

# An Analysis of the Determinants of Declining Paddy Cultivation in Kerala

ASWATHY RAVEENDRAN\*<sup>1</sup> and P. K. BABY<sup>2</sup>

<sup>1</sup>SRF, Department of Applied Economics, Cochin University of Science and Technology, Kochi - 682 022, Kerala, India

<sup>2</sup>Director, Department of Youth Welfare, Cochin University of Science and Technology, Kochi - 682 022, Kerala, India

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## Abstract

Paddy is the most significant food crop in Kerala. Since the 1980s, Kerala has witnessed a steady decline in the area under cultivation and production of paddy. At present, only 7.4 % (Agriculture Statistics of Kerala, 2021) of the gross cropped area in the state is under paddy cultivation. Over the study period, all districts in Kerala recorded an overall negative growth rate in the area under paddy cultivation and paddy production. However, productivity of paddy recorded a positive growth rate across all districts. The decline in the area under paddy cultivation and its production has significantly affected Kerala's economic and social development. Paddy cultivation in Kerala is constrained by policy issues related to price and procurement, increasing pressure on land, low profitability, labour shortages, agro-climate change, competition from other crops and crop diseases. The study analyses state-level trends in the area, production, and productivity of paddy from 1980–81 to 2020–21 and identifies the major constraints affecting paddy cultivation. Data analysis was carried out by using simple statistical tools such as trend line, percentage changes and cumulative growth rate.

**Key words:** Paddy cultivation, Overall growth of paddy, Challenges of paddy cultivation

Rice is the important staple food crops and it serves as a primary source of nutrition and livelihood among billions of people in the world. As per the report of Food and Agriculture Organization (FAO), global rice production turned 512.8 million tonnes during 2021-2022, it reflecting continued growth in global rice production [1]. India has emerged as the largest producer followed by China and the Ministry of Agriculture and Farmers Welfare, through its Third Advance Estimates of Food Grain Production, reveals that rice production at 129.66 million tonnes in 2021-22 [2].

Rice is the most essential crop in Kerala. About 600 kinds of rice varieties are cultivated in various paddy fields in Kerala [3]. The major rice-producing districts in Kerala are Palakkad and Alappuzha. There has been a sharp decline in the area under cultivation and its production. In fact, the Kuttanadu region in Alappuzha district, known as the 'rice bowl of the state', has a major hand in the production of rice. Paddy cultivation in Kerala has witnessed a drastic change in its area under cultivation and production since the 1980s. The area under cultivation of paddy declined from 8.01 lakh hectares in 1980–81 [3] to 2.05 hectares in 2020–21 [3]. During the same period, the production of paddy declined from 12.72 lakh hectares [3] to 6.33 lakh metric tonnes [3]. When compared to other agricultural crops in Kerala, paddy held the third-largest area of cultivation [4]. Kerala faces significant challenges in paddy cultivation such as increasing pressure on land, low levels of profitability, seasonal shortages of labour supply, agro-climate change, competition from other crops, plant diseases, etc. [5]. These challenges affected the area of cultivation and production of paddy. Among the traditional

practices of Kerala, agriculture was given an important space from feudal era. It is mainly because of the climate and environmental resources (mainly soil and water) are available in the terrestrial area of Kerala. However, it shows a declining trend on growth of agriculture especially in paddy and also the shifting of groups of people from agriculture to industries and mainly service sector in the state. It is mainly because of the high returns from other sectors than agriculture. Paddy production has been declining since the 1980s [6]. The study analyses the trend pattern of area, production and productivity of paddy over the 40-year time frame and also examine the major challenges for paddy cultivation in the state. Objectives of the study are as:

1. To analyze the trend pattern of area, production, and productivity of paddy in Kerala since the 1980s.
2. To study the major challenges of paddy cultivation in Kerala.

## MATERIALS AND METHODS

The present study was undertaken to analyze the trends in paddy production in Kerala. Since the primary objective was to examine the long-term changes in area, production, and productivity of paddy, the study relied predominantly on secondary data collected from authentic and officially published sources. Secondary data on paddy cultivation, including area, production, productivity, and related agricultural statistics, were collected from the Directorate of Economics and Statistics, Government of Kerala, Thiruvananthapuram; the Centre for Pest Management,

\*Correspondence to: Aswathy Raveendran, E-mail: [aswathyraveendran333@gmail.com](mailto:aswathyraveendran333@gmail.com)

Mancombu; and the *Economic Review* published by the Kerala State Planning Board. Additional information was obtained from government reports, research publications, and other relevant official documents.

The study focused on the major paddy-growing districts of Alappuzha and Palakkad in Kerala. To supplement the secondary data with field-level insights, informal discussions were held with paddy farmers, agricultural officers, and officials of the Department of Agriculture. These interactions provided information on cultivation practices, technological interventions, production constraints, and the changing scenario of paddy cultivation in the selected districts.

The collected data were compiled, classified, and analyzed using descriptive statistical tools. Trend analysis, percentage change, and cumulative growth rate (CGR) were employed to assess changes in paddy area, production, and productivity over the study period. The results were presented through appropriate tables and graphs to facilitate interpretation, while the findings were corroborated with the opinions of farmers and agricultural officials to provide a comprehensive understanding of paddy production trends in Kerala.

## RESULTS AND DISCUSSION

### *Area, production and productivity of paddy in Kerala*

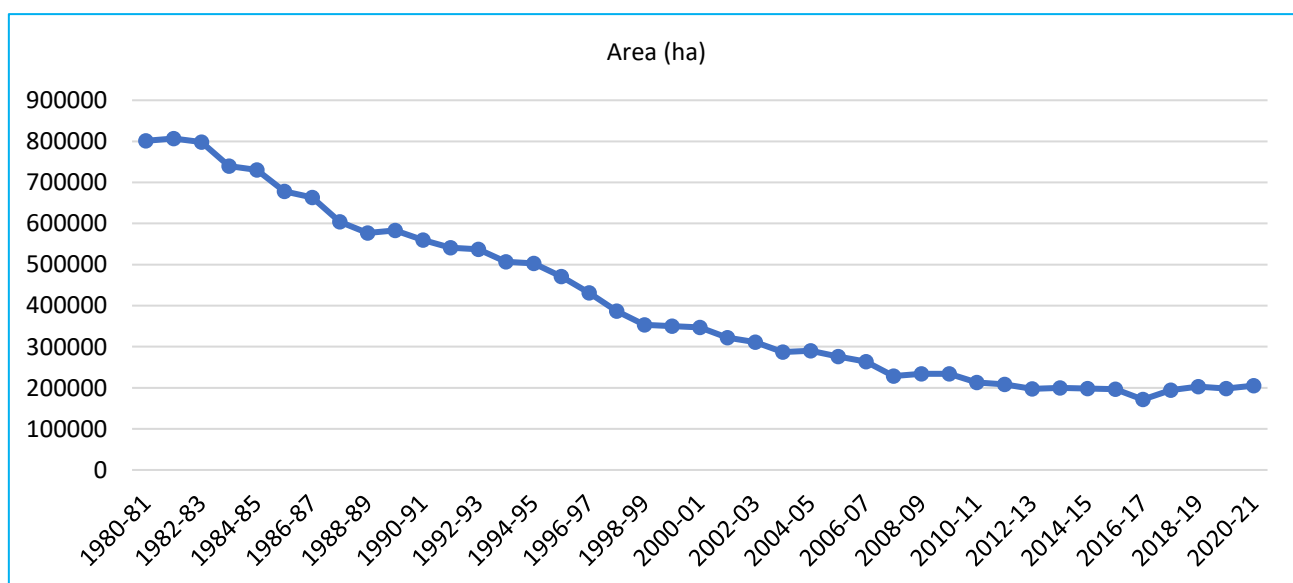
Paddy is the most important food crops grown in Kerala. Since the 1980s, Kerala has witnessed a steady decline in the area under cultivation and production of paddy. The area under paddy cultivation in Kerala declined from 8.01 lakh hectares in 1980–81 [3] to 2.05 lakh hectares in 2020–21 [3] (Fig 1). The production of paddy was about 12.72 lakh tonnes in 1980–81 [3] and it became a mere 6.33 lakh tonnes in 2020–21 [3] (Fig 2). During 1980–81 to 1990–91, the area under cultivation of paddy declined from 8.01 lakh hectares [3] to 5.59 lakh hectares [3]. In the same period, the production of rice declined from 12.72 lakh tonnes [3] to 10.86 lakh tonnes [3]. Further, the cropped area of paddy declined to 3.22 lakh hectares in 2000–01 [3] and production decreased to 6.89 lakh tonnes [3]. During 2010–11 the area under cultivation and production of paddy was 2.13 lakh hectares [3] and 5.22 lakh tonnes [3] respectively. While compared with preceding years the area which is used for paddy cultivation has declined.

Palakkad and Alappuzha are the major rice-producing districts in Kerala. The cropped area of paddy in Palakkad also declined from 183634 ha [3] in 1980–81 to 76916 ha [3]. In the same period, the area of cultivation in Alappuzha also largely declined from 82466 ha to 40344 ha [3]. The latest data shows that the first position in the area under cultivation of paddy is occupied by the Palakkad district with 76916 ha [3]. Approximately 37.51 percent of the total cropped area in Kerala is under cultivation of paddy [3]. The second position is occupied by the Alappuzha district with 40344 ha [3]. About 19.67 percent of the cropped area to the total paddy area in the state is in Alappuzha. The third position in paddy production is occupied by the Thrissur district, with 23946 ha [3], i.e., 11.6 percent [3] of the total paddy area in the state. The last position is occupied by the Idukki district with 820 ha [3], i.e., 0.399 percent of the total paddy area in the state. This is because Idukki district mainly focused on the cultivation of spices and plantation crops.

In Kerala, paddy is cultivated largely in winter season, i.e., 43.17 percent [3] and the least production of paddy is in the summer season, i.e., 28.37 percent [3]. Palakkad District occupied the first place in the Autumn and Winter seasons, while Alappuzha district occupied the first position in the summer season. Alappuzha, Kannur, Kottayam, and Thrissur districts are in the next positions in the autumn season, whereas Thrissur, Wayanad, and Malappuram districts occupy the next positions in the winter season. Thrissur and Kottayam come in the second and third positions in summer paddy cultivation.

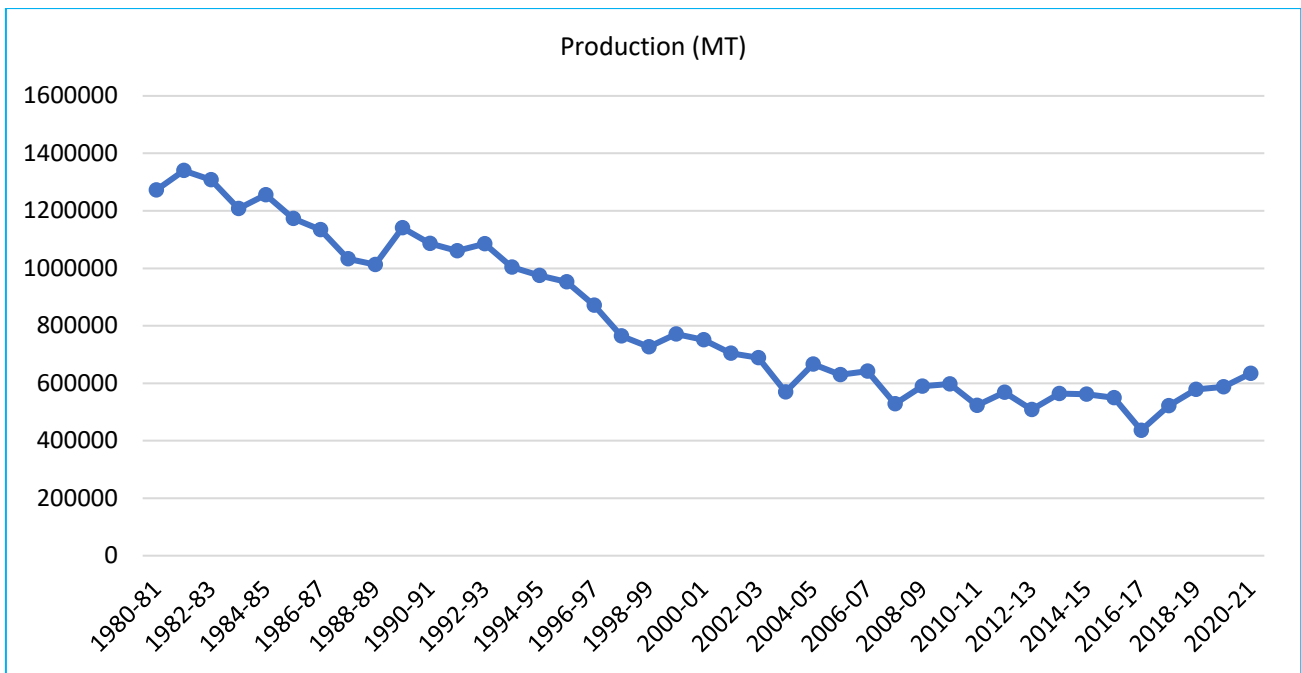
The productivity of paddy increased during this period, increasing from 1587 kg/ha in 1980–81 (agricultural statistics, Kerala, 1981) to 3105 kg/ha in 2020–21 [3] (Fig 3). Except certain years, the productivity of all districts in Kerala has also increased over the years. Thrissur district had the highest paddy productivity, while Pathanamthitta district had the lowest paddy productivity. The steep decline in the area and therefore production of paddy leads to an improvement in productivity. The cropped area and production of paddy showed a sharp decline over the years in the state. Changes in land use patterns have created serious problems in the production of paddy in Kerala [7].

The trends in area, production and productivity of paddy in Kerala during the period 1980–81 to 2020–2021 are shown in (Fig 1–3).



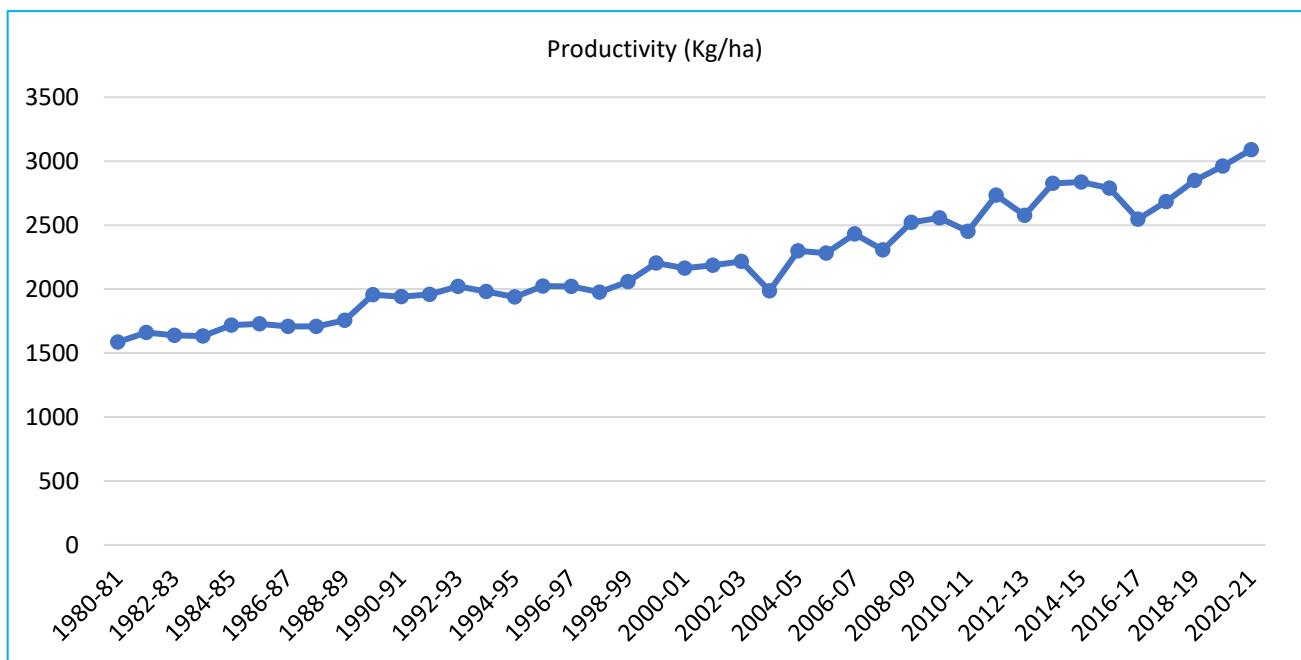
Source: Agriculture Statistics of Kerala, 1980–81 to 2020–2021

Fig 1 Area under Paddy Cultivation in Kerala



Source: Agriculture Statistics of Kerala, 1980-81 to 2020-2021

Fig 2 Production of paddy in Kerala



Source: Agriculture Statistics of Kerala, 1980-81 to 2020-2021

Fig 3 Productivity of Paddy in Kerala

*Cumulative growth rate of area, production, and productivity of paddy in Kerala*

The cumulative growth rates of area, production and productivity of paddy for the period 1980-81 to 2020-2021 in Kerala is shown in (Table 1).

The above table shows the cumulative growth rate of area, production, and productivity in Kerala (%) from 1980–81 to 2020–21. From 1980–1981 through 2019–2020, the area and output of paddy have seen negative cumulative growth rates; these rates are -3.5% and -2.5 % respectively. However, the cumulative growth rate of productivity was positive (1.7%). During the period from 1990–91 to 1999–2000, Kerala experienced the highest decline in the area under paddy

cultivation and paddy production, with cumulative growth rates of -4.9% and -3.7%, respectively. During the same period, the growth in paddy productivity was relatively low compared with the other periods. During the period, 2010-11 to 2019-20 there has a slight increment in the area under cultivation of paddy as well as production of paddy. Especially after 2017-18 in Kerala’s area under paddy cultivation and production of paddy gradually increased [8]. But the entire period shows a negative cumulative growth rate of area under cultivation and production of paddy, i.e., -3.5% and -2.5% respectively. This indicates that although improvements in productivity have partially compensated for the decline in cultivated area, they have not been sufficient to offset the overall reduction in paddy production during the study period.

Table 1 Cumulative growth rate of area, production, and productivity of paddy in Kerala (%)

Decade	Area	Production	Productivity
1980-81 to 1989-90	-3.4	-0.98	1.6
1990-91 to 1999-2000	-4.9	-3.7	1.4
2000-01 to 2009-10	-3.8	-1.9	2.1
2010-11 to 2019-20	-3.4	-2.7	1.9
CGR for the entire period	-3.5	-2.5	1.7

Source: Estimated (Agriculture Statistics of Kerala, 1980-81 to 2019-2020)

### *Challenges of paddy cultivation in Kerala*

In Kerala, the area of paddy cultivation and production rapidly declined from the 1980s onward. The major rice-producing districts in Kerala are Palakkad and Alappuzha. The area under cultivation of paddy in these districts also declined over the years. However, the productivity of rice in Kerala has increased over the years. There are different factors that adversely affect the cultivation of paddy in Kerala. Discussions with farmers and officials in the study area pointed out certain problems that adversely affect paddy cultivation in Alappuzha, Palakkad, and the rest of the state. The major issues are discussed as follows:

#### *Policy on price and procurement*

Paddy cultivation is a cornerstone of Kerala's agriculture, particularly in regions like Kuttanad and Palakkad, contributing to food security and livelihoods. However, high production costs driven by labour, water management and climate challenges make it challenging for farmers. If paddy cultivation is to remain a profitable venture for farmers, the crop must be procured from them at reasonably high price. As K.N Harilal (Chairman of the 7<sup>th</sup> Kerala State Finance Commission) observes, one of the most significant interventions by the State government in support of rice cultivation is centered on pricing mechanisms. The minimum support prices declared by the government play a crucial role in determining the rates at which farmers can sell their product. In Kerala, the state government intervenes through price support and procurement mechanisms to ensure remunerative returns, often exceeding the Central Government's Minimum Support Price (MSP). These policies are implemented via the Kerala State Civil Supplies Corporation (Supplyco), under the Decentralized Procurement Scheme (DCP) of the central government. Beginning with an MSP of just Rs. 707 per quintal in 2005-06 [9] the Kerala government has increased this price annually, with particularly substantial hikes occurring after 2009-10. During 2020-11, the State government set the MSP for paddy at Rs. 1300 per quintal [9], markedly higher than the Central Government's MSP of Rs. 1000 per quintal [9]. In the State Budget presented in February 2011, the Kerala government announced a further elevation of the MSP for paddy to Rs. 1400 per quintal. Kerala has one of the highest paddy procurement prices in India due to its state-sponsored Minimum Support Price (MSP) system, supplemented with a bonus. During the year 2021-22 the procurement price of paddy was around Rs. 28.20 per kg, it includes central MSP of Rs. 20.40 and state bonus of Rs. 7.80 per kg quintal [9]. In Kerala, the procurement is largely handled by the state Civil Supplies Corporation, which procured around 7.31 lakh tonnes of paddy from approximately 2.5 lakh farmers in a single season, including payments more than Rs. 2070 crore quintal. The recent data indicates, annual procurement levels of Rs. 5.8 lakh tonnes across crop seasons, covering over 2 lakh farmers and involving payments exceeding Rs. 1600 crore. The certain reports reveal that, despite ensuring relatively stable and remunerative structural inefficiencies such as delayed payments; for example, pending dues of Rs. 557 crores during

2022 and heavy fiscal burdens due to subsidy commitments and pending central reimbursements of over Rs. 1100 crore. Overall, the policy has been effective in sustaining paddy cultivation and support farmer incomes in a high-cost of cultivation. However, its long-term efficiency is constrained by financial stress, delays in payments and dependence on intergovernmental fund flows.

#### *Increasing pressure on land*

In Kerala, the population increased from 25453680 [10] in 1981 to 33406061 in 2011. There was a positive growth rate, i.e., 31.24 percent, during the period of 1981–2011. The increased population makes land alteration necessary to meet their demand and different kinds of land uses. During 2000–2020, in Kerala 50000–60000 ha of paddy land converted into non-agricultural purposes. Many of low-lying paddy fields have been filled for housing colonies, IT parks (eg. Infopark, Kochi) and commercial buildings especially in Ernakulam, Thrissur, Alappuzha and Palakkad districts. National Sample Survey Organization (NSSO) reported approximately 12 lakh of families owned houses or flats in Kerala after 2014 March 31 and also Kerala has occupied first position in its size of house compared with other states in India [11]. The annual growth rate of the construction sector has rapidly increased over the years in Kerala. The annual growth rate of the construction sector in Kerala for the period 1980–81 to 2020–21 is more than 10 percent [12]. Simultaneously, the growth rate of population and construction activities increased, but land under cultivation, especially paddy fields, declined in Kerala over the years.

#### *Agro-climate change*

Climate change and agricultural sustainability are interrelated. There is an interrelation between agriculture and climate change in many ways, such as climate, food security, water availability, and resource utilization. Global warming will likely to increase the frequency of hazardous floods and severe droughts in general, which will reduce agricultural production in low latitudes. Climate change affects farmers directly, and they are close observers of climate change and vulnerability. In Kerala, the paddy farmers are cautious of climate changes that could have dangerous outcomes on their paddy production. The immediate increases in temperature and monsoon uncertainties are likely to influence the production of paddy adversely. Drought is also one of the problems facing paddy cultivation in Kerala. The decreasing rainfall in Kerala, the late onset of the monsoon, the failure of the monsoon, and the break in the monsoon in the state lead to too many drought situations. During 1983, 1985, 1986 and 1987, Kerala had severe dry spells and droughts, even though the state has a wet climate. There were dry spells of 4 to 5 weeks in 1985 and 1986 respectively, during the southwest monsoon period. In 1983, Kerala witnessed 323000 hectares of paddy loss due to severe drought, at an estimated cost of Rs. 106.86 per core [13]. Increased temperature adversely affects the crop 1 (Puncha) in Kerala.

Farmers states that a change in the amount of rainfall may lead to an extreme weather event like flood. It adversely affected the production of paddy. According to Suja Eapen (Principle Agriculture Officer, Alappuzha), salt water intrusion and salination of fertile rice land are becoming problems in Kuttanad (Alappuzha and Kottayam districts), Pokkali land (Ernakulam and Alappuzha), Kaipad lands (Kannur District), and Kole land (Thrissur and Malappuram). This is also being projected as an implication of climate change at the regional level. The summer rain usually comes to the state as a relief to the inhabitants in the months of March and April as it may ease the water shortage, but for the last few years, the summer rain has adversely affected paddy cultivation in the state (Kerala State Action Plan on Climate Change, 2014). Floods in Kerala mainly affected the Kuttanad region in Alappuzha district. During 2018, paddy cultivation has been destroyed entirely in 25,370.59 hectares (Agriculture Development and Framers Welfare, 2018) of cropped area due to floods, resulting in a loss of Rs 380.55 crore (Agriculture Development and Framers Welfare, 2018).

Hence, appropriate adaptation strategies are important to reduce the losses due to climate change. The excess rainfall adversely affected the second crop. Rainfall mainly affected Kuttanadu regions in Alappuzha district. The major adaptation strategies used by the farmers are shorter-cycle crop varieties, changing planting and harvest dates, changing the size of land under cultivation, construction of bunds to conserve moisture, changes in irrigation practices, etc. These adaptation strategies were applied by the paddy farmers on the basis of changes in climatic conditions. However, the cultivators also face various barriers to adaptation. Such barriers include lack of government assistance or subsidies, lack of knowledge regarding adaptation practices, lack of money, savings, or credit, etc. Generally, the fast changing of climatic conditions creates a negative impact on the production of paddy.

#### *Seasonal shortage in labour supply*

In Kerala, the major changes that occurred in paddy fields was in the 1980s. The seasonal shortage of labourers are also one of the problems of cultivating paddy in the state. It also adversely affected the production of paddy in Kerala. Since the investment in the production of rice decreased over the years. Kerala's unique development experience as of high human development with low per capita income has received international attention. Education has played a central role in determining Kerala's social development. As a result, the state witnessed a shift from a primary sector-dominated economy to a tertiary sector-dominated one. These shifts of people from the primary sector to the tertiary sector also create shortages in labour supply. Most of the youth in Kerala prefer white collar jobs more than other jobs. Shortage of labour supply which will adversely affect 25-30% of paddy cultivation area in every season in Alappuzha [14]. In 2021-2022, due to labour shortage around 10-15% grain shedding and quality loss in Thrissur and delayed harvesting in Palakkad.

#### *Insects and crop diseases*

Kerala paddy cultivation faces the serious problem of crop diseases. Kuriakos K., a paddy cultivator in Kainakari village in Alappuzha district, states that 'Bacterial Leaf Blight' is one of the major plant diseases in Alappuzha and the rest of Kerala. This disease causes severely infected leaves to dry quickly, resulting in a loss of up to 60% of grain yield. There are practical ways (chemicals, pesticides of curing a plant after it becomes infected, but it not more effective. Other Crop diseases are Blast, Brown Spot, Sheeth Blight, and Sheeth Rottu

[15]. Sadhananthan A is a farmer in Palakkad district who cultivates paddy. He states that Brown Plant Hopper (Munja) is also one of the important rice-damaging insects in Kerala. It also reduces the quality and quantity of rice production. There has different type of insects adversely affected paddy production, such as Nafalocrosis Medinalis, Sirpofaga Insurttulas, Spodoptira Mourishya, Nimfula Dipamkattalis, Orsiyoliya Oriss, Balio Thripis Bye Formis, Neforyttiks Vyran, Leptokorais Akyutta and Scottinofora Bisspynos [15].

#### *Competition from other crops*

Over the years, paddy cultivation of certain regions in Kerala converted into the cultivation of perennial cash crops such as coconut, banana, arecanut and rubber. This shift is driven by higher net returns, lower labour intensity and better market prices for these cash crops compared to paddy, which is highly labour intensive, vulnerable to weather risks and offer low profitability due to rising wage and input costs. Historically, paddy covered 32.1 of the Gross Cropped Area (GCA) in 1965-66 (8.08 lakh ha). The area under paddy cultivation declined from 8.01 lakh ha in 1980-81 to 2.05 lakh ha in 2020-21 [9]. During the same period, the area under cultivation of coconut and rubber increased. In fact, coconut provides income to the cultivators from fibre trade to coconut shell artefacts. The price of cash crops is inversed over the years compare with paddy (rice). Kerala produces around 70 percent of India's coconut output [2]. Kerala's agriculture sector produces 85 percent [2] of the natural rubber within the country. In Kerala, the important spices are cardamom, cinnamon, clove, turmeric, nutmeg, and vanillin. The cultivation of spices and plantation crops like cardamom, black pepper, and coffee also increased over the years. Kerala's primary sector produces 97 percent [2] of the country's national output of black pepper. In Kerala, cardamom is exported to other countries and brings great revenues to the country. In fact, competition with other high-value crops is a constraint that limits the expansion of paddy cultivation in Kerala [16].

#### *Low levels of profitability*

Kerala's paddy cultivation remains a vital part of the state's agrarian heritage. However, persistent low profitability has driven a long-term decline with the sector failing to meet domestic demand. During 2021-2022, rice production declined to approximately 5.3 lakh tonnes, i.e., 10% declined from 5.93 lakh tonnes in 2021-22., while consumption hovers around 40 lakh tonnes, creating an 85-90 % import dependency [9]. The area of cultivation as well as productivity of paddy also declined over the period. This trend visible from 1980's. Mrithyunjayan T. is a paddy cultivator in Alappuzha district, in his opinion paddy cultivation in Kerala faces the serious problem of low levels of profitability. Because of the high cost of cultivation, the lack of input subsidies, the destruction of rice production due to extreme weather events, etc., are the obstacles affected to the net revenue of the farmers in Kerala. Farmers get only Rs. 28.20 per kg of paddy. The labour cost and cost of machines also increased over the years. The cost of fertilizers and pesticides increased, it adversely affected the paddy cultivation. By the end of the eighties, cash crops started to generate higher income for the farm sector [17]. Therefore, farmers began to shift from food crops to cash crops. In overall declines persist due to climate impacts and input costs.

The 1980s, Kerala has witnessed a steady decline in the area under cultivation and production of paddy. The area under paddy cultivation in Kerala declined from 8.01 lakh hectares in 1980-81 to 2.05 lakh hectares in 2020-21. But the productivity of the paddy increased over the years. The cumulative growth

rates of area and production of paddy for the period 1980–81 to 2020–21 are negative, and they are -3.2 of area and -1.3 for production. However, the cumulative growth rate of productivity is positive for the period and is 1.8. In Kerala, paddy procurement policy has played a significant role in ensuring remunerative prices and income stability for paddy farmers, thereby encouraging the continuation of paddy cultivation. However, the effectiveness of the policy is constrained by structural challenges, including delays in procurement payments, rising procurement costs, and increasing fiscal pressure on the state government, highlighting the need for institutional and financial reforms. Agro-climate change is one of the important problems facing paddy cultivation in Kerala. During the year 1983, 1985, 1986, and 1987, Kerala had severe dry spells and droughts, even though the state has a wet climate. During the year 2018, paddy cultivation has been destroyed entirely on 25,370.59 hectares due to floods, resulting in a loss of Rs 380.55 crore. The state witnessed a shift from a primary sector-dominated economy to a tertiary sector-dominated one. These shifts of people from the primary sector to the tertiary sector also create shortages in labour supply. In Kerala, the population increased from 25453680 in 1981 to 33406061 in 2011. The increased population makes land alteration necessary to meet their demand and different kinds of land uses. The high expansion of construction has led to a drastic change in the land utilization pattern, which has had a negative impact on the agriculture sector. The annual growth rate of the construction sector has rapidly increased over the years in Kerala. The annual growth rate of the construction sector in Kerala for the period 1980–81 to 2020–21 was more than 10 percent. Crop diseases like ‘Blacterial Leaf Blight’ and ‘Brown Plant Hopper (Munja)’ are the most serious plant diseases in Kerala. It adversely affected the production of paddy. During the period from 1980–81 to 2020–21, the area under cultivation of coconut and rubber increased in Kerala, as did the production of spices and plantation crops. High cost of cultivation, lack of input

subsidies, destruction of rice production due to extreme weather events, etc. Reduce the profitability of paddy production. By the end of the eighties, cash crops started to generate higher income for the farm sector. Therefore, farmers began to shift from food crops to cash crops [18].

So, the government should give proper attention to the declining trend in area under cultivation of paddy. The authorities should take into serious consideration where and how the subsidies related to the cash crops are channelized and whether they are reaching the proper hands. The government should allocate more funds and resources to improve the research and development, especially in the case of food crops, as this can contribute a lot towards improving the quality and quantity of production, which in turn can help to improve the quality of life of those engaged.

## CONCLUSION

Paddy cultivation in Kerala has witnessed a steady decline in the area under cultivation and its production since the 1980s. The area under cultivation of paddy declined from 8.01 lakh hectares in 1980-81 to 2.05 lakh hectares in 2020-21. The production of paddy also declined in the period, from 12.72 lakh metric tonnes in 1980-81 to 6.33 lakh metric tonnes in 2020. The major challenges for paddy cultivation in Kerala are Policy on Price and Procurement, increasing pressure on land, agro-climate change, low profitability, competition from other crops, a seasonal shortage in labour supply, and crop diseases. Generally, these challenges adversely affect the area under cultivation and the production of paddy in the state. Paddy cultivation is a cornerstone of Kerala’s agriculture, particularly in regions like Kuttanad and Palakkad, contributing to food security and livelihoods. However, high production costs driven by labour, water management and climate challenges make it challenging for farmers. So, the government should take necessary measures for the maintenance of the existing lands and take stern action against the conversion of paddy lands.

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