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A COMPARATIVE STUDY ON AGRICULTURE COMMODITY OFPADDY AND SUGARCANE IN TIRUPPUR DISTRICT

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ABSTRACT
Agriculture occupies an important position in India. India is the second largest producer of the rice in the world after china. Rice in India is grown across the country and also consumed in all the part of the country. The bulk of rice production is consumed domestically. Rice are a cool season crop. Rice soil should be well drained and well supplied with organic matter. Heavy clay soil should be avoided. Coarse sand soil may be used for specialty rice production under irrigation. Most researchers agree the rice has been cultivated for 5000 years or more. Since rice grew wild in various regions, they were probably consumed for thousands of years and domesticated simultaneously all over the world.

KEYWORDS: *Agriculture, consumer, rice.*

INTRODUCTION

Agriculture continues to be the mainstay of livelihood for more than 50 per cent of the population in Tamil Nadu. It contributes 12 per cent of Net State Domestic Product. It is the single largest private sector providing job opportunities for rural people besides being the source of supply of food grains and other dietary staples and serving as the prime source of raw materials for industries. Agricultural development is essential not only to achieve self reliance in food grains at the state level, but also for ensuring household food security and to bring equity in distribution of income and wealth resulting in ultimate reduction of the poverty level. In fact, high economic growth will have no meaning for the masses of people living in rural areas unless agriculture is revitalized. Agriculture in Tamil Nadu is beset with anumber of adverse characteristics such as declining total cultivable area in relation to scarcity of cultivable land, low productivity per unit of labour in most of the regions, predominance of small and marginal farmer households, risk aversion due to production by tenants and agricultural labourers under insecure conditions, vast seasonal variations and presence of a large percentage of tradition loving farmers.

Rice may be one of the earliest cultivated crops because they were less perishable than other food of the time, were transportable, were easy to grow, and could be grown in a variety of soils and climates. In addition, the rice was useful for sustaining human life. Rices prevented thirst and could be dried and preserved for later consumption when food might bescarce. Agriculture is the largest sector in many developing countries.

PADDY AND SUGARCANE PRODUCTION IN INDIA

Paddy and sugarcane is one of the most important vegetables grown in India which is used either in raw or dehydrated form to add flavour and taste to Indian cuisine. Since paddy and sugarcane has medicinal values, it is used in some pharmaceutical preparations also. The diverse agro-climatic conditions enable India to produce paddy and sugarcane in one or the other part round the year. For India, paddy and sugarcane is a consistent earner of foreign exchange and the export of paddy and sugarcane and paddy and sugarcane products reach several destinations, Rice, a pungent edible vegetable is one of the oldest cultivated ones. It isconsidered as a food of exceptional value for flavouring and

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seasoning. Research has shown that paddy and sugarcane contain antioxidants and can reduce blood cholesterol levels. They are low in calories and a source of dietary fiber. The world's major producer of paddy and sugarcane is China followed by India, Russia, Pakistan, Indonesia, Turkey, Vietnam, USA, Myanmar, Brazil and Bangladesh. Paddy and sugarcane is exported mainly to neighbouring countries like Sri Lanka, Malaysia, Maldives, Nepal, Kuwait, Indonesia, Mauritius, Seychelles, UAE, Singapore, Pakistan, Saudi Arabia and Dubai.

Bellary paddy and sugarcane (Allium cepa var.cepa) and multiplier paddy and sugarcane (Allium cepa var. aggregatum) are the two major paddy and sugarcane groups cultivated in India. Maharashtra accounts for 28 per cent of the country's production (Bellary rice) followed by Gujarat, Orissa, Uttar Pradesh, Karnataka, Rajasthan, Madhya Pradesh, Bihar, Tamil Nadu, Andhra Pradesh and Haryana. The productivity of paddy and sugarcane is also highest in Maharashtra (20.62 tones/ha) followed by Gujarat and Haryana. In India, paddy and sugarcane is produced in three major seasons viz., Kharif, late Kharif and Rabi. Kharif season starts at June and harvesting is done in August – September. Late Kharif crop is sown during September and harvested during the month of November.

HISTORY OF RICE

Paddy and sugarcane is a famous spice commodity grown all over the world and consumed in various forms. It has been in cultivation for more than 4,000 years. The maximum diversity of Alliums species is found in a belt from the Mediterranean basin to Iran and Afghanistan, i.e. Iran, north Iraq, Afghanistan, Soviet middle-Asia and West Pakistan, indicating the primary centre of origin. The earliest record comes from Egypt where paddy and sugarcane appear as carvings on pyramid walls and in tombs from the third and fourth dynasties (2700 BC). It is thought that Romans took the paddy and sugarcane from north of the Alps. The paddy and sugarcane was among the first cultivated plants taken to the Americas from Europe. Europeans took the species to East Asia during the last century.

PADDY AND SUGARCANE PRODUCTION IN TIRUPPUR DISTRICT

Tiruppur District lies on the extreme north of Tamil Nadu. Tiruppur District situated atbetween 10 36" and 11 58" North Latitude and between 76 49" and 77 58" East Longitude. The district in general is characterised with a scandy rainfall and a dry climate. Maximum rainfall is recorded in Gobichettipalayam and Bhavani taluks. As per revenue land records, the total geographical area of the district is 8,16,191 hectares. Of those, 3,09,252 hectares have been brought under cultivation as net area sown. This accounts for 37.8% of the total area of the district. Area sown more than once is 47,255 hectares i.e. 4% of the total net area sown. Total cropped area is 3,56,507 hectares i.e. 43.6% of the total area sown in the district.

Tiruppur is a major horticulture belt in the State. Almost all the fruits, vegetables, spices, flowers and plantation varieties are grown here. Tapioca is the main vegetable cultivated in 3,938 hectares, followed by small paddy and sugarcane in 2,026 hectares, which occupied 4th place in cropped area and 2nd place in productivity next to Coimbatore District.

PROBLEMS AND PROSPECTS OF PADDY AND SUGARCANECULTIVATION

Agricultural marketing involves in its simplest form the buying and selling of agricultural produce. This definition of agricultural marketing may be accepted in olden days, when the village economy was more or less self-sufficient, when the marketing of agricultural produce presented no difficulty, as the farmer sold his produce directly to the consumer on a cash or barter basis. But, in modern times, marketing of agricultural produce is different from that of olden days. In modern marketing, agricultural produce has to undergo a series of transfers or exchanges from one hand to another before it finally reaches theconsumer.

The production of agricultural produce cannot be adjusted to the changing paddy and sugarcane or demand as in the case of industrial products. Once a crop is raised, the farmer has to allow the crop to grow and harvest it, irrespective of changes in paddy and sugarcane levels. Even if there is a fall in paddy and sugarcane, the farm producer cannot think of stopping the growth of the crop in the middle. Such an attempt would also result in loss.

Since the farm producer is not able to adjust production to the changingdemand, he has no control over paddy and sugarcane. Therefore, very often, the farm producer is not able to get a remunerative paddy and sugarcane for his products. Further, it is very difficult to have a common understanding among a large number of farm producers in controlling the level of production and in that way, to control supply and paddy and sugarcane. In view of the special characteristics of agricultural products, marketing of agricultural produce is really a complex problem. In spite of the phenomenal improvements in different aspects of marketing, the rural poor still face certain problems in both production and selling of their products.

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These days farming has not remained specialised because of more risk and uncertainty in the output as well as in paddy and sugarcane. Farmers have diverted their efforts towards growing vegetables rather than any other crops. It fetches them continuous flow of income either throughout the year or at least in the season. Income so received depends upon, how the marketing of the vegetables is undertaken by the producers. Production of paddy and sugarcane is an important business to various producers and this is an important crop which helps to increase the economic condition of the farmers. Paddy and sugarcane is a seasonal dependence crop. Its productivity is highly associated with the nature. Paddy and sugarcane production is an eye irritating like paddy and sugarcane itself as its productivity and paddy and sugarcane remains not stabilized. Paddy and sugarcane producers are facing many problems right from the point of production to the final disposal. If the monsoon and climate are favourable to farmers in production, proper paddy and sugarcane for the produce is not received because of over supply.

STATEMENT OF PROBLEM

The purpose of the study is to find out the awareness about cultivation and marketing of paddy and sugarcane by the farmers the main aim is to find out what are all the problem faced by then and remedies to overcome it. Are they looking for less price or high price from more produce. And to find out the step or actions what they have taken and motivated other to do to make farming techniques easier and harmless.

OBJECTIVES OF THE STUDY

- To know the study the socio-economic characteristics of respondents.
- To find out the factors influencing the farmers to plant paddy and sugarcane.
- To find out the knowledge and adoption of recommended cultivation practice by the paddy and sugarcane growers
- To study about the satisfaction level of the farmers about paddy and sugarcane cultivation.
- To study the problems faced by farmers in paddy and sugarcane cultivation.
- To offer suggestions based on findings of the study.

RESEARCH METHODOLOGY

Research is common parlance refers to a search for knowledge. The manipulation of things, concepts or symbols for the purpose of generalizing to extend, correct or verify, knowledge aids in construction of theory or in the practice of an art. Research is an academic activity and as such the term should be used in a technical sense.

SAMPLE DESIGN

Convenient sampling method is adopted for the purpose of study.

DATA COLLECTION TECHNIQUES

After identifying and defining the research problem and determining specific information required in solving the problems, the next step is to look for the type and source of data that may yield the desire results. There are mainly two types of data that a researcher can collect, one is the primary data and the other is the secondary data.

Primary data

The primary data are those which are collected a fresh and for the first time, and thus happened to be original in character.

Collection of data through questionnaires

This method of data collection is quite popular. It is being adopted by private individual research worker, etc. in this method Questionnaires were distributed to the employees.

Secondary data

To supplement the primary data, secondary data was required. This was ob- tained from company records, articles in magazines and other books related to the subject matter.

STATISTICAL TOOLS USED

- Percentage method
- Chi - square analysis
- Weighted average method
- Ranking method

REVIEW OF LITERATURE

Harsheet Kaur Chawla (2019) contemplated a review of the Indian Agricultural Commodity Market. It talks about different agrarian commodities being exchanged and the exhibition of Agricultural Commodity Market in India and the different changes in the market in recent years. The future of agricultural commodities looks rather unsure, however with the innovation, there will be, there can be a great expected, particularly as far as the arrangement of exchanging.

Hariharan and et.al. (2018) examined the Indian commodity market. This study centres on understanding the dynamic development in the commodity market which has seen a noteworthy change in the previous decade. The commodity market is additionally an elective alternative for a

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financial specialist who isn't content with the equity market. In India, over 70% of populations rely upon agricultural commodities. Commodity futures markets are a vital part of a program for farming progression. The present paper is completed with the deference of every one of the six National level commodity exchanges in India to be specific NMCE, Ahmadabad; MCX, Mumbai; NCDEX, Mumbai; ICEX, Mumbai; ACE, Ahmadabad; and UCX, Mumbai. These trades are assuming a significant job in the exchanging exercises India.

SIMPLE PERCENTAGES ANALYSIS

SPENDING FOR CULTIVATION PER YEAR

S.No	Spending for cultivation per year	Number of Respondents	Percentage (%)
1	Rs. 100000 - 2000000	69	45
2	Rs.200001- 300000	44	28
3	Rs.300001- 400000	25	16
4	Above Rs. 400001	17	11
	Total	**155**	**100**

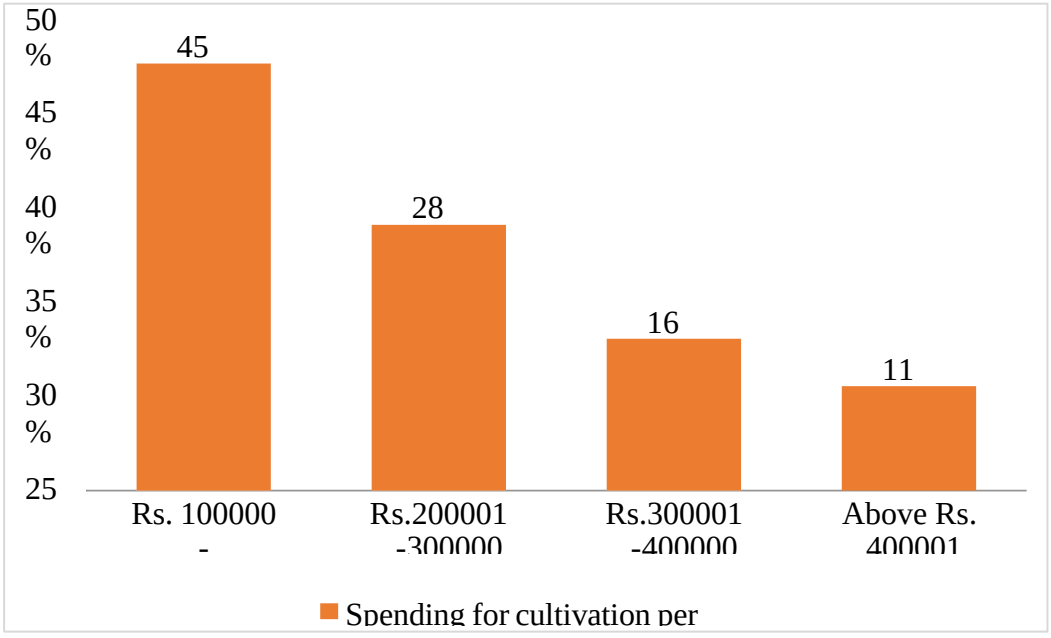
INTERPRETATION

The above table shows that45%of the respondents pending yearly Rs. 100000 - 2000000, 28%of the respondents spending yearlyRs.200001- 300000, 16%of the respondents spending yearlyRs.300001- 400000and11%of the respondents spending yearly above Rs. 400001.

INFERENCE

Here mostly 45%of the respondents spending yearly Rs. 100000 – 2000000.

SPENDING FOR CULTIVATION PER YEAR



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RANKING ANALYSIS

RANKING ANALYSIS OF SATISFACTION LEVEL ON USING THEPADDY AND SUGARCANE CULTIVATION SYSTEM

PARTICULARS	Highlysatisfied	Satisfied	Neutral	Dissatisfied	Highly dissatisfied	TotalScore	Rank
Crop uniformity	24 (120)	38 (152)	53 (159)	28 (56)	12 (12)	499	5
Low expenses	49 (245)	41(164)	12(36)	43(86)	10 (10)	541	2
High yield	33 (165)	56 (224)	24 (72)	17 (34)	25 (25)	520	4
Profit	59 (295)	24 (96)	36(234)	25(50)	11 (11)	686	1
Less usage ofwater	44 (220)	39 (156)	38 (114)	12 (24)	22 (22)	536	3

Source: Primary Data

INTERPRETATION

From the above ranking analysis Profit ranks 1, Low expenses ranks 2, Less usage ofwater ranks 3, High yield ranks 4 an Crop uniformity ranks 5.

Here majority says Profit as ranks 1.

CHI SQUARE TEST

ANALYSIS BETWEEN TOTAL AREA OF FARM AND SPENDING FORCULTIVATION PER YEAR

NULL HYPOTHESIS (H0):

There is no significant relationship between total area of farm and spending for cultivationper year.

ALTERNATIVE HYPOTHESIS (H1):

There is a significant relationship between total area of farm and spending for cultivation peryear.

Spending Farming area	Rs. 100000 – 2000000	Rs.200001- 300000	s.300001- 400000	Above Rs.400001	Total
0 to 5 acres	11	14	1	13	39
6 to 10 acres	1	5	22	22	50
11 to 15 acres	13	15	11	1	40
Above 15 acres	2	7	12	5	26
Total	27	41	46	41	155

Chi-Square Tests

	Value	df	Asymptom. Sig. (2-sided)
Pearson Chi-Square	24.551[a]	8	.006
Likelihood Ratio	18.160	8	.005
Linear-by-Linear Association	4.485	1	.034
N of Valid Cases	155		

7 cells (46.7%) have expected count less than 5. The minimum expected count is .14

INTERPRETATION

Hence the p value is grater then 0.05, so, null hypothesis is accepted which states that there is

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no significant difference between total area of farm and spending for cultivation per year.

CONCLUSION

Paddy and sugarcane cultivation system with drip irrigation is good for a small yard or for watering individual plants. Drip irrigation is highly effective at supplying one to four gallons of water per hour directly to the soil. The advantage of paddy and sugarcane cultivation over sprinklers is that there is little water loss due to evaporation or runoff. It's particularly good for mulched areas because it can directly soak the soil without washing away the mulch.Whether in a garden center or a home landscape, hand watering eachindividual plant based on its needs that day is probably the best way to water. By hand watering, you are forced to get up close to each plant; therefore, you're able to adjust each plant's watering to its specific need. You can give a dry, wilting plant extra water or skip a plant that prefers to stay on the dryer side. Most of us just don't have the time for this slow, thorough watering process. Sprinkler or paddy and sugarcane cultivation systems allow you to save time by watering large areas of plants all at once.

The research work has resulted in some significant findings which are very relevant to the farmers as well as to the policy makers. From the farmers point of view they are not effecting changes in their cropping pattern to suit the exigencies of water non availability. They quite reluctant to go for modern irrigation methods to optimize the water use and derive maximum benefit out of it. The Water Users Associations of the farmers are defunct in majority of the areas and there is no cooperation and government machinery to facilitate the formation of Water Users Association in the study area. From the government point of view the G.O. related to the release of Tamilnadu canal had proved to be a heart burn for the farming community.

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