

A Study on Cultivation of Paddy in Arumanai

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Abstract: Rice is an important staple food crop for more than 60 percent of the world population. It is the oldest known food that is still widely consumed today. Paddy also called rice paddy, small level flooded field used to cultivate rice in southern and eastern Asia. Wet-rice cultivation is the most prevalent method of farming in the forest where it utilizes a small fraction of the total land yet feeds the majority of rural population. Rice was domesticated as early as 35000 BC and by about 2,000 years ago it was grown in almost all of the present day cultivation areas, predominantly deltas, food plains and coastal plains, and some terraced valley slopes. Many paddy fields are flooded by rivers and rainfall during monsoon season, while others must be irrigated. The paddies have an important subsoil and are bordered by earthen bunds to hold an average of 4-6 inches (10-15 centimeters) of water in the field for three-quarters of the growing season. In all countries, excluding India paddies are worked by family labour alone and by the same methods as were used 2,000 years ago hand cultivation with had and spade, or water buffalo-, horse-, or ox-drawn plough with metal share.

Key Words: Rice, Nutrition, Cultivation, Yield, Finance, Seedlings

Introduction:-

Rice is a cereal grain belongs to the grass family of gramineae and native to the deltas of the great Asian rivers, the Ganges, the change (Yangtze) and the Tigris and Euphrates. The rice plant grows from 2 to 6 ft tall, with a round, jointed stem, long pointed leaves and edible seeds borne in dense head on separate stalks. Rice is one of the most cultivated grain crops in India as well as in Asian countries and a staple diet of major part of India. India is an important centre for rice cultivation and consumption. India stands in second position after china in the production of rice. Methods of growing rice differ greatly in different regions, but in most Asian countries including India, the traditional hand methods of cultivating and harvesting rice are still practiced. Modern farming of rice started in most of the countries which drastically reduced the labour problems and cost of cultivation. There are machines available from planting to harvesting the rice crop. Some parts of Indian rural areas still depend on the wet buffalos for land preparation and manpower in plantation and harvesting. People often confuses with paddy and rice. Rice when it is still covered by the brown hull is known as paddy. Rice fields are also called paddy fields or rice paddies. A Paddy field is a flooded parcel of arable land land used for growing semi aquatic rice. Paddy cultivation should not be confused with cultivation of deepwater rice. Which is grown in flooded conditions with water more than 50 cm (2 oin) deep for at least a month. South India consumes more rice than any part of India. Rice can be used to produce rice bran oil from it husk a part from using in regular culinary purpose. There are many varieties of rice cultivated across India. With proper field management practices and irrigation facility, rice farming would be the profitable in short period of time. In India rise is cultivated in Rabi and Kharif seasons. However in some parts of India, rice is being cultivated 3 times yearly.

Nutrient Values and Health Benefits of Rice

The following are the health benefits of rice.

1. Rice is a good source of energy.
2. Rice is a cholesterol free food.
3. Rice helps in blood pressure management.
4. Rice helps in preventing skin problems.
5. Rice helps in cancer prevention.
6. Rice can also helps in preventing chronic constipation.
7. Rice brain oil supports cardiovascular health.
8. Rice is a good source a niacin, vitamin D, calcium, fiber, iron, thiamine and riboflavin.

Importance

Importance is given to paddy cultivation for two reasons,

1. The first reason is that paddy is one of the very important consumers good and it has in elastic demand.
2. The second reason is that coconut is highly profitable for the produces, but now a days the price of the rice is continuously increasing in Kanyakumari District.

Statement of the Problem

The paddy cultivation is unique in all respects among the horticultural crops grown in the country as source of food. The crop assumes considerable significance in the national economy in view of the rural employment and income generation major share of the rice product in the country is contributed by millions of marginal and small farmers, who form the back bone paddy country depend on paddy cultivation processing, marketing and trade related activities.

In the coastal tracts, most of the people depend on the paddy for their subsistence and paddy is the sole income. Thus the paddy based farming system satisfies the day to day needs of a family in coastal agro.

Objectives

- 1) To estimate the production of the paddy in the study area.

- 2) To find out the mode of obtaining the farm land and the level of attitude.
- 3) To find out the mode of obtaining seedlings and the level of attitude.

Analysis

1. Area under cultivation of paddy:-

Area under cultivation of paddy is classified and analyzed.

Table-1: Distribution showing the area under cultivation of paddy of the sample respondents

| S.No | Area(Acres) | No.of Respondents | Cultivated area in production (in Acre) | Percentage |
|------|----------------|-------------------|---|------------|
| 1. | Up to 5 acres | 14.4 | 5,400 | 3.9 |
| 2. | 6-10 acres | 24 | 20,000 | 14.56 |
| 3. | 11-15 acres | 36 | 36,700 | 26.72 |
| 4. | 16 -20 acres | 26.4 | 43,700 | 31.89 |
| 5. | Above 20 acres | 19.2 | 31,500 | 22.94 |
| | Total | 120 | 1,37,300 | 100 |

Source: Primary Data

Table 1 indicates that 3.9 percent of the respondents use 5-10 acres area of land for cultivation, 14.50 percent of the respondents use 15-20 acres area of land for cultivation. 26.72 percent of the respondent use 30-40 acres area of land for cultivation. 31.89 percent of the respondent use 50-60 acres area of land for cultivation and 22.94 percent of respondents use 70-80 acres area of land for cultivation.

Duration of Getting Yield:-

Duration of getting yield after cultivation of paddy are analysed and given in tables.

Table-2: The Duration of getting yield of the sample respondents

| Get Yield After cultivation (months) (yearly three times) | No.of Respondents | Percentage |
|---|-------------------|------------|
| 1 -4 (M) | 24 | 20 |
| 5-8(M) | 74.4 | 62 |
| 9-12(M) | 21.6 | 18 |
| Total | 120 | 100 |

Source: Primary Data

Table 2 Shows that out of 120 respondents 20 percent of them were yield after 4 months 62 percent of them were getting yield 8 months 18 percent of them getting yield after 12 month.

Source of Finance

The farmers borrowed funds from different sources. The nationalized bank are landing loans to the farmers with subsidy .Source of finance of the respondents are analyzed and given table.

Table -3: Distribution showing the sources of finance of the sample respondents

| Source of Finance | No. of Respondents | Percentage |
|-------------------|--------------------|------------|
| Owned | 48 | 40 |
| Borrowed | 45.6 | 38 |
| Both | 26.4 | 22 |
| | 120 | 100 |

Source: Primary Data

Table 3 shows that 40 percent of the respondents are using their own finance 38 percent of the respondents borrowed from other sources for their finance 22 percent of the respondents have some funds with them and the balance were borrowed from various sources.

Mode of Obtaining The Farm Land

Paddy is a short term crop because the farmers enjoy the yield for a long period .The farmers need high investment at the initial stage of paddy farming. It has been observed that farmers have inherited the land from their ancestors and then they are automatically engaged in farming. Some others like to involve themselves in paddy farming out of self interest paddy is a cash crop. Therefore farmers are involved in paddy farming for their level hood. Some paddy farmers take to it because it calls for less maintenance. The details regarding the mode obtaining the farm land for paddy farming are presented in Table 4.

Table -4: Mode of obtaining the farm land by the sample farmers

| S.No | Mode | No.of Respondents | Percentage |
|------|------------------|-------------------|------------|
| 1. | Tradition | 50 | 41.7 |
| 2. | Self Interest | 13 | 10.8 |
| 3. | Profit motive | 49 | 40.8 |
| 4. | Less Maintenance | 8 | 6.7 |
| | Total | 120 | 100 |

Source: Primary Data

Table 4 pinpoints that out the 120 respondents selected 50 941.7 percent) follow paddy farming due to tradition , 13(11.5 percent) due to self-interest 49(40.8 percent) for the purpose of profit and 8 (6.7 percent) because it involves less maintenance cost.

Table-5: Mode of obtaining the farm land and level of attitude

| Category | Level of Attitude | | | Total |
|----------------------|-------------------|----------|-----------|------------|
| | Low | Medium | High | |
| Inherited Farm | 18 (78%) | 50 (71%) | 12 (44 %) | 80 (67%) |
| Newly Developed Farm | 5(22%) | 20 (29%) | 15(56 %) | 40 (33 %) |
| Total | 23 (100%) | 70(100%) | 27 (100%) | 120 (100%) |

Source: Primary Data

Table 5 shows that out of 80 (percent) respondents who possess inherited farms, 218 (percent), 50 (percent) and 12 (percent) possess low, medium and high level of attitude respectively to paddy farming. In order to test relationship between mode of obtaining the farm land for coconut farming and the level of attitude the hypothesis that “There is no significant relationship between the mode of obtaining the farm land of coconut farming and the level of attitude” was farmed.

Mode of Seedlings

Better quality seedlings are needed to get good yields. The department of agriculture produces fine varieties of seedlings through research projects in order to increase the yield. The farmers who have high seedlings in their paddy farms, some of the seedlings are used for their own purpose and some others maintain it as a business, selling the seedlings to others. Table 6 elucidates the mode of obtaining seedlings by the sample paddy farmers.

Table -6: Mode of obtaining seedlings by the sample farmer

| S. No. | Mode | Number of Respondents | Percentage |
|--------|-----------------|-----------------------|------------|
| 1. | Private Sellers | 76 | 63.3 |
| 2. | Home Garden | 25 | 20.8 |
| 3. | Government Farm | 19 | 15.8 |
| | Total | 120 | 100 |

As seen from table 6 out of the 120 sample farmers 76 (63.3 percent) farmers developed seedlings from their own paddy gardens, 25 (20.8 percent) farmers purchased the seedlings from private sellers and 19 (15.8 percent) farmers purchased them from the government farm.

Table 7: Mode of obtaining seedlings and the level of attitude.

| S. No | Mode | Level Of Attitude | | | Total |
|-------|--------|-------------------|----------|-----------|------------|
| | | Low | Medium | High | |
| 1. | Own | 11 (52%) | 50 (74%) | 24 (77 %) | 85 (71 %) |
| 2. | Others | 10 (48%) | 18 (26%) | 7 (23%) | 35 (29 %) |
| | Total | 21 100%) | 68(100%) | 31 (100%) | 120 (100%) |

It is clear from table 7 that out of 85 (71 percent) respondents who developed their own seedlings 11 (52 percent), 50 (74 percent), 24 (77 percent) have low, medium and high levels of attitude respectively.

In order to find the hypothesis that “There is no significant relationship between the made of obtaining seedlings and the level of attitude is framed and tested with the help of the chi -square test . Since calculated value is more than the table value the hypothesis is rejected.

Findings

1. The study reveals that out of 120 respondents majority 31.89 percent of respondent use 11-15 acres area of land for paddy cultivation.
2. It is found that out of 120 respondents, majority 62 percent of them were getting yield after 5-8 months.
3. It is observed from the majority 40 percent of the respondent used owned funds of cultivation of paddy.
4. It is understood that majority respondents tradition farmers.
5. It is revealed from that majority 80 percent of the respondents inherited to the level of attitude.
6. It is evident that majority 63.3 percent of the respondents are private sellers.
7. Majority of the respondents (85 percent) of the own level of attitude in the cultivation.

Suggestions

Paddy farming plays a important role in the socio-Economic life of a large number of paddy formers in Arumanai. The climate and soil conditions are the best suited for successful cultivation. The growers will come forward to bring more area under paddy cultivation if they are ensured fair and suitable price and a well organized market. The government of India and State Government have to give importance to raise crop-status among farmers. Seedlings and fertilizers are to be supplied by Government agencies in different parts of state. Its field staff should visit the new plantations to give advice to the farmers. This may persuade the growers to look for planting in their paddy cultivation to protect their income. A systematic and proper marketing system should be introduced so as to avoid any intermediaries, who may come in the way in the future years.

Conclusion

Paddy farming in the area has increased considerably over the years. Paddy farming occupies a unique position in the socio-economic structure of the district and it is intimately related to the prosperity of a vast multitude old small and marginal farmers. The paddy based farming system satisfies paddy cultivation satisfy the fuel requirement of a large number of families. The present study provides ample opportunity to the researcher to exhibit all her research skills. The findings of the study will enable the policy makers to take appropriate decisions to make the paddy farming a profitable position. Moreover the study will also enable the academicians and researches to have an over view of paddy farming in Arumanai Area.

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