DYNAMICS OF PADDY CULTIVATION IN KERALA

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ABSTRACT

In recent years Kerala agricultural production is low level but it may be given a threat to Kerala food security. Kerala Economy is depending on central government share and other neighboring states like Tamilnadu Karnataka and Andhra Pradesh for the sustainable food balance. It gives us Kerala economy is deficit economy in every year. In India have passed the food security bill Loksabha in 2014 may reduce the state share, because the standard of living of people in Kerala is high comparatively other states in India. A lot of agricultural fields are filled for the developmental activities like metro rail, airport, and industries; housing plots, etc...The main agricultural production district in Kerala is Palakkad and Alappuzha. Large number of cancer patients is in Kerala due to the cause of poisoned foods in other states. Rice production in Kerala has given declining tendency to the recent year 2012-13 is 6%. Main important causes for the declining tendency of rice production in Kerala were low price in output has given to the farmers and there was not profitable because Kerala climate has no similarity in each and every year. Government has not given a serious intervention to rice production.

KEY WORDS: Paddy Cultivation, Prices Of Rice, Farmers Problem, Agriculture, Labour,

INTRODUCTION

Paddy cultivation was part of the proud culture of Kerala state. Rice is the most important cereal and staple food produced and consumed in Kerala. In Kerala, you can see vast green paddy fields. Kuttanad is called as rice bowl of Kerala because of rice cultivation. Trissur and Palakkad are the other two places in Kerala where large scale cultivation is done. According to the state planning board, Kerala lost over 5,00,000 hectares of paddy fields
between 1980 and 2007. But due to serious intervention of Kerala Government in the year 2010, 1500 hectors of land kept follow for 2-5 decades brought under cultivation, paddy production increased by 1.25 lakh tons, upland paddy cultivation started in another 1000 hectors. Kerala government has implemented novel schemes under food security programs for special rice production areas like Kole, Pokkali, Kuttanadu, Onattukara, Purakkadkari, Kuttampalli, Palakkad, etc... In the earlier days rice used to be cultivated almost in all parts of Kerala in three seasons. They were mundakan, virippu and puncha. Since agriculture has a very important role in Kerala economy. It is essential to have a clear picture of the performance of agriculture in the past and present for the proper understanding of the economy. Despite the fact that Kerala produces only for less than its annual requirement of the rice thereby remaining a deficit state, the area under paddy cultivation has been continuously declining at an alarming rate over the years. Most of them are not entering deeply into the real problems. Since the mid-seventies and much effort were not made to isolate the prime reasons behind the poor performance of paddy fields at micro level.

REVIEW OF LITERATURE

There are a lot of studies of paddy cultivation in Kerala. Some of the literature is reviewed here.

Prakash (2008) pointed out that Palakkad district is largest paddy cultivating district in Kerala, has found that the problem faced by the farmers was the acute shortage of labour and increase in wages of farm workers. As the major share of the paddy cultivation depended on hired labour; youth especially those having school education considered the agriculture work is a dirty job.

Prabhakaran(2009) has discussed that Palakkad called the rice bowl of Kerala, accounted for nearly 50% of paddy produced in the state during 2008-09. During 2007-08, its share was 46%. The increase is attributed to a rise in the area of cultivated land and productivity, said to be the results of decade-long salient revolution initiated by local bodies, government agencies, and farmers. The development of eight high yielding varieties from paddy from near extinct traditional varieties of Palakkad being to be double production the author said.

Agriculture department of Kerala has state that climate based crop insurance will be provided for paddy crop in Palakkad district during rabbi season of 2009-2010. 75 % of the premium for paddy cultivation will be given as subsidy. Paddy cultivation can be insured for a maximum amount an acre. The Premium excluding subsidy and including subsidy and including service tax, which paddy cultivators should remit Rs 177 an acre. The paddy cultivation will get insurance cover for temperature, wind and rain at level that are detrimental to it.

Prabhakaran and harikumar have revealed that Kerala’s agriculture is in crisis today. Nearly 1500 farmers have committed suicide in the last five years, mainly in wayanad and Palakkad; the two farms dominated backward districts. In the rice bowls of the state Palakkad and kuttanad is alarming declining in the extent of area under paddy cultivation. According to economic and statistical department, totally paddy cultivation in Kerala is 3,10,521 hectares, in Palakkad it is 1,15,910 hectares in three seasons. The drop in paddy cultivation is because farmers don’t find it remunerative.
STATEMENT OF PROBLEM

Land can be used for several proposed and allocation of land among literature uses is a complex economic problem since population pressure is very high and per capita availability of land is used very low. The pattern of land used at any particular time is determined by physical, economical and institutional framework together. Further, the land use is determined the population. During the past three decades, the gap between internal production and requirement of paddy in the state has been widening. The gap between demand for and supply for paddy in the state give rises to the problem of importing food grains which is unsafe from the economic point of view. Hence it is very important to revitalize the paddy sector of the state. Recovery of the paddy sectors is also important on many other grounds like providing employment and income to the people. Thus development of the agricultural sector is considered to be a necessary condition for the overall progress of a developing country. Agricultural development in Kerala, in spite of all measures remains stagnant and paddy sector of the state economy has been showing declining trends both in area and production since mid-seventies.

SIGNIFICANCE OF THE STUDY

Palakkad district and Kuttanad is known as the granary of Kerala state. Paddy is the principle crop here and it is cultivated in three seasons viz..., autumn, winter and summer. Being one of the interior districts of the state, Palakkad is geographically unique in many aspects. The continuity of the majestic Western Ghats which stretches over 1000km is broken at Palakkad district known as Palakkad gap with a width of 3.02 km. The climate of the district is greatly influenced by the gap, as it enables the north east winds, to blow spreading its wing throughout the breadth of the Ghats. Since the districts gets the benefit of south west and north east winds. Rainfall is heavy in both seasons and consequently Palakkad district has got extensive paddy fields and it is aptly known as the granary of Kerala. To the west this region are the plains broken here and thereby Bharathapuzha and tributaries. There are extensive paddy fields in this track. There are neither low lying areas nor seasons embracing the district. In the present scenario it is difficult to do rice cultivation in the state due to high labour cost and shortage of labour mechanized transplanting is attracting more and more paddy farmers in Kerala. By adopting good quality seeding’s, adequate use of organic manure, integrated water and pest management Kerala farmers can increase rice yield and thereby profit from it. Also paddy fields are being converted into filled up land. Paddy fields are slowly diminishing from Kerala, creating threat to food security of state. For conversion of paddy fields, Kerala government had made law to stop filling the paddy fields for uses like construction, cultivation of cash crops like rubber, coconut tree etc... There has been an unprecedented hike in the price of rice over Kerala for the last three years. Price of rice in the open market reached approximately Rs.34- 40 per kg in 2014 November.

METHODOLOGY AND SOURCE DATA

This study is mainly focused in Kerala state, the primary and secondary data are used for this study. Primary data is related with interview of the farmers. Major sources of secondary data used in this study are the publications of the State Planning Board (SPB), Department of Economics and Statistics (DES) of the state government earlier known as the Bureau of Economics and Statistics (BES), Kerala Agricultural University, Rice Research Centre, Kerala Sasthra Sahithya Parishat etc.
Census Survey Reports, village office records, data collected by the krishibhavan for local level planning, research papers, articles and various Commission Reports are also used in this study.

OBJECTIVES OF THE STUDY
The important objectives of the present study are:

1. To examine the economics of paddy cultivation in Kerala.
2. To identify the determinants of shifting
3. To identify the current problems faced by paddy cultivators

Keeping the above objectives in view, the present study focuses on examination of the following aspects of the study

1. Cost and price of the study.
2. Comparative profitability of paddy and substitute crops.
3. Conversion of paddy fields to other purposes.
4. Farm size and productivity relationship.

SCOPE OF THE STUDY
The scope of the study relates with;

1. The research study is help to improve the agricultural production in Kerala.
2. The analysis of the agricultural production is given to more importance from government policies.
3. The research findings more helpful to the farmers in Kerala.

REVIEW OF RICE PRODUCTION IN KERALA
In order to increase food production in the state, a major food security project was launched in 2008-09 covering rice, milk and egg. As part of the project, regional sub-projects were launched with additional incentives, interest free loans, project based support for fallow land cultivation and a package of support measures. The procurement price was also enhanced to Rs.13 per kg and further to Rs.15 per kg. A modernization programme for lift irrigation was also initiated as part of the food security project and Malabar Package. A rehabilitation project on ponds was also initiated recently, as part of state food security project. From 2008-09 to 2009-10, area under paddy remain constant as 2.34 lakh ha. During 2010-11, the area under rice declined to 2.13 lakh ha and the production of rice also declined to 5.22 lakh MT from 5.98 lakh MT in 2009-10.

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Figure 1, Graphical representation of area, production of paddy cultivation

The average annual decline in area under rice during the Eighth Five Year Plan was around 22000 ha, whereas it has come down to an average of 13000 ha during the Ninth Plan period. The average annual reduction in area during Tenth Plan was 47200 ha. During 2007-08, decline in area was to the tune of 229000 ha from 2.64 lakh ha. In 2007-08 to 2.29 lakh ha and rice production declined from 6.42 lakh MT to 5.28 lakh MT, and then increased to 5.90 lakh MT in 2008-09, indicating at 11.74 percent increase over the previous year. The area under rice increased to 2.34 lakh ha in 2008-09. During 2009-10, there was a slight reduction in area by 252 ha only over 2008-09, while production increased by 8098 MT. The deviation in area and production of rice in the major districts of Kerala during 2009-10 over 2008-09 (%) is shown in table. The average productivity which was stagnant at around 2.2 MT/ha for four years, till 2005-06 has improved to 2.4 MT/ha in 2006-07 and slightly declined to 2.31 t in 2007-08 and further improved to 2.56 t in 2009-10.

Table-2, District-wise area, production and productivity of rice in Kerala

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Source: Directorate of economics and statistics

The following may be given status if rice production in kerala. Thrissur district is the only which may be increasing rate of area, production and productivity of rice in recent years like 2010-11, 2011-12, 2012-13. In 2010-11 the area is 20259, production 53079000 MT so the productivity is 2620. The highest district was area of cultivation in 2010-11 is Palakkad.
8,751.11 hectares and least area cultivation is Idukki 1,819 hectares. At this time the production is also Palakkad has highest one 21,815,500 MT and least one is Kozhikode 3,814,000 MT. The highest productivity of these years is Kottayam because it has various irrigation facilities are available than the Palakkad district. In 2011-12 the largest area of cultivated in rice is Palakkad 83,399.8 hectares but was shown the declining area of rice cultivation and least area cultivated is Idukki 1,264 hectares and highest level of production in rice is Palakkad 22,441,300 MT and least one is Idukki 3,135,000 MT but the productivity is changed Pathanamthitta has got highest place 3,208 and Kozhikode is last one 1,146.4. The latest 2012-13, the highest area of rice cultivation is 7,920.1 hectares and lower is Idukki 1,176 hectares, the production level is Palakkad district has keeps the highest 18,922,900 MT and lowest one is Kollam district 29,280,000 MT. The productivity level of the Palakkad and Alappuzha they are known as granaries of Kerala also have been decreasing in area, production and productivity of rice in every year. It was given food insecurity in Kerala.

CAUSES FOR THE DECLINING PADDY CULTIVATION IN KERALA

The following are the important causes of the declining trend of paddy cultivation in Kerala.

1. **Seasonal shortage of labour supply:**

   Compared to garden crops and plantation crops, paddy cultivation is more labour intensive. It is estimated that human labour costs amount to nearly 60 percent of the total costs involved in paddy farming. Present investigation shows that household members of 60 percent of the sample farmers in the study area do not perform any sort of manual works in their fields. It is also found that 33 percent of the marginal farmers, 67 percent of the small farmers, 80 percent of the medium farmers and 83 percent of the local farmers are exclusively depending on hired human labour. According to a vast majority of paddy farmers in this area the single biggest problem they are facing is the non-availability of sufficient farm labourers during the harvesting season.

2. **Small size of holdings and decline in the number of full time farmers:**

   It has been pointed out that an agricultural household with 5 to 6 member needs at least 10 acres of paddy fields for its sustenance in the absence of any other source of income. However, in Kuttanad only 3 percent of the farmer households possess that much
As per the provisions of the Land Reforms Act (1969) the maximum area of paddy fields that a family can possess is restricted to ten acres. The excess land above the ceiling is declared as surplus and taken over by the government for redistribution. The redistribution of such surplus paddy lands taken over from large enterprising farmers in Kuttanad led to the formation of a new class of absentee land owners with less than one acre of paddy fields. Unable to conduct paddy farming successfully in their newly acquired fields, at present many of them lease out their lands to tenant farmers defeating the very purpose of land reforms.

3. Lack of Proper Marketing System:-
Wide temporal variations are observed in the price of paddy in Kuttanad area. Compared to non-harvesting season farm price of paddy decreases considerably during the harvesting season. In order to clear their debts and due to the lack of storage facilities a vast majority of the paddy farmers in the study area sell their marketable surplus of the product immediately after harvest at the then prevailing low prices. Nearly 85 percent of the marginal and small farmers, 73 percent of medium farmers and 58 percent of large farmers in the study area have no granaries to store paddy.

4. Low level of profitability:-
There are three major factors that affect the profitability of rice cultivation in Kerala such as cost of cultivation, yields levels and prices. Labour costs are relatively high. At this time the expenses involved in agriculture inputs are equally large burden of all farmers. The new economic policy helps to increase the price of pesticides and agricultural inputs, and the labour costs in Kerala is very high comparatively in other states in India. Insufficient labours make more demand for labour it may induce the rise in wage of the labour.

5. Growing aversion of new generation to paddy cultivation:-
Some decades back in Kerala the upper class and middle class family is considered the ownership of paddy fields as a symbol of their social status, owners of the paddy fields commanded much social respect and acceptance. However, the present rice cultivation has lost its glamour. The new generation people from farmers households looking for the white collar job.

6. Pressure of population on land:-
There is a heavy pressure on land. In fact since the non-agricultural sectors of the economy have not been able to expand at a sufficiently rapid pace of last five decades, this pressure has continuously increased. Increasing pressure of population on land is partly responsible for the subdivision and fragmentation of small uneconomic holding is now low.

7. Inadequate irrigation facilities:-
Productivity is bound to be low in all those areas which lack irrigation facilities, and are totally dependent on rains. Palakkad is the example of this because in summer there was no irrigation facilities are available in agriculture.

SUGGESTIONS
Based on the this researcher has suggested the following

1. As the shortage of labour is the primary problem in paddy cultivation, mechanization the paddy fields may help to increase the paddy cultivation.
2. Subsidized high yielding variety seeds will improve the production. Hence both the farmers as well as government have to consider more on promoting the same in the state.
3. The price of the paddy should be increased to a reasonable level, which makes the farmers to cultivate paddy to a great extent.

4. The farmers also have a broader look regarding the fall of paddy production and engage in paddy cultivation intensively.

CONCLUSIONS

Rice cultivation in Kerala state is falling down over a period of time. The major causative factor identified by the social scientists is labour shortage and low price of paddy. This statement has been proved in this study. Though the fertile of soil, favourable monsoon, and government policies have been helped the farmers they have not completely engaged in paddy cultivation as it requires timely manual work. This needs more human labour, which is only problem in the farmers. And hence, mechanization, or participation of human labour alone will increase the paddy production in the study area.

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