Research paper *IJBARR*
Impact Factor (GIF) 0.314 *E- ISSN -2347-856X*
ISSN -2348-0653

A STUDY ON THE PROBLEMS AND PROSPECTS OF THE FARMERS CULTIVATING AND MARKETING OF SUGARCANE WITH SPECIAL REFERENCE TO ERODE AND TIRUPUR DISTRICTS

Prof.S.Umarani
Assistant Professor, Department of Commerce, Park's College, Tirupur, India.
Dr.G.Rengarajan
Associate Professor and Head, Department of Commerce, Park's College, Tirupur, India.

Introduction

The traditional occupation of most of the Indian citizens is farming. More than 65 percent of the population in India is residing in rural areas of the country. Out of them about 80 percent of the public depend on agriculture and allied industries of agriculture. In olden days particularly before independence the Indian agriculture was very backward when compared with the developed nations because of lack of advanced technology and also using of traditional pattern of farming. After independence much importance was given by the then governments to develop agriculture. In all budgets considerable amount is being allocated to agriculture sector. Due to the efforts made by the government we experienced considerable development in agriculture. Modern equipments and machineries are being used in all phases of agriculture starting from ploughing of land to harvesting of crop. Further in many ways the government announces subsidies to the farmers for few crops and for some of the agricultural works like trip irrigation, supply of fertilizers at a subsidized rate. Only limited farmers get huge income from agriculture. All other farmers could not earn income as like in the case other activities involved by the human being. The farmers are affected due to various factors like shortage of rainfall, problems of diseases in the crop, seed failure, and heavy rainfall at the time of harvesting, fluctuation in the price of the agricultural produces. The farmers are affected irrespective of the nature of the crops either cash crops or food grains due to low income from their crops.

Sugarcane is well known to all of us. Sugarcane is the basic raw material for all forms of sugar. Hence sugarcane cultivation is fully encouraged by even the government. More cottage industries and large scale industries were established for manufacturing sugar; simultaneously the necessity for cultivation of sugarcane was increased. In all parts of the country where the water level is good and the irrigation from river and dam water is available, the farmers started to cultivate sugarcane. Being sugar is the basic necessary domestic commodity; the demand for the sugar is going on increasing year by year. Hence the necessity for cultivation of sugarcane is also simultaneously increased. The input cost for cultivation of sugarcane like seed, ploughing of land, manures, fertilizer and labour charges are increased considerably. Here the farmers who are cultivating the sugarcane face number of problems to cultivate, harvest and to market the sugarcane. The revenue from the sugarcane is affected by various factors such as yield capacity of the land, problem of diseases from insects, rainfall etc., Apart from the above said factors the farmers could not get fixed rate for their produces because of the policy of the government. Sometimes the government directly purchases the sugarcane from all farmers through government agencies or official concerned. Some of the farmers have their own cottage business of manufacturing sugar and allied products by using sugarcane as the raw material. Some of the farmers sell their harvested sugarcane to the Private Sugar factories which are operated in nearby areas.

The prices of agricultural commodities are usually determined by market factor of demand and supply .if there are many farmers producing the same commodity then they will fetch lesser prices for their produce .if there is great demand from farmers for a certain commodity then formers can expect to get a higher prices .These prices keep changing daily. Other factors that determine the prices of the product are its quality, yield and pest free status. Climatic conditions, international prices, cost of production and new laws may also affect the prices of agricultural commodities .The prices at different markets may be different.

Whatever may be the factor, produce, mode of disposing their produce, the farmers could not get adequate income from their crops. The farmers who cultivate the sugarcane are not excuse for these problems. The farmers who are

IJBARR
E- ISSN -2347-856X
ISSN -2348-0653

involved in cultivation of sugarcane are forced to borrow money from the banks, financial institutions or local money lenders or from their relatives with high rate of interest. This makes all the farmers facing financial crisis to grow another crops after harvesting and also to meet their family requirements. The government is more concerned about the development of farming community as a whole since independence. Number of projects, schemes was being introduced for the welfare of the farmers. Yet the farmers cultivating sugarcane are in a critical condition. Many of the farmers migrated to the urban areas to generate income to the family and repay the loan borrowed for cultivation of crops. Further some of the farmers remain in their native with heavy loan burden and suffering lot to meet the basic requirements of their family members particularly to grow their wards, to send their wards to the school and colleges and also to provide the facilities for their developments. This is the real situation prevailing in all farmers' family. Both the central and state governments allocate considerable fund to agriculture sector in all budgets. But they could not improve the standard of living of the farmers particularly who involved in the cultivation of sugarcane. There is a separate department for agriculture for giving advice about the crops, cultivating methods, recommendation of right fertilizer and pesticides for yielding more volume of produces from farming. But the lifestyle of the farmers of sugarcane could not turn to a better side. They always run their life with financial problems and loan burden. These types of problems should be eliminated. Effort should be taken to solve the problems faced by the farmers. To improve and develop the farmers' life necessary care and measures should be taken. Hence it is inevitable to know the problems faced by the farmers. By keeping all the above issues in mind the researcher selected the title "A STUDY ON THE PROBLEM AND PROSPECTS OF THE FARMERS CULTIVATING SUGARCANE WITH SPECIAL REFERENCE TO ERODE AND TIRUPUR DISTRICTS"

Statement of the Problem

In India normally all farmers are struggling lot for survival irrespective of total area of the cultivation, type of crop cultivated, etc. All the farmers say their views and reasons for the difficulties. The farmers who are cultivating sugarcane are forced to borrow because of some administrative in the sugar mills, the dues (balance amount) from sugar mills to the farmers getting delay for settlement. For starting the cultivation of next crop they are in need of finance. Hence they approach the money lenders for financial support where they have to pay high rate of interest. The crops failure also makes them further weak in their financial position. In Tirupur and Erode district due to industrial development, there are huge amount of employment opportunities with reasonable wage or salary package. The entire farming labourers turn to industrial sectors due to working condition. For agriculture work there is heavy demand for labourers but only few workers are available. This caused high rate of labour cost in agriculture. The fertilizers and pesticides' rate is also high. A farmer who has minimum acres of land for cultivating sugarcane cannot afford the input cost till the harvesting of sugarcane.

Apart from these expenses they have to meet their family requirements and also to grow their wards and support their dependents. Hence every the farmers who involve in sugarcane cultivation are facing number of issues in the family. They could not provide better life to their wards as they thing or decide. This is real situation of the farmers. There are number of schemes initiated by the government to support the farmers in the form subsidy in loan, providing fertilizers to the farmers and fixing guaranteed rate for certain specified crops etc. but these are not properly reaching to the needy group framers instead due to political and other influences the benefits of the scheme launched by the government to the welfare of the farmers reach only to the farmers who are sound enough in finance and socially well. All other farmers till face financial problems and borrow regularly to meet their day to day requirements of the family members. Unless and otherwise the government should take necessary steps to monitor the issues faced by the farmers, the fate of the farmers may go to aggravate the conditions of the farmers in cultivation of sugarcane.

Significance of the Study

People are engaged in various activities to generate income to the family based on the efficiency, knowledge, family occupation or any other activities in which the individual has knowledge. Likewise most of the rural people in our country are involved in agricultural activities for generating income to the family. Cultivation of sugarcane is one of the most important sources for generating income to the agricultural workers. In all activities

IJBARR
E- ISSN -2347-856X
ISSN -2348-0653

people get some short of income based on the work or effort taken by the individuals. Regarding the farmers' income there is no guarantee for getting the expected return from their crop. Various factors like natural calamities, price fluctuation, problems from insects and also rainfall have considerable impact on the income of a farmer. They could not sometimes get the amount put in to grow or cultivate any types of crop. There is no chance for reimbursement of the amount lost by the farmers due to the crop failures or low yielding from the crops.
The harvesting period for the crops cultivated varies from crop to crop. Most of the crops are harvested within 4 months; few crops take 6 months for yielding. Banana, sugarcane consume at least 1 year for yielding and harvesting. The farmers who involved in sugarcane cultivation have to wait more than 12 months to get income from the crops. Up to harvesting of sugarcane the farmers are in a position to invest huge amount in the crops and also to manage their family. Crop failure and fall in price render more trouble to the farmers. They face difficulties in arranging funds for cultivating other crops till they get amount from the sugar mills. Unnecessary delay in getting amount forces the farmers to borrow money from money lenders or from other sources. This is the regular practice and problems faced by the farmers involved in cultivation of sugarcane. The government fixes the rate per tonne for purchasing the sugarcane from the farmers. But it is reported from farmer's side that the rate fixed by the government is not sufficient. Hence the farmers could not get enough income from their crops. They always lead very normal life with low standard of living when compared with others. This pathetic situation of the farmers in the study area should be changed. The government and the authorities concerned should know the real causes for problems of the farmers in the study area. Hence this research study gets vital importance to know the practical difficulties of the farmers who cultivate sugarcane and find out the remedial measures to solve the problems of the farmers and bring their standard of living to a better position to lead a peaceful life like others.

Objectives of the Study

This study aims to portrait present condition and problems faced by the farmers cultivating sugarcane and also the farmers' opinions toward different effort taken by the government to improve the standard of living of the farmers in the study area. But the specific objectives of this study are –

1. To constitute farmers profile by demographic data, such as identification (name, address, and phone no.), sex, marital status, name of family members, ages, income, occupation, no. of children present, home ownership.
2. To identify schemes available farmers to get loan and subsidies that lead farmers to improve their life styles.
3. To discover a ttitude of farmers and their satisfaction level towards facilities provided by the government and sugar mills
4. To analyze the various issues and problems faced by the farmers from cultivation to harvest of sugarcane.
5. To uncover out the causes and reasons for the problems.
6. To find remedial measures to solve the issues faced by the farmers and offer recommendations to the needy group.

Research Methodology

Data Collection

To make the research in this study both the primary data and secondary data were collected from the respondents and records, journals and magazines published with sugarcane industry.

Sample Selection

Due to the development in the economy, social status and the changing trends among the farmers led cultivation of cash crops than the food grains and the pulses. Erode and Tirupur districts are considered one of the districts where sugarcane is cultivated more. As the population for the study is numerous, 800 respondents were selected at random by using convenient sampling method. In each Erode district among 7 revenue blocks 20 villages where sugarcane is cultivated are chosen for the selection of the respondents. In each village 20 farmers who cultivate

sugarcane were identified and selected as sample respondents from the total population. Likewise In Tirupur district there are seven revenue blocks where only in four blocks the sugarcane is being cultivated. Among four blocks 20 villages were chosen by using stratified random sampling. Then 20 farmers per village, who are involved cultivation of sugarcane, have been selected as sample respondents. The sample respondents will consist of both the male and female from middle class and lower class people.

Tools for Data Collection

By virtue of mass data obtained from the research survey, as well as data from secondary sources collected and presented in the present report, descriptive and analytical research were considered most appropriate for this study. The research problem, questionnaire and interview schedule were also framed accordingly. The suggestions offered in the final chapter of the present report emerged from the inferences drawn from the analysis of the information obtained from the sample respondents about the preferences and opinion about the problems and issues faced by the farmers while cultivating sugarcane. The researcher used closed and open ended questions in the questionnaire to collect the primary data.

Statistical Tools Used

The factors were studied by means of two way tables, percentages, averages, ranges and standard deviations, chi-square tests, Garrett Ranking technique, Factor analysis and cluster analysis as and when found necessary

Hypothesis

1. There is no association between the satisfaction of the farmers and their level of income.
2. There is no association between the area of the land cultivated and the yielding of sugarcane.
3. There is no association between the respondents based on gender and their opinion regarding the support extended by the government to fix standard rate for sugarcane per ton.
4. There is no association between the age of the respondents and their standard of living.
5. There is no association between the respondents based on the educational qualification and their technical knowledge for making sugar.
6. There is no association between the satisfaction level of the respondents and socio-economic status of the respondents.

Review of Literature

In this chapter, review of related works pertinent to the topic of research was made in order to know the present status of research in the area. The knowledge of these studies would help the researcher to proceed in an appropriate direction in the present study and to draw meaningful conclusions.

Rao I.V.Y. Rama (2012)[1] in his study entitled that Efficiency, yield gap and constraints analysis in irrigated vis-à-vis rain fed sugarcane in north coastal zone of Andhra Pradesh. the economics of yield gap in irrigated and rain fed sugarcane cultivation have been studied in North Coastal Zone of Andhra Pradesh for the period 2008–09 by collecting data on various aspects of costs and returns. Budgeting techniques, cost concepts, benefit cost ratio (BCR), yield gap analysis and response priority index have been used for the analysis. The study has shown that the value of BCR is higher for plant crop in irrigated (1.49%) than in rain fed (1.43%) regions. The yield gap between irrigated and rain fed regions has been found to be 67.00%, in which input usage had a higher (41.86%) effect than cultural practices (25.93%). The most important constraint in sugarcane cultivation is shortage of labour during crucial operations. Therefore, irrigated sugarcane is more remunerative and yields can be sustainable if constraints are addressed and a proper package of practices is followed.

[1] **Rao I.V.Y. Rama**, Efficiency, yield gap and constraints analysis in irrigated vis-à-vis rainfed sugarcane in north coastal zone of Andhra Pradesh Year : 2012, Volume : 25, Issue : 1 First page : (167) Last page : (171) Print ISSN : 0971-3441. Online ISSN : 0974-0279.

Jaswanth Singh, R.D.Singh, S.I.Anwar and S.Solomon (2011)[2] in their paper entitled that 'Alternative Sweeteners Production from sugarcane in India: Lump Sugar (Jaggery)'. Importance of sweeteners has long been recognized in Indian diets. Sweetness and flavor are very important as regards consumers' acceptability. The sugar and jaggery are the main sweetening agents which are added to beverage and foods for increasing palatability. Over the years, food habits of human beings have been greatly influenced by research and developmental activities and also due to their health consciousness. Despite witnessing pressure of industrialization, the jiggery industry has flourished in different states of the country viz., Uttar Pradesh, Tamilnadu, Karnataka, Maharashtra and Andhra Pradesh. The increasing trend of their production is of much significance to learn about peoples' liking towards jaggery in rural areas mainly due to it's nutritional and medicinal values.

Murali P., Balakrishnan R. (2011)[3] In the recent past, labour scarcity coupled with high labour wage rate has greatly affected the irrigation and harvesting of sugarcane crop in time. It has reduced sugarcane area from 3.91 lakh ha in 2006–07 to 3.14 lakh ha in 2009–10 in Tamil Nadu. Modern sugarcane machinery and labour-saving devices were introduced on a large scale to reduce dependency on labour, and finish different farm operations in time. The study has found the mechanical operations to be superior to manual operations in sugarcane cultivation. These have reduced cost of production and have enabled efficient utilization of resources with better work output. For example, furrow method of irrigation required about 320 person-hour, whereas drip irrigation required only 30 person-hour. Similarly, manual harvesting required about 1000 person-hour and cost of 55000 to harvest 100 tonne (550/t) against 32500 (325/t) with the labour engagement for 12 person-hour/ha. The study has concluded that it has become inevitable to use modern sugarcane machinery, which is now available in the country. Although its initial cost is very high, the advantages accrued in their use are many. The study has suggested the use of drip irrigation and mechanical harvesters to mitigate the acute labour scarcity (farm operation and harvesting). It has also proposed to implement custom hiring system on co-operative basis/or owned and operated by the sugar factories for sugarcane harvesters in the state.

I.V.Y Rama Rao., G Sunil Kumar Babu (2011) [4]: The present study was an attempt to work-out costs and returns in value added products of Sugarcane viz., sugar, jaggery and sugarcane juice, in order to suggest the sugarcane growers the profitable and sustained way to deal with sugarcane. Multistage sampling technique was adopted in selecting the sampling units at various levels during 2010-11. Analytical tools like tabular analysis and Benefit Cost Ratio (BCR) were employed to achieve the objectives. The results revealed that cost of cultivation of sugarcane is the prime factor in the various value added products. Among the value added products, sugarcane juice production was found more profitable, which needs further study of technical and financial feasibility of keeping quality in order to produce on large scale.

K. Shrivastava, A. K. Srivastava, S. Solomon, A. Sawnani and S. P. Shukla (2011)[5]**:** in their study entitled that 'Sugarcane cultivation and Sugar industry in India'? Sugarcane had been one of the most important and celebrated crops cultivated widely in India since time immemorial. Its
cultivation and uses are mentioned in ancient Indian literature as well as in the descriptions in important books written during the reign of various kings as also in the descriptions given by various travelers who visited India during different periods. Ancient Indian literature (*Puranas*, etc.) mention about *gur* and *sharkara* made from

[2] **Jaswanth Singh, R.D.Singh, S.I.Anwar and S.Solomon**, Sugar Tech (December 2011) 13(4):366-371, DOI 10.1007/s 12355-011-0110-4

[3] **Murali P., Balakrishnan R.** Agricultural Economics Research Review Year : 2011, Volume : 24, Issue : conf First page : (567) Last page : (567) Print ISSN : 0971-3441. Online ISSN : 0974-0279.

[4] **I.V.Y Rama Rao., G Sunil Kumar Babu.** Indian Journal of Sugarcane Technology 2011

[5] **K. Shrivastava, A. K. Srivastava, S. Solomon, A. Sawnani and S. P. Shukla,** Sugarcane Cultivation and Sugar Industry in India: Historical Perspectives, Sugar Tech, December 2011, Volume, 13, Issue 4, pp 266-274

sugarcane juice. The earliest record of establishment of first sugar factories in India dates back to 1610 by Captain Hippon at Masulipatam and Petapoli on the Coromandel Coast, and subsequently one at Surat on the West Coast by Captains Best and Dowton in 1612. Sugarcane is grown by a large number of farmers its command area supply, marketing and payment to the farmers, etc., have been regulated by various Acts and Sugarcane Control orders promulgated and amended by the Government from
time to time. Sugarcane development has received due importance both at the national level as well as at the state (Province) levels

Imandi Venkata Yoga Ramarao (2011)[6]: The present study was conducted during 2008–2009 in Andhra Pradesh State of India, is an attempt to work-out various facets of economics involved in Jaggery manufacturing and marketing, constraints faced by jaggery manufacturers. Multistage sampling technique was adopted in selecting the sampling units. Averages, benefit–cost ratio (BCR), net present worth (NPW), internal rate of return (IRR), break even output (BEO), payback period (PBP), Garrets ranking technique and Kendall's coefficient of concordance (W) test were employed as analytical tools. Cost of cultivation of sugarcane (68.22%) is the prime factor in jaggery manufacturing. Lack of infrastructural facilities in jaggery production and insufficient price dissemination in jaggery marketing were major constraints. Market concentration in whole sellers was moderately high (Gini coefficient = 0.59) and in commission agents was medium (Gini coefficient = 0.45). For profitable and sustained way of jaggery manufacturing and marketing these constraints should be addressed at war foot basis.

Table No.1,Association between Education of the Respondents and Opinion the Sources of Income

Educational qualification	Source of income to the respondents			Total	% of the respondents
	Agriculture Only	Agriculture and Business	Agriculture and Allied		
Illiterate	60(63.8)	38(37.6)	28(24.6)	126	15.8%
Up to 8th std	153(163)	99(96.2)	70(62.8)	322	40.2%
Up to 10th std	77(80)	52(47.2)	29(30.8)	158	19.8%
Up to 12th std	58(49.1)	24(29)	15(18.9)	97	12.1%
Degree level	36(32.4)	17(19.1)	11(12.5)	64	8.0%
Diploma and others	21(16.7)	9(9.9)	3(6.4)	33	4.1%
Total	405	239	156	800	100.0%

The figures in the parenthesis are expected frequencies
Null hypothesis
There is no association between education level and sources of income of the respondents
Alternative hypothesis
There is an association between education level and sources of income of the respondents

[6] **Imandi Venkata Yoga Ramarao**, An Economic Appraisal of Manufacturing and Marketing of Jaggery in Andhra Pradesh state, India Sugar Tech September 2011, Volume 13, Issue 3, pp 236-244

Table No.2

Factor	Calculated value χ^2	Table value	DF	Remarks
Educational qualification	10.036	18.307	10	Insignificant

As the calculated value of chi-square χ^2 (10.036) is less than table value(18.307) for 10 degrees of freedom at 5% level of significance, There is no association between the education of the respondents and their source of income. Hence the null hypothesis is accepted and it is inferred that there is no significant relationship between the education and sources of income of the respondents. The source of income may be based on some other factors like the individual attitudes and effort

Table No. 3, Association between Age of the Respondents and Annual Income

Age group	Annual income				Total	% of the respondents
	less than Rs.50000	Rs.50000-100000	Rs.100000-150000	above Rs.150000		
below 25 years	0(2)	6(8.5)	16(10.4)	5(6.2)	27	3.4%
26-35 years	23(20.6)	71(89.1)	110(109.3)	80(65)	284	35.5%
36-45 years	13(21.1)	124(91.3)	106(112)	48(66.6)	291	36.4%
46 and above	22(14.4)	50(62.1)	76(76.2)	50(45.3)	198	24.8%
Total	58	251	308	183	800	100.0%

The Figures in the Parenthesis are Expected Frequencies

Null hypothesis
There is no association between Age group and Annual income of the respondents

Alternative hypothesis
There is an association between Age group and Annual income of the respondents

Table No.4

Factor	Calculated value χ^2	Table value	DF	Remarks
Age group	40.618	16.919	9	Significant

As the calculated value of chi-square χ^2 (40.618) is greater than table value (16.919)for 9 degrees of freedom at 5% level of significance, There is an association between the age group of the respondents and their annual income. Hence the null hypothesis is rejected and it is inferred that there a significant relationship between the age group and annual income of the respondents. The annual income is depending on the age group of the respondents

Table No.5, Association between Age of the Respondents and Opinion about the Reason for Cultivating Sugarcane

Age group	Reason for cultivating sugarcane					Total	% of the respondents
	Highly Portable	Traditional Crop	Better Marketing Facility	Better Income	Suitable Climate And Fertility		
Below 25 Years	6(2.6)	7(8.2)	11(8.4)	2(5.6)	1(2.1)	27	3.3%
26-35 Years	29(27.7)	88(86.3)	94(88.8)	52(58.9)	21(22.4)	284	35.5
36-45 Years	24(28.4)	87(88.4)	88(90.9)	69(60.4)	23(22.9)	291	36.4%
46 And Above	19(19.3)	61(60.1)	57(61.9)	43(41.1)	18(15.6)	198	24.8%
Total	78	243	250	166	63	800	100.0%

The figures in the Parenthesis are Expected Frequencies

Null hypothesis
There is no association between Age group and opinion about the reason for cultivating sugarcane

Alternative hypothesis
There is an association between Age group and opinion about the reason for cultivating sugarcane

Table No.6

Factor	Calculated value χ^2	Table value	DF	Remarks
Age group	12.364	21.026	12	Insignificant

As the calculated value of chi-square χ^2 (12.364) is less than table value (21.026) for 12 degrees of freedom at 5% level of significance, There is no association between the age group of the respondents and their opinion about the reason for cultivating sugarcane. Hence the null hypothesis is accepted and it is inferred that there no significant relationship between the age group and opinion about the reason for cultivating sugarcane. The reason for cultivating sugarcane may be depending on some other factors like climate, yielding capacity of the soil and water facility etc.

Table No.7, Association between Size of the Land and Opinion about the Benefits from Modern Cultivation

size of the land	Opinion about the Benefits from Modern Cultivation		Total	% of the respondents
	Yes	No		
Below 3 Acre	74(82.2)	27(18.8)	101	12.5%
4-7 Acres	254(245.8)	48(56.2)	302	37.8%
8-10 Acres	263(259.5)	56(59.4)	319	39.9%
Above 10 Acres	60(63.5)	18(14.5)	78	9.8%
Total	651	149	800	100.00

The figures in The Parenthesis are Expected Frequencies
Null hypothesis
There is no association between size of the land and opinion about the benefits from modern cultivation

Alternative hypothesis
there is an association between size of the land and opinion about the benefits from modern cultivation.

Table No.8

Factor	Calculated value χ^2	Table value	DF	Remarks
size of the land	7.128	7.815	3	Insignificant

As the calculated value of chi-square χ^2 (7.128) is less than table value (7.815) for 3 degrees of freedom at 5% level of significance, There is no association between the size of the land and their opinion about the benefits from modern cultivation. Hence the null hypothesis is accepted and it is inferred that there no significant relationship between size of the land and opinion about the benefits from modern cultivation. The benefits from modern cultivation may be depending on some other factors like price for the produce, yielding capacity of the soil and high-breed seeds etc.

Table No.9

Test Statistics	Benefits enjoyed	Yielding per acre	Satisfaction about the yielding	Opinion about the Benefits from Modern Cultivation
Chi-Square	.645	5.690	7.865	4.625
df	4	4	4	4
Asymp. Sig.	.958	.223	.097	.328
a. Kruskal Wallis Test				
b. Grouping Variable: method preparing the land for cultivation				

From the above table it is inferred that There is no significant relationship between the method of preparing the land by the respondents and the benefits enjoyed from the land, yielding per acre and the opinion of the respondents about the benefits enjoyed from modern cultivation whereas there is a significant relationship between the method of preparing the land by the respondents and the satisfaction about the yielding from the land.

Table No.10,GARRETT Ranking Table

Sl.No	Problems faced by the respondents	Rank							Total Score	Average	Rank
		1	2	3	4	5	6	7			
1	Shortage of Labour	7920	7050	6032	7750	4257	3010	1892	37911	47.388	III
2	Seed Problem	7986	6580	6032	7800	4515	2730	2112	37755	47.193	V
3	Water Shortage	8118	6956	5800	7050	4429	3430	1914	37697	47.121	VI
4	Power Problem	9372	6721	5568	7300	4472	2765	1980	38178	47.722	I
5	High Cost of Labour	7986	7144	5974	7600	4472	2940	1848	37964	47.455	II
6	Shortage of Fertilizers	8844	7144	5394	7150	4343	2975	2024	37874	47.342	IV

From the above table it is under stood that among the problems based by the respondents power problem is given first rank with a Garrett score of 38178 and an average of 47.722 followed by the problem "high cost of labour gets second rank with a Garrett point 37964 and with an average of 47.455.The third rank given to the problem "shortage of labour" with a garrett point 37911 and an average of 47.388. The fourth rank given to the problem "shortage of fertilizer" with a Garrett point 37874 with an average of 47.342 and the3 fifth rank goes to the problem "seed problem" with a Garrett point of 37755 and an average of 47.193 and finally the sixth rank given to the problem "water shortage" with a garrett score of 37697 and average of 47.121.

Findings

The empirical findings of the study were made by analyzing the collected data by applying necessary statistical tools which are suitable for the research work. The statistical tools like chi-square test, ANOVA, Factor Analysis and Cluster analysis were applied to make the research work effective and find out the result of the research work in a fruitful way. The following are the findings made in this research.

1. Most of the respondents have studied up to 8th standard only
2. Majority of the respondents belong to the age group of 36-45 years
3. Major proportion (96 %) of the respondents is male.
4. Considerable portion of the respondents have three dependents in the family
5. Majority of the respondents earn Rs.100000-150000 as their annual income.
6. Most of the respondents have more than 10 years of experience in agriculture.
7. Major proportion of the respondents has 6-9 years' experience in cultivating sugarcane
8. Most of the respondents depend on the income from agriculture only
9. Majority of the respondents (57.4%) have own land for cultivating sugarcane.
10. Most of the respondents have 8-10 acres of land
11. Most of the respondents allocate the land for cultivating sugarcane and other crops on 2:1 basis
12. Most of the respondents conveyed that sugarcane is the traditional crop in the study area so that they used to cultivate sugarcane.
13. Most of the respondents told that they prepare the land for cultivating sugarcane by plugging with manure.
14. Most of the respondents follow Drips irrigation method
15. Majority of the respondents follow traditional method of cultivation
16. Majority of the respondents follow organic and inorganic system of cultivation
17. Major proportion of the respondents told that modern method of cultivation gives more Income.
18. Most of the respondents conveyed that high yield is the main benefit enjoyed by them, when following modern cultivation system.
19. Majority of the respondents (46.6%) conveyed that they get 40 tonne-50 tone yield of sugarcane per acre
20. Majority of the respondents (62.4) informed that they employ labour for agriculture on daily wage basis

Findings from Chi-Square Test

1. There is no association between the education of the respondents and their source of income.
2. There is an association between the age group of the respondents and their annual income.
3. There no significant relationship between the age group and opinion about the reason for cultivating sugarcane.
4. There no significant relationship between size of the land and opinion about the benefits from modern cultivation.
5. There no significant relationship between education of the respondents and yield per acre of land while cultivating sugarcane.
6. There is an association between method preparing the land for cultivation and satisfaction about the yielding while cultivating sugarcane.

Kruskal-Wallis Test

There is no significant relationship between the method of preparing the land by the respondents and the benefits enjoyed from the land, yielding per acre and the opinion of the respondents about the benefits enjoyed from modern cultivation whereas there is a significant relationship between the method of preparing the land by the respondents and the satisfaction about the yielding from the land.

GARRETT Ranking Table

Among the problems based by the respondents power problem is given first rank with a Garrett score of 38178 and an average of 47.722 followed by the problem "high cost of labour gets second rank with a Garrett point 37964 and with an average of 47.455.The third rank given to the problem "shortage of labour" with a garrett point 37911 and an average of 47.388. The fourth rank given to the problem "shortage of fertilizer" with a Garrett point 37874 with an average of 47.342 and the3 fifth rank goes to the problem "seed problem" with a Garrett point of 37755 and an average of 47.193 and finally the sixth rank given to the problem "water shortage" with a Garrett score of 37697 and average of 47.121

Suggestions

1. Some of the respondents feel that the rate per tonne of sugarcane fixed by the government and the sugar mills are not adequate. Hence effort should be made by the government to consider the cost of cultivating the sugarcane and take initiatives to revise the purchase price of the sugarcane from the farmers.
2. Few respondents informed that power supply is the main problems faced by the farmers during the time of cultivation. Hence the authorities and government should see that power supply to the farmers should not be disturbed. If the power cut is necessary for maintenance work it should be announced well in advance.
3. Few of the respondents informed that shortage of labour is the another problem faced by the respondents because of the industrial development in the study area. Hence the government must take initiatives to create awareness among the farmers regarding the modern method of cultivation and the government should supply the modern equipments for forming in the concessional rate which will help the farmers to minimize the cost of cultivation.

Conclusion

Farmers are considered as the main heart of India because of the contribution by the farming sector in the economic development of the country. Whatever may be the crop or whoever may be the person and whichever may be the area, it is necessary to all the government officials and the authorities to see the welfare of the farmers in the particular area. In the study area the farmers cultivating sugarcane face various issues relating to cultivation and marketing of sugarcane. In this researcher identified the causes for the problems and the remedial measures to solve the plight of the farmers in the study area. Adequate rate for the produce, power supply without any power cut, supply of fertilizers with concessional rate and providing the financial assistance and inputs to the cultivation and concessional rate for example solar power system etc are the main and urgent requirement of the farmers in the study area. Hence the government and the authorities concerned in the department should see that the farmers are provided with the above stated facilities to bring betterment in the life of the farmers in Tirupur and Erode districts which will lead to the balanced development of the districts including the rural parts of the study area.

Bibligraphy

1. Rao I.V.Y. Rama, Efficiency, yield gap and constraints analysis in irrigated vis-à-vis rainfed sugarcane in north coastal zone of Andhra Pradesh Year : 2012, Volume : 25, Issue : 1 First page : (167) Last page : (171) Print ISSN : 0971-3441. Online ISSN : 0974-0279.
2. Jaswanth Singh, R.D.Singh, S.I.Anwar and S.Solomon, Sugar Tech (December 2011) 13(4):366-371, DOI 10.1007/s 12355-011-0110-4
3. Murali P., Balakrishnan R. Agricultural Economics Research Review Year : 2011, Volume : 24, Issue : conf First page : (567) Last page : (567) Print ISSN : 0971-3441. Online ISSN : 0974-0279.
4. I.V.Y Rama Rao., G Sunil Kumar Babu. Indian Journal of Sugarcane Technology 2011

5. K. Shrivastava, A. K. Srivastava, S. Solomon, A. Sawnani and S. P. Shukla, Sugarcane Cultivation and Sugar Industry in India: Historical Perspectives, Sugar Tech, December 2011, Volume, 13, Issue 4, pp 266-274
6. Imandi Venkata Yoga Ramarao, An Economic Appraisal of Manufacturing and Marketing of Jaggery in Andhra Pradesh state, India Sugar Tech September 2011, Volume 13, Issue 3, pp 236-244
7. Amit Kumar Dwivedi, Academic Associate; Research paper, Indian Institute of Management Ahmedabad, E-mail: amitkd@iimahd.ernet.in, dwivedipgdm@gmail.com
8. M. W. N. Dharmawardene, Trends in farm mechanization by sugarcane small land holders in Sri Lanka, Sugar Tech, Volume 5, Numbers 1-2 / March, 2003, Springer India, 0972-1525 (Print) 0974-0740.
9. K.G.Kshirsagar, 'Organic Sugarcane Farming for Enhancing Farmers' Income and Reducing the Degradation of Land and Water Resource in Maharashtra., Indian Journal of Agricultural Economy, Vol:63, No:3, July – Sep 2008.
10. R. N. S. Yadav, Sandeep Yadav and Raj Kumar Tejra , Labour saving and cost reduction machinery for sugarcane cultivation, Sugar Tech journal, Volume 5, Numbers 1-2 / March, 2003.