural produce and insurance of these are important.

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3. RESEARCH METHODOLOGY

Objectives of the Study

1) To study the Socio-Economic Characteristics of Betel leaf cultivators in the study area.
2) To study the problems faced by betel leaf growers in the study area
3) To suggest suitable policy measure, improve the betel leaf cultivation in the study area.

Hypotheses

There is no contribution of respondent's Problems of betel leaf cultivation on the demographic variables

Research Design

Sample Design

Multistage stratified random sampling technique will be applied in the present study. A sample of 344 farmers will be collected from four different categorize namely Marginal Farmers (86) Small Farmers (86), Medium Farmers (86) and Large Farmers (86). In this study will be concentrated Amlarem Blocks in West Jaintia Hills District. There are 344 samples to be collected from Amlarem Blocks. It comprises that there are 43 villages were selected for the present study. Therefore, Amlarem Blocks consist of 344 samples consider the present study area.

Sample Size

The West Jaintia Hills District in Meghalaya consisted of 3 blocks. This study was carried out in Amlarem C&R. D Block only. Because this block Highly cultivated in Betal Leaf and other two block very megre cultivation. From the above mention blocks 43village panchayats from the selected block is being selected. Further, 8 households have been identified from each village and the total numbers of samples for the present study are 344 as detailed below, by using multi-stage random sampling.

Data and Tools of Analysis

Spreadsheets with the Statistical Package for Social Science (SPSS) have been used to insert the survey data after review and coding. Cross tabulation, t-ratio, and regression analysis have also been carried out on the data, among other statistical methods used for data analysis and interpretation

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4. RESEARCH AND DISCUSSION

Table no 4.1 Problem faced by betel leaf cultivators and type of farmers Percentage Distribution of Sample Respondents

S. No.	Problem farmer face in betel leaf cultivation	Type of farmers				Total
		Small Farmers (n=86)	Medium Farmers (n=86)	Marginal Farmers (n=86)	Large Farmers (n=86)	
1.	Expensive start up	8 (9.3%)	13 (15.1%)	12 (14.0%)	16 (18.6%)	49 (14.2%)
2.	Soil quality not suitable	14 (16.3%)	10 (11.6%)	9 (10.5%)	17 (19.8%)	50 (14.5%)
3.	Lack of knowledge and skilled	13 (15.1%)	10 (11.6%)	13 (15.1%)	2 (2.3%)	38 (11.0%)
4.	Betel vines disease	51 (59.3%)	53 (61.6%)	52 (60.5%)	51 (59.3%)	207 (60.2%)
	Total	86 (100.0%)	86 (100.0%)	86 (100.0%)	86 (100.0%)	344 (100.0%)

Source: Primary data

The above table shows that the people of sample households were classified into four groups in terms of the farmer Problem faced in betel leaf cultivation. The above table shows the association between the Problem farmer face in betel leaf cultivation and the type of farmers of the respondents. Out of 344 farmer Problem faced in betel leaf cultivation-wise distribution of sample respondents, the study is the relationship between the farmer Problem faced in betel leaf cultivation and type of farmers of sample respondents. The people of sample households were classified into four groups in terms of the farmer Problem faced in betel leaf cultivation. Similarly, when the results are compared among the type of farmers, i.e, Small, Medium, Marginal and Large farmers a minimal percentage of the respondents are Lack of knowledge and skilled about farmer Problem faced in betel leaf cultivation in large farmers when the results are compared among the type of farmers. In the case of respondents at Small farmers, Out of 86 farmer Problem faced in betel leaf cultivation wise distribution of sample respondents, 9.3% of them are Expensive start up, 16.3% of them are Soil quality not suitable, 15.1% of them are Lack of knowledge and skilled and 59.3% of the respondents are Betel vines disease farmer Problem faced in betel leaf cultivation. It is understood from the results that small farmers group are dominated 59.3% in the sample group of respondents are Betel vines disease farmer Problem faced in betel leaf cultivation. It is the least to the tune of 9.3 percentages for the small farmers groups of respondents are Expensive start up Problem farmer face in betel leaf cultivation. Therefore majority of the respondents are Betel vines disease farmer Problem faced in betel leaf cultivation. Further, in the case of respondents at medium farmers, Out of 86 farmer Problem faced in betel leaf cultivation wise distribution of sample respondents, 15.1% of them are Expensive start up, 11.6% of them are Soil quality not suitable, 11.6% of them are Lack of knowledge and skilled and 61.6% of the respondents are Betel vines disease farmer Problem faced in betel leaf cultivation. It is understood from the results that medium farmers group are dominated 61.6% in the sample group of respondents are Betel vines

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disease farmer Problem faced in betel leaf cultivation. It is the least to the tune of 11.6 percentages for the medium farmers groups of respondents are Lack of knowledge and skilled farmer Problem faced in betel leaf cultivation. Therefore majority of the respondents are Betel vines disease farmer Problem faced in betel leaf cultivation. Also, in the case of respondents at marginal farmers, 14.0% of them are Expensive start up, 10.5% of them are Soil quality not suitable, 15.1% of them are Lack of knowledge and skilled and 60.5% of the respondents are Betel vines disease farmer Problem faced in betel leaf cultivation. It is understood from the results that marginal farmers group are dominated 60.5% in the sample group of respondents are Betel vines disease farmer Problem faced in betel leaf cultivation. It is the least to the tune of 10.5 percentages for the marginal farmers groups of respondents are Soil quality not suitable farmer Problem faced in betel leaf cultivation. Therefore majority of the respondents are Betel vines disease farmer Problem faced in betel leaf cultivation. Further, in the case of respondents at large farmers, Out of 86 farmer Problem faced in betel leaf cultivation wise distribution of sample respondents, 18.6% of them are Expensive start up, 19.8% of them are Soil quality not suitable, 2.3% of them are Lack of knowledge and skilled and 59.3% of the respondents are Betel vines disease farmer Problem faced in betel leaf cultivation. It is understood from the results that large farmers group are dominated 59.3% in the sample group of respondents are Betel vines disease farmer Problem faced in betel leaf cultivation. It is the least to the tune of 2.3 percentages for the large farmers groups of respondents are Lack of knowledge and skilled farmer Problem faced in betel leaf cultivation. Therefore majority of the respondents are Betel vines disease farmer Problem faced in betel leaf cultivation. On the whole, it is understood from the results that medium farmers groups dominated the sample group of respondents are Betel vines disease farmer Problem faced in betel leaf cultivation. It is the least to the tune of 2.3 percent for the large farmers groups of respondents are Lack of knowledge and skilled Problem farmer face in betel leaf cultivation groups.

Table No 4.2 Major problems that betel leaf cultivators and type of farmers Percentage Distribution of Sample Respondents

S.No.	Major drawback that betel leaf cultivation	Type of farmers				Total
		Small Farmers (n=86)	Medium Farmers (n=86)	Marginal Farmers (n=86)	Large Farmers (n=86)	
1.	Transportation problem	12 (14.0%)	24 (27.9%)	19 (22.1%)	16 (18.6%)	71 (20.6%)
2.	Low cost of price in market	62 (72.1%)	51 (59.3%)	57 (66.3%)	55 (64.0%)	225 (65.4%)
3.	Less production of betel leaf in times of harvesting	12 (14.0%)	11 (12.8%)	10 (11.6%)	15 (17.4%)	48 (14.0%)
	Total	86 (100.0%)	86 (100.0%)	86 (100.0%)	86 (100.0%)	344 (100.0%)

Source: Primary data

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The table no 4.2 reveals that the people of sample households were classified into four groups in terms of the Major drawback that betel leaf cultivation. The above table shows the association between the Major drawbacks that betel leaf cultivation and the type of farmers of the respondents. Out of 344 Major drawbacks that betel leaf cultivation-wise distribution of sample respondents, the study is the relationship between the Major drawback that betel leaf cultivation and type of farmers of sample respondents. The people of sample households were classified into four groups in terms of the Major drawback that betel leaf cultivation. Similarly, when the results are compared among the type of farmers, i.e, Small, Medium, Marginal and Large farmers a minimal percentage of the respondents are Less production of betel leaf in times of harvesting in marginal farmers when the results are compared among the type of farmers. In the case of respondents at Small farmers, Out of 86 Major drawback that betel leaf cultivation wise distribution of sample respondents, 14.0% of them are Transportation problem, 72.1% of them are Low cost of price in market and 14.0% of the respondents are Less production of betel leaf in times of harvesting.

It is understood from the results that small farmers group are dominated 72.1% in the sample group of respondents are Low cost of price in market about Major drawback that betel leaf cultivation. It is the least to the tune of 14.0 percentages for the small farmers groups of respondents are Less production of betel leaf in times of harvesting about Major drawback that betel leaf cultivation. Therefore majority of the respondents are Low cost of price in market about Major drawback that betel leaf cultivation. Further, in the case of respondents at medium farmers, Out of 86 Major drawback that betel leaf cultivation wise distribution of sample respondents, 27.9% of them are Transportation problem, 59.3% of them are Low cost of price in market and 12.8% of the respondents are Less production of betel leaf in times of harvesting. It is understood from the results that medium farmers group are dominated 59.3% in the sample group of respondents are Low cost of price in market about Major drawback that betel leaf cultivation.

It is the least to the tune of 12.8 percentages for the medium farmers groups of respondents areLess production of betel leaf in times of harvesting about Major drawback that betel leaf cultivation. Therefore majority of the respondents are Low cost of price in market about Major drawback that betel leaf cultivation. Also, in the case of respondents at marginal farmers, Out of 86 Major drawback that betel leaf cultivation wise distribution of sample respondents, 22.1% of them are Transportation problem, 66.3% of them are Low cost of price in market and 11.6% of the respondents are Less production of betel leaf in times of harvesting. It is understood from the results that marginal farmers group are dominated 66.3% in the sample group of respondents are Low cost of price in market about Major drawback that betel leaf cultivation. It is the least to the tune of 11.6 percentages for the marginal farmers groups of respondents areLess production of betel leaf in times of harvesting about Major drawback that betel leaf cultivation.

Therefore majority of the respondents are Low cost of price in market about Major drawback that betel leaf cultivation. Further, in the case of respondents at large farmers, Out of 86 Major drawback that betel leaf cultivation wise distribution of sample respondents, 18.6% of them

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are Transportation problem, 64.0% of them are Low cost of price in market and 17.4% of the respondents are Less production of betel leaf in times of harvesting. It is understood from the results that large farmers group are dominated 64.0% in the sample group of respondents are Low cost of price in market about Major drawback that betel leaf cultivation. It is the least to the tune of 17.4 percentages for the large farmers groups of respondents are Less production of betel leaf in times of harvesting about Major drawback that betel leaf cultivation. Therefore majority of the respondents are Low cost of price in market about Major drawback that betel leaf cultivation. On the whole, it is understood from the results that small farmers groups dominated the sample group of respondents are Low cost of price in market about Major drawback that betel leaf cultivation. It is the least to the tune of 12.8 percent for the medium farmers groups of respondents are Less production of betel leaf in times of harvesting about Major drawback that betel leaf cultivation groups.

Table 4.3 Production constraints in betel leaf cultivators and type of farmers Percentage Distribution of Sample Respondents

S.No.	Production constraints in betel leaf cultivation	Type of farmers				Total
		Small Farmers (n=86)	Medium Farmers (n=86)	Marginal Farmers (n=86)	Large Farmers (n=86)	
1.	Lack of credible source of knowledge and information	8 (9.3%)	7 (8.1%)	14 (16.3%)	13 (15.1%)	42 (12.2%)
2.	Lack of suitable fertile land	20 (23.3%)	19 (22.1%)	17 (19.8%)	18 (20.9%)	74 (21.5%)
3.	Lack of plant protection measure	58 (67.4%)	60 (69.8%)	55 (64.0%)	55 (64.0%)	228 (66.3%)
	Total	86 (100.0%)	86 (100.0%)	86 (100.0%)	86 (100.0%)	344 (100.0%)

Source: Primary data

The above table shows that the people of sample households were classified into four groups in terms of the Production constraints in betel leaf cultivation. The above table shows the association between the Production constraints in betel leaf cultivation and the type of farmers of the respondents. Out of 344 Production constraints in betel leaf cultivation-wise distribution of sample respondents, the study is the relationship between the Production constraints in betel leaf cultivation and type of farmers of sample respondents. The people of sample households were classified into three groups in terms of the Production constraints in betel leaf cultivation. Similarly, when the results are compared among the type of farmers, i.e, Small, Medium, Marginal and Large farmers a minimal percentage of the respondents are Lack of credible source of knowledge and information in medium farmers whenthe results are compared among the type of farmers.

In the case of respondents at Small farmers, Out of 86 Production constraints in betel leaf cultivation wise distribution of sample respondents, 9.3% of them are Lack of credible source of knowledge and information, 23.3% of them are Lack of suitable fertile land and 67.4% of

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the respondents are Lack of plant protection measure. It is understood from the results that small farmers group are dominated 67.4% in the sample group of respondents are Lack of plant protection measure about Production constraints in betel leaf cultivation. It is the least to the tune of 9.3 percentages for the small farmers groups of respondents are Lack of credible source of knowledge and information about Production constraints in betel leaf cultivation. Therefore majority of the respondents are Lack of plant protection measure about Production constraints in betel leaf cultivation. Further, in the case of respondents at medium farmers, Out of 86 Production constraints in betel leaf cultivation wise distribution of sample respondents, 8.1% of them are Lack of credible source of knowledge and information, 22.1% of them are Lack of suitable fertile land and 69.8% of the respondents are Lack of plant protection measure.

It is understood from the results that medium farmers group are dominated 69.8% in the sample group of respondents are Lack of plant protection measure about Production constraints in betel leaf cultivation. It is the least to the tune of 8.1 percentages for the medium farmers groups of respondents areLack of credible source of knowledge and information about Production constraints in betel leaf cultivation. Therefore majority of the respondents are Lack of plant protection measure about Production constraints in betel leaf cultivation.

Also, in the case of respondents at marginal farmers, Out of 86 Production constraints in betel leaf cultivation wise distribution of sample respondents, 16.3% of them are Lack of credible source of knowledge and information, 19.8% of them are Lack of suitable fertile land and 64.0% of the respondents are Lack of plant protection measure. It is understood from the results that marginal farmers group are dominated 64.0% in the sample group of respondents are Lack of plant protection measure about Production constraints in betel leaf cultivation. It is the least to the tune of 16.3 percentages for the marginal farmers groups of respondents are Lack of credible source of knowledge and information about Production constraints in betel leaf cultivation.

Therefore majority of the respondents are Lack of plant protection measure about Production constraints in betel leaf cultivation. Further, in the case of respondents at large farmers, Out of 86 Production constraints in betel leaf cultivation wise distribution of sample respondents, 15.1% of them are Lack of credible source of knowledge and information, 20.9% of them are Lack of suitable fertile land and 64.0% of the respondents are Lack of plant protection measure. It is understood from the results that large farmers group are dominated 64.0% in the sample group of respondents are Lack of plant protection measure about Production constraints in betel leaf cultivation. It is the least to the tune of 15.1 percentages for the large farmers groups of respondents are Lack of credible source of knowledge and information about Production constraints in betel leaf cultivation.

Therefore majority of the respondents are Lack of plant protection measure about Production constraints in betel leaf cultivation. On the whole, it is understood from the results that medium farmers groups dominated the sample group of respondents are Lack of plant protection measure about Production constraints in betel leaf cultivation. It is the least to the tune of 8.1 percent for the medium farmers groups of respondents are Lack of credible source of knowledge and information about Production constraints in betel leaf cultivation groups.

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Regression Analysis for Demographic Variables Respondents Problems of betel leaf cultivation and Demographic Variables

Table 4.3 Contribution of Independent Variable Respondents Problems of betel leaf cultivation and Demographic Variables

Model	Unstandardized Coefficients		Standardized Coefficients	't' value	
	B	Std. Error	Beta		
Constant	27.942	2.773		14.844	
Age	3.029	4.352	3.014	3.878	
Marital Status	4.466	3.213	2.145	2.295	R^2=0.249
Educational Qualification	3.471	2.345	2.085	4.336	F=16.942
Occupation	3.015	2.165	3.019	3.066	
Community	3.240	4.178	3.085	4.367	
Religion	3.035	3.146	4.017	3.225	
Type of family	2.029	3.297	2.082	4.088	
Status of Living House	3.192	3.144	3.034	3.166	
House type	3.293	2.943	3.664	4.642	

There is no contribution of respondent's Problems of betel leaf cultivation on the demographic variables.

Table 4.3 displays the R square value, which is 0.249. It is clear that the respondents' demographic variables account for only 16.9% of the total variance in the independent variable Problems of betel leaf cultivation. The remaining percentage of variance, 83.1% (1-R Square), is to be accounted for by other factors that are not included in this study.

From the analysis, the following regression equation has been found:

$$Y_1 = 3.029X_1 + 4.466X_2 + 3.471X_3 + 3.015X_4 + 3.240X_5 + 3.035X_6 + 2.029X_7 + 3.192X_8 + 3.293X_9 + 28.77$$

Using the equation and the information from the scores in the dependent variables (Problems of betel leaf cultivation), the predicted average score x1 for Age can be computed. There is a prediction in the Problems of betel leaf cultivation scores of 3.029 for every unit that predicts Age scores. For every unit that predicts Marital Status group scores, there is a predicted Problems of betel leaf cultivation score of 4.466.

For every unit that predicts Educational Qualification scores, there is a predicted Problem of betel leaf cultivation scores of 3.471. For every unit that predicts Occupation scores, there is a predicted Problem of betel leaf cultivation scores of 3.015. For every unit that predicts Community scores, there is a predicted Problem of betel leaf cultivation score of 3.240.

There is a predicted Problem of betel leaf cultivation score of 3.035 for every unit that predicts the Religion scores. For every unit that predicts Type of family scores, there is a predicted Problem of betel leaf cultivation score of 2.029. There is a predicted Problem of betel leaf cultivation score of 3.192 for every unit that predicts Status of Living House scores. For every unit that predicts House type scores, there is a predicted Problem of betel leaf cultivation score

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of 3.293. It is evident from Table 4.3 that the F value is found to be 16.942, which is significant at 0.01 levels. It indicates that there is a significant contribution from respondents' Problems of betel leaf cultivation and demographic variables. Hence the framed hypothesis is rejected and it is concluded that there is a significant contribution of respondents' Problems of betel leaf cultivation and demographic variables.

5. SUMMARY OF THE FINDINGS

Majority of the respondents are Betel vines disease farmer Problem faced in betel leaf cultivation. On the whole, it is understood from the results that medium farmers groups dominated the sample group of respondents are Betel vines disease farmer Problem faced in betel leaf cultivation. It is the least to the tune of 2.3 percent for the large farmers groups of respondents are Lack of knowledge and skilled Problem farmer face in betel leaf cultivation groups. On the whole, it is understood from the results that small farmers groups dominated the sample group of respondents are Low cost of price in market about Major drawback that betel leaf cultivation.

It is the least to the tune of 12.8 percent for the medium farmers groups of respondents are Less production of betel leaf in times of harvesting about Major drawback that betel leaf cultivation groups. Medium farmers groups dominated the sample group of respondents are Lack of plant protection measure about Production constraints in betel leaf cultivation.

It is the least to the tune of 8.1 percent for the medium farmers groups of respondents are Lack of credible source of knowledge and information about Production constraints in betel leaf cultivation groups. It is evident from Table 4.3 that the F value is found to be 16.942, which is significant at 0.01 levels.

It indicates that there is a significant contribution from respondents' Problems of betel leaf cultivation and demographic variables. Hence the framed hypothesis is rejected and it is concluded that there is a significant contribution of respondents' Problems of betel leaf cultivation and demographic variables.

6. CONCLUSION

The bottom line of this research is that if we are to get to grips with the problems of the betel leaf farmer with regard to marketing those responsible for research and policy on agriculture must study the question in depth and recommend a course of action. The understanding of the problem must be on prevailing conditions, not on theory or past experience.

The fundamental problems of the betel leaf farmer must be solved through coherent policies to ensure a smooth functioning of the betel leaf economy. The outcome of this study will help the State government to take remedial measures to solve the problems faced by farmers relating to marketing of betel leaf. A few policy implications at the government level have been suggested for consideration and implementation.

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