Marketing Constraints and Institutional Support among Paddy Farmers in Kidangoor Grama Panchayat, Kottayam, Kerala

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Abstract: Paddy cultivation in Kerala depends heavily on state procurement, yet farmers continue to leave the crop. This study examined marketing practices, marketing constraints, institutional support and policy preferences among paddy farmers in Kidangoor Grama Panchayat, Kottayam district. A descriptive survey was conducted from January to March 2026 with 32 farmers selected by convenience sampling, using a bilingual interview schedule. Data were analysed using percentage analysis, tabulation and charts. All respondents reported selling their paddy through government procurement centres, indicating a strong dependence on the government procurement system. Most respondents were dissatisfied with the price received (78.1%), reported delayed payment (68.8%) and lacked adequate storage (68.8%), and 93.8% faced transport problems at least occasionally. Awareness of government schemes was universal; however, 68.8% of respondents reported receiving no support from cooperatives or farmer societies, while 78.1% had not received loans or financial assistance from financial institutions. Furthermore, 75.0% had received no training on marketing and production.

More than 90% favoured a higher minimum support price, farmer cooperatives and digital market platforms, and 34.4% intended to discontinue paddy farming, chiefly because of transport difficulties. Assured procurement must be matched by prompt payment, local logistics and collective marketing institutions if paddy cultivation in such panchayats is to remain viable.

Keywords: Agricultural marketing, paddy procurement, minimum support price, payment delay, Kerala

1. INTRODUCTION

Rice is the staple food of Kerala, and paddy fields hold a place in the state's economy and ecology that goes beyond their contribution to farm output. They provide rural employment, recharge groundwater and sustain wetland ecosystems. Yet the area under paddy in the state has fallen for decades, and the economic viability of the crop increasingly depends on how

farmers are able to market it. Agricultural marketing covers assembling, grading, storage, transport, pricing and payment, and weaknesses at any of these stages reduce the share of the final price that reaches the grower [1], [2].

Paddy marketing in Kerala differs from most other states because the Kerala State Civil Supplies Corporation (Supplyco) procures paddy directly from registered farmers at the central minimum support price (MSP), which was ₹2,369 per quintal for common paddy in the 2025-26 marketing season [3], together with a state incentive bonus. Procurement removes much of the price risk of private trade, yet farmers still report low price realization, delayed payment, and inadequate storage and transport, problems that discourage them from continuing cultivation.

Kidangoor Grama Panchayat in Kottayam district is a rural area where many farmers depend on paddy for their livelihood but face these marketing difficulties. The objectives of this study were (1) to study the traditional paddy farming practices followed by farmers in Kidangoor; (2) to identify and analyze the agricultural marketing challenges faced by paddy farmers; (3) to examine the role of institutional and government support in paddy marketing; (4) to assess farmers' perceptions regarding marketing improvements and government policy measures to improve income and sustainability; and (5) to identify key suggestions from farmers to improve income. The study provides farm-level evidence from a non-traditional rice area, and its findings may help policymakers, Krishi Bhavan and local bodies strengthen the rural marketing system for paddy.

2. REVIEW OF LITERATURE

Mani et al. [2] documented the dimensions of the Indian agricultural marketing system and the attempts made to make it work for farmers, traders and consumers. They argued that small and marginal farmers, who hold about 85% of holdings, are disadvantaged in the mandis because of their low marketable surplus, and suggested promoting farmer producer organizations, market intelligence based on information and communication technology (ICT), adequate storage and safeguarded links with retail chains, along with a review of the Model APMC Act.

Singh and Vidani [4] observed that although agriculture contributes only about 14% of gross domestic product, it sustains more than half of India's population, and that the efficiency of agricultural marketing is a major concern because of poor linkages in marketing channels and

weak marketing infrastructure. They recommended that agencies such as Krishi Vigyan Kendras include marketing information in extension services. Abishek et al. [5] proposed a web and mobile application that links farmers directly with consumers and retailers without middlemen, with experts approving and rating produce for quality, so that farmers gain freedom of pricing and access.

Bisen and Kumar [6] reviewed agricultural marketing reforms and the electronic National Agriculture Market (e-NAM), noting that efficient markets offer price discovery and a level playing field. They analyzed the challenges in implementing e-NAM in terms of infrastructure, institutions and information, and called for public-private strengthening of the supply chain, amendment of state APMC Acts and wider publicity of e-NAM among farmers. Bodkhe and Dhepe [7] described the structure and problems of agricultural marketing in India and argued that sound agricultural development requires attention to marketing and distribution efficiency as well as production efficiency, suggesting remedial measures including the use of web and mobile technologies.

Hrustek [8] reviewed the literature on sustainability and agriculture driven by the digital technologies of Industry 4.0 and showed that digitally transformed agriculture, through automation, data analysis and better management of operations, can cope with challenges such as climate change and supply disruptions. Reddy [9] examined the impact of digital marketing on agricultural business in India and noted that farmers and farmer producer organizations increasingly use smartphones, social media and e-market platforms such as e-NAM and AGMARKNET to reach national and international buyers, find multiple buyers and obtain better prices without commission agents.

Saha et al. [1] critically reviewed agricultural marketing in India in the context of the three farm laws passed in September 2020 and repealed in November 2021, observing that while the laws were intended to modernize markets through investment and competition, farmers feared the loss of the state's safety net. Villacis et al. [10] used farm-level data to show that producers of local crops received 13% to 73% higher prices in mandis than from private traders, whereas producers of high-value export crops received lower prices in mandis, and argued for tailored rather than uniform marketing policies. Dey and Singh [11] studied smallholder paddy farmers in Eastern India and found that market participation raised income and consumption, that education, membership in farmer organizations, price information and distance to market

influenced participation, and that lack of market information, vehicles and storage pushed most farmers to sell to farm-gate collectors.

Recent studies from Kerala point to problems in the procurement system itself. Absence of immediate payment was the most serious procurement constraint in Palakkad and Alappuzha, followed by difficulty in meeting quality standards [12], and paddy farmers in Palakkad reported constraints in management, finance, marketing and inputs [13] and drought-related price and sales difficulties [14]. Most of this evidence comes from the large rice tracts of Palakkad and Kuttanad; little is known about smaller midland panchayats such as Kidangoor, which the present study addresses.

3. RESEARCH METHODOLOGY

3.1 Study Area and Design

The study was conducted in Kidangoor Grama Panchayat, a rural panchayat in Kottayam district of Kerala where paddy is grown by smallholders alongside rubber and other crops. A descriptive survey design was adopted because the aim was to document existing marketing practices, constraints and opinions rather than to test causal relationships.

3.2 Sampling and Data Collection

Paddy farmers registered with Kidangoor Grama Panchayat formed the study population, comprising approximately 50 farmers. Owing to time and resource constraints, 32 farmers, representing 64% of the identified population, were selected using convenience sampling. The respondents were selected based on their accessibility, availability and willingness to participate in the study during the data collection period. Primary data were collected from January to March 2026 through personal interviews using a structured interview schedule consisting of 33 questions prepared in English and Malayalam. The schedule covered the farmer profile, traditional cultivation practices, marketing channels, marketing constraints, institutional and government support, policy preferences, suggestions for improving income and the intention to continue paddy cultivation. Secondary information on local support

schemes was obtained from the Agricultural Officer of Kidangoor Krishi Bhavan, while published literature and government records were used to provide contextual information.

3.3 Local Support Schemes

According to Kidangoor Krishi Bhavan, paddy farmers in the panchayat can receive assistance from the state Department of Farmers' Welfare under the Sustainable Development of Rice Cultivation scheme (₹5,000 per hectare), an operational expenses component (₹360 per hectare) and a fallow land cultivation scheme (₹40,000 per hectare on own land and ₹35,000 to ₹50,000 per hectare on leased land), and from the panchayat under the Samagra Nellu Krishi Vikasanam project (₹20,000 per hectare). These schemes form the institutional background against which farmers' responses on subsidy benefits should be read.

3.4 Analysis

The collected data were analysed using simple statistical tools: percentage analysis, tabulation, and charts and diagrams. Responses to each question were tabulated as frequencies and expressed as percentages of the 32 respondents, and the main results are presented as bar charts. Questions that permitted more than one answer are reported as the percentage of respondents selecting each option, so their totals exceed 100%. All percentages were calculated on the full sample base of 32.

4. RESULTS AND DISCUSSION

4.1 Profile of Respondents

Table 1 shows that paddy farming in Kidangoor is carried out mainly by middle-aged and older men. Nearly half the respondents (46.9%) were aged 50–59 years, while 25.0% were aged 40–49 years and 28.1% were aged 60 years and above. No respondent was younger than 40 years. Men constituted 84.4% of the sample. All respondents had at least ten years of experience in paddy cultivation, and 53.1% had more than twenty years of experience. Half of the farmers cultivated less than one acre, while a further 43.8% cultivated between one and two acres. In addition, 78.1% cultivated their own land. The absence of younger respondents in the sample, together with the considerable farming experience reported by participants, highlights the importance of examining generational continuity in paddy cultivation.

Table 1: Socio-economic profile of the respondents (N = 32)

Characteristic	Category	Respondents (n)	Percentage (%)
Age (years)	40-49	8	25.0
	50-59	15	46.9
	60-69	4	12.5
	70-79	4	12.5
	80-89	1	3.1
Gender	Male	27	84.4
	Female	5	15.6
Experience in paddy farming	10-20 years	15	46.9
	Above 20 years	17	53.1
Land tenure	Own land	25	78.1
	Leased land	7	21.9
Area under paddy	Below 1 acre	16	50.0
	1-2 acres	14	43.8
	3-5 acres	0	0
	Above 5 acres	2	6.3

Source: Primary data.

4.2 Cultivation Practices and Marketing Channel

Traditional practices remain common (Table 2). Local seed varieties were the main traditional practice for 53.1% of respondents and traditional ploughing for 40.6%, while only 6.3% relied mainly on organic manure. Farmers were, however, uncertain about these methods: 65.6% were unsure whether they are still effective, and 53.1% planned to replace them with modern techniques, though only 6.3% had already done so. This indicates that a considerable proportion of respondents are willing to adopt modern cultivation techniques, although the specific factors influencing their adoption intentions require further investigation.

A notable finding is that all respondents reported selling their paddy exclusively through government procurement centres. None reported using private traders, local markets or

cooperatives. This indicates that government procurement centres serve as the exclusive marketing channel for the respondents included in the study.

Table 2: Cultivation practices and marketing channel (N = 32)

Item	Response	Respondents (n)	Percentage (%)
Main traditional practice followed	Local seed varieties	17	53.1
	Traditional ploughing	13	40.6
	Organic manure	2	6.3
Traditional methods still effective	Yes	3	9.4
	No	8	25.0
	Not sure	21	65.6
Replaced traditional practices with modern techniques	Yes	2	6.3
	No	13	40.6
	Planning to replace	17	53.1
Marketing channel for paddy	Government procurement centre	32	100.0
	Private traders / local market / cooperative	0	0.0

Source: Primary data.

4.3 Marketing Constraints

Table 3(a) and Figure 1 summarize the marketing constraints. Dissatisfaction with the price received was reported by 78.1% of farmers, and low price was named as a major marketing problem by every respondent (Table 4). Delayed payment was reported by 68.8%. The findings highlight two major concerns associated with government procurement: dissatisfaction with

the procurement price and delays in receiving payments. The same pattern has been documented in Palakkad and Alappuzha, where absence of immediate payment ranked as the most severe procurement constraint [12], and it matches the finding that payment time shapes paddy farmers' channel decisions [15]. A majority (59.4%) were also unsure whether procurement ensures a fair price, indicating limited understanding of how the procurement price is set.

Physical marketing infrastructure was a second cluster of problems. Only 6.3% of farmers reported no transport difficulty: 25% faced it regularly and 68.8% sometimes, so 93.8% experienced it at least occasionally. Adequate storage facilities were available to only 18.8% of respondents. The limited availability of storage facilities may restrict farmers' ability to retain harvested paddy and could increase their dependence on available procurement arrangements. Price fluctuations affected the income of 59.4%, and half the respondents lacked regular market information before sale. Middlemen were identified by only one farmer as a major problem, although 34.4% believed that intermediaries influence the paddy price. Although none of the respondents reported selling paddy to private traders, the reasons underlying this perception were not separately investigated in the study and require further exploration.

Table 3: Marketing constraints and institutional support reported by paddy farmers (N = 32)

Indicator	Yes, n (%)	No, n (%)	Third option, n (%)
(a) Marketing constraints			
Satisfied with the price received	7 (21.9)	25 (78.1)	Partly: 0 (0.0)
Face transport problems while selling	8 (25.0)	2 (6.3)	Sometimes: 22 (68.8)
Have adequate storage for harvested paddy	6 (18.8)	22 (68.8)	Limited: 4 (12.5)
Price fluctuations affect farm income	19 (59.4)	12 (37.5)	Sometimes: 1 (3.1)
Payment for paddy is delayed	22 (68.8)	10 (31.3)	Occasionally: 0 (0.0)

Receive proper market information before sale	16 (50.0)	11 (34.4)	Sometimes: 5 (15.6)
Middlemen influence paddy price	11 (34.4)	19 (59.4)	Not sure: 2 (6.3)
Government procurement ensures a fair price	6 (18.8)	7 (21.9)	Not sure: 19 (59.4)
(b) Institutional and government support			
Aware of government schemes for paddy	32 (100.0)	0 (0.0)	Little: 0 (0.0)
Aware of the minimum support price	17 (53.1)	15 (46.9)	-
Benefited from government subsidies	23 (71.9)	9 (28.1)	-
Receive support from cooperatives or farmer societies	6 (18.8)	22 (68.8)	Occasionally: 4 (12.5)
Receive marketing guidance from agricultural officers	7 (21.9)	12 (37.5)	Sometimes: 13 (40.6)
Receive loans or financial assistance from institutions	7 (21.9)	25 (78.1)	-
Received training on marketing and production	6 (18.8)	24 (75.0)	Occasionally: 2 (6.3)
Satisfied with government support	6 (18.8)	23 (71.9)	Partly: 3 (9.4)

Source: Primary data. Row percentages may not sum to exactly 100 because of rounding.

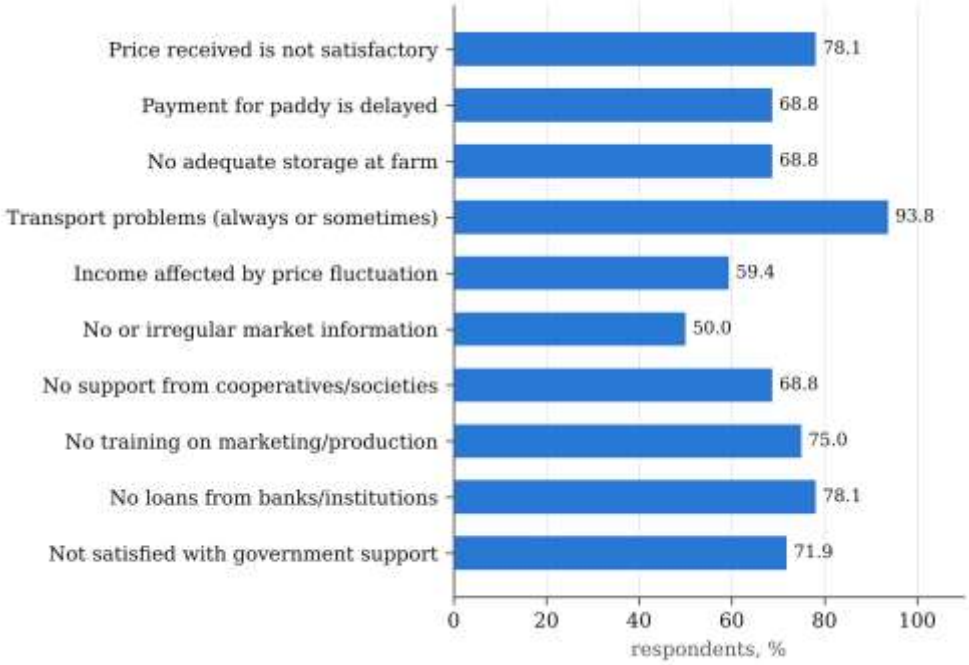


Figure 1: Share of farmers reporting each marketing or support constraint (N = 32)

4.4 Institutional and Government Support

Table 3(b) shows a clear gap between awareness and effective support. All respondents were aware of government schemes for paddy farmers and 71.9% had benefited from subsidies, consistent with the scheme-based support available through Krishi Bhavan. Awareness of the MSP, however, was only 53.1%, even though all respondents sell at a price built on it. Beyond subsidies, institutional reach was thin: 68.8% received no support from agricultural cooperatives or farmer societies, 75.0% had received no training on marketing or production, 78.1% had no loans or financial assistance from banks or institutions, and only 21.9% reported receiving marketing guidance from agricultural officers, while 40.6% received such guidance occasionally. Furthermore, 71.9% of respondents expressed dissatisfaction with the overall government support available. The findings suggest that although government subsidies reach a considerable proportion of farmers, several respondents continue to experience limitations in accessing institutional credit, cooperative support, marketing guidance and training. Similar gaps in leadership, finance and marketing support have been reported for paddy farmers in Palakkad [13].

4.5 Perceptions of Marketing Improvements and Suggestions

Farmers' views on possible improvements were nearly unanimous (Figure 2). Improved market facilities were expected to raise income by 96.9% of respondents, and 93.8% supported a higher MSP and agreed that farmer cooperatives can improve paddy marketing. Introduction of digital or online platforms for selling paddy was favoured by 90.6%, more subsidies by 87.5%, and direct sale to consumers and better storage by 84.4% each. The strong support for cooperatives and digital platforms is notable given that none of the respondents reported using cooperatives as a marketing channel. The survey measured support for digital platforms, not their actual use. These responses indicate interest in collective and alternative marketing arrangements that could complement, rather than replace, state procurement. Studies of paddy markets show that membership in farmer organizations and access to price information improve market participation and income [11], and digital channels can widen market access when supported by infrastructure and institutions [6], [8].

When asked for suggestions to improve income (Table 4), all respondents called for an increase in the MSP, 81.3% for more government support, 65.6% for better storage and 46.9% for fewer middlemen. These priorities mirror the constraints identified in Table 3: price and payment first, then infrastructure.

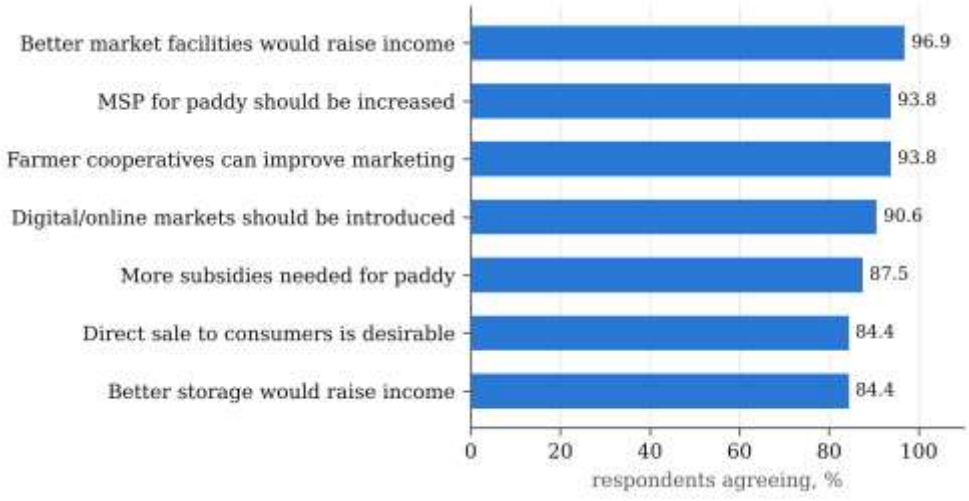


Figure 2: Farmers' agreement with proposed marketing improvements and policy measures (N = 32)

4.6 Intention to Continue Paddy Cultivation

About one-third of the farmers (34.4%) intended to discontinue paddy cultivation (Table 4). Among these 11 respondents, transport problems were the most frequently cited reason (81.8%), followed by low price (45.5%), delay in payment (36.4%) and irrigation problems (27.3%). Transport difficulties therefore emerged as the most frequently reported reason among respondents intending to discontinue paddy cultivation. This finding highlights the importance of examining local transportation arrangements and identifying feasible interventions to reduce the difficulties faced by farmers.

The intention of some respondents to discontinue paddy cultivation, together with the predominance of small landholdings and the absence of younger respondents in the sample, highlights concern regarding the future continuity of paddy cultivation in the study area. Although labour scarcity is frequently reported as a constraint in Kerala's rice farming sector [16], only one respondent in the present study identified it as a reason for discontinuing cultivation. Within the scope of the issues examined, transport and other post-harvest difficulties emerged as prominent concerns among the respondents.

Table 4: Major marketing problem, suggestions and intention to continue paddy cultivation

Item	Response	Respondents (n)	Percentage (%)
Biggest marketing problem (multiple response, N = 32)	Low price	32	100.0
	Transport issues	9	28.1
	Lack of storage	6	18.8
	Middlemen influence	1	3.1
Suggestions to raise income (multiple response, N = 32)	Increase the MSP	32	100.0
	More government support	26	81.3
	Better storage	21	65.6
	Reduce middlemen	15	46.9
	Yes	21	65.6

Plan to continue paddy cultivation (N = 32)	No	11	34.4
Reasons for discontinuing (multiple response, n = 11)	Transport issues	9	81.8
	Low price of paddy	5	45.5
	Delay in getting payment	4	36.4
	Irrigation problems	3	27.3
	Lack of labor	1	9.1
	Physical condition	1	9.1

Source: Primary data. Multiple-response items sum to more than 100%.

5. CONCLUSIONS

This study examined the marketing practices, constraints and institutional support experienced by paddy farmers in Kidangoor Grama Panchayat, Kottayam district, Kerala. The respondents were predominantly middle-aged and older farmers with considerable experience in paddy cultivation, operating mainly on small landholdings. Although traditional cultivation practices remain common, a considerable proportion expressed an intention to adopt modern techniques. All respondents reported selling their paddy through government procurement centres, indicating a strong dependence on the government procurement system. However, dissatisfaction with the procurement price, delays in receiving payments, transportation difficulties and inadequate storage facilities emerged as significant concerns. Although awareness of government schemes was universal, the findings indicate limitations in access to cooperative support, institutional credit, marketing guidance and training. Respondents expressed strong support for an increase in the minimum support price, improved market facilities, farmer cooperatives, digital marketing platforms and better storage infrastructure. Approximately one-third of the respondents also expressed an intention to discontinue paddy cultivation, with transportation difficulties being the most frequently reported reason.

The findings suggest that assured government procurement alone may not be sufficient to ensure the long-term sustainability of paddy cultivation in the study area. Timely payment mechanisms, improved transportation arrangements, shared drying and storage facilities, and stronger farmer organisations could help address the difficulties reported by respondents. Krishi Bhavan, cooperatives and local self-government institutions may also consider

strengthening their role in providing marketing guidance, training, institutional credit linkages and access to digital marketing platforms. The study is subject to limitations arising from its small convenience sample drawn from a single panchayat, reliance on self-reported information and the descriptive nature of the analysis. Consequently, the findings cannot be generalised to all paddy farmers in Kerala. Future studies may consider larger samples across multiple panchayats, direct measurement of cultivation costs and payment delays, and an assessment of the effectiveness of collective marketing and logistics interventions.

DECLARATIONS

Study Limitations

The study covered a single panchayat and employed convenience sampling to select 32 respondents from an estimated population of 50 registered paddy farmers. Although the sample represented 64% of the identified population, the non-probability sampling technique may have introduced selection bias, as farmers who were more accessible and willing to participate might be overrepresented. Consequently, the findings may not fully reflect the experiences and opinions of all paddy farmers in the study area or be generalisable to other regions of Kerala. Data were based on farmers' self-reported perceptions and recall, and no direct measurements of prices, cultivation costs or payment delays were undertaken. Furthermore, the descriptive nature of the analysis does not establish causal relationships.

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