



ISSN Print: 2618-060X
 ISSN Online: 2618-0618
 NAAS Rating (2026): 5.20
 IJRA 2026; SP-9(10): 120-124
www.agronomyjournals.com
 Received: 18-08-2026
 Accepted: 26-09-2026
 Published: 06-10-2026

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Market-Led Extension Practices of Paddy Manjunath.B.Kudari a & b , 2 C.Sunil a & b , 3 Swaroop. H.G a & b , 4 Pradeep.Gopakali b , 5 MohanakumaraV b , 6 Jeevan HR b & c

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DOI: <https://www.doi.org/10.33545/2618060X.2026.v9.i10Sb.6789>

ABSTRACT

This study assessed the utilization of market-led extension practices, marketing behaviour, marketing activities, constraints and farmers' suggestions in paddy cultivation in Shivamogga district of *Karnataka*. Market-led extension plays a crucial role in enhancing farmers access to market information, improving marketing efficiency and strengthening their participation in agricultural value chains. The present study was undertaken to assess the utilization of market-led extension practices among paddy farmers and to analyze their marketing behaviour, constraints, suggestions and preferred extension strategies. The study revealed that production-related practices recorded the highest utilization, whereas post-harvest and market information services were utilized to a moderate extent. Marketing behaviour of farmers was generally favourable however, most respondents depended on village-level traders, local markets and farm-gate sales for marketing their produce. Immediate cash payment, low marketing costs and market accessibility were the major factors influencing the choice of marketing agencies and markets.

Keywords: Market-led extension, Paddy cultivation, Marketing behaviour, Post-harvest management, Agricultural value chains

Introduction

Market-led extension has emerged as a vital approach for enhancing the profitability and sustainability of agriculture by enabling farmers to make informed production, post-harvest and marketing decisions. In the context of paddy cultivation, efficient marketing practices are essential for improving price realization, reducing post-harvest losses, and strengthening farmers' participation in agricultural value chains. However, the effectiveness of market-led extension depends on farmers access to market information, storage facilities, transportation infrastructure, value addition opportunities and institutional support mechanisms. Understanding the existing marketing behaviour, constraints and support requirements of farmers is therefore necessary for designing appropriate extension interventions.

The present study was undertaken to examine the marketing activities, constraints, suggestions and extension strategies related to market-led extension among paddy farmers. The study assessed various dimensions including post-harvest management practices, storage and transportation facilities, marketing channels, market selection behaviour and decision-making processes. It also identified the major production, market and extension-related constraints affecting the utilization of market-led extension practices and documented farmers suggestions for improving marketing efficiency. The findings provide valuable insights for policy-makers, extension agencies and development organizations in formulating strategies to strengthen market-oriented agriculture and enhance the economic well-being of paddy farmers.

Table 1.

I	Post-harvest management	Frequency (n)
	a. Cleaning	34
	b. Grading	29
	c. Value addition	24
II	Place of storage of produce	
	a. Part of house	34

(continued on next page)

I	Post-harvest management	Frequency (f)	Percentage (%)
	b. Farm house	17	14.17
	c. Godown	09	7.50
III	Mode of transport		
	a. Private transport (very costly)	12	10.00
	b. Own vehicle	20	16.67
	c. Farm gate (selling at the farm)	88	73.33
IV	Time of sale of farm produce		
	a. Immediately after the harvest (reason)	86	71.67
	i Quality was not good	13	10.83
	ii No storage facilities available	17	14.17
	iii Financial urgency	56	46.67
	b. After initial storage	14	11.67
	c. After considerable period of storage	12	10.00
	d. When the demand is high	18	15.00
	Whom (agency) do you sell the produce		
	a. To village level trader	89	74.17
	b. To the wholesaler through commission agents in the regular market yard	14	11.67
	c. To the traders through rice mills	16	13.33
	d. To the rice mills	17	14.17
	e. Directly to the consumer/Direct marketing	10	8.33
V	Reasons to sell to a particular agency		
	a. The agency is very familiar	69	57.50
	b. Low marketing cost	76	63.33
	c. The agency is credit worthy	56	46.67
	d. Immediate cash payment	92	76.67
	e. Previous agreement	10	8.33
	f. Better price	23	19.17
VI	Type of market used for selling farm produce		
	a. Local / village market	86	71.67
	b. Direct to rice mills	24	20.00
	c. Wholesale market	10	8.33
VII	Reasons for selling at a particular place(market)		
	a. Better price and Immediate payment	91	75.83
	b. Market is far away from the village	16	13.33
	c. Quality of the produce	24	20.00
	d. Cost of the transport to reach the market	45	37.50
	e. Lack of infrastructure availability in the markets	16	13.33
VIII	Decision making regarding marketing venue		
	a. Not considering any aspect (without any information)	22	18.33
	b. Decision taken after consultation with family members	18	15.00
	c. Consider the distance to the market	57	47.50
	d. Consider the prices at the market	97	80.83
	e. Consider the quality of the produce	59	49.17
	f. Look for demand at other areas	19	15.83

Presents the marketing activities and performance aspects of paddy farmers, covering post-harvest management practices, storage facilities, transportation modes, timing of sale, marketing agencies, reasons for choosing agencies and markets and decision-making factors related to marketing.

Post-harvest management

Among the post-harvest management activities, cleaning was the most commonly adopted practice, reported by (28.33%) of the farmers, followed by grading (24.17%) and value addition (20.00%). The findings indicate that farmers undertake basic post-harvest operations to maintain produce quality; however, value addition activities remain relatively limited, which may reduce opportunities for obtaining higher market prices.

Place of storage of produce

Regarding storage facilities, 28.33% of the respondents stored their produce in a part of their house, while 14.17% used a farmhouse and only 7.50% stored produce in a godown. This suggests inadequate access to scientific storage facilities, compelling farmers to rely primarily on household storage arrangements.

Mode of transport

The majority of farmers (73.33%) sold their produce at the farm gate, thereby avoiding transportation costs and logistical difficulties. About (16.67%) used their own vehicles, whereas only (10.00%) depended on private transportation, which was considered costly. The predomi

nance of farm-gate sales reflects the farmers preference for minimizing marketing expenses and transportation risks.

Time of sale of farm produce

A substantial proportion of farmers (71.67%) sold their produce immediately after harvest. Among the reasons cited, financial urgency (46.67%) was the most important factor, followed by the lack of storage facilities (14.17%) and poor quality of produce (10.83%). In contrast, only (11.67%) sold after initial storage, (10.00%) after a considerable storage period, and (15.00%) when market demand was high. These findings indicate that immediate cash requirements strongly influence farmers' marketing decisions.

Agencies to whom produce was sold

The majority of respondents (74.17%) sold their produce to village-level traders, followed by sales to rice mills (14.17%), traders through rice mills (13.33%) and wholesalers through commission agents in regulated markets (11.67%). Only (08.33%) of farmers adopted direct marketing to consumers. This highlights the dominant role of village traders in the paddy marketing system and the limited participation of farmers in direct marketing channels.

Reasons for selling to a particular agency

The most important reason for selecting a marketing agency was immediate cash payment (76.67%), followed by low marketing cost (63.33%), familiarity with the agency (57.50%) and creditworthiness of the agency (46.67%). Comparatively fewer farmers selected agencies based on better prices (19.17%) or previous agreements

(08.33%). These findings suggest that convenience and liquidity needs outweigh price considerations in farmers' choice of marketing intermediaries.

Type of market used

Most farmers (71.67%) sold their produce in local or village markets, while (20.00%) sold directly to rice mills and only (08.33%) utilized wholesale markets. The preference for local markets may be attributed to their proximity, lower transaction costs and ease of access.

Reasons for selling at a particular market

The primary reason for selecting a particular market was better price coupled with immediate payment (75.83%). Other important reasons included transportation cost (37.50%), quality of produce (20.00%), distance of the market from the village (13.33%) and lack of market infrastructure (13.33%). This indicates that economic considerations, particularly price realization and prompt payment, play a major role in market selection.

Decision-making regarding marketing venue

When deciding where to market their produce, the majority of farmers considered market prices (80.83%), followed by quality of produce (49.17%) and distance to the market (47.50%). A smaller proportion sought information about demand in other areas (15.83%) or consulted family members (15.00%), while (18.33%) made decisions without considering any specific aspect. This suggests that price information remains the most influential factor in determining marketing venues.

Table 3. Constraints in utilization of market led extension practices in paddy

Sl. No	Constraints	Frequency (f)	Percentage (%)
Production dimension			
1	Higher cost of labour	94	78.33
2	Small scale production that creates difficulty in attracting major markets	65	54.17
3	Insufficient infrastructure for processing and value addition	79	65.83
4	Lack of grading at producers level/ more grading procedures prevent trades	87	72.50
5	Unavailability of required quality inputs	91	75.83
6	Lack of credit facilities	89	74.17
Market dimension			
1	Inadequate storage facility leading to distress sale	81	67.50
2	Existence of numerous middle man in the value chain	77	64.17
3	Unstable market price/ low market rate	99	82.50
4	Non-availability of market information	65	54.17
5	Inadequate awareness and experience to deal with the legal aspects of export marketing	77	64.17
6	Inadequate transportation facilities/ high cost of transportation	88	73.33
7	Market are far away / location disadvantages	90	75.00
8	Delayed cash payment	96	80.00
Extension dimension			
1	Lack of follow up activities by extension personnel	77	64.17
2	Lack of credibility of online channels	83	69.17
3	Lack of farmers' sensitization for quality of produce and consumer needs	77	64.17
4	Scanty efforts for advisories regarding post-harvest, marketing and export stages	97	80.83
5	Inadequate trained personnel for capacity building of farmers regarding market led extension	92	76.67

The major production constraints faced by the respondents were unstable market price/low market rate (82.50%), followed by scanty efforts for advisories regarding post-harvest, marketing and export stages (80.83%), delayed cash payment (80.00%), higher cost of labour (78.33%) and inadequate trained personnel for capacity building regarding market-led extension (76.67%). Unavailability of required quality inputs (75.83%) and market location disadvantages

(75.00%) were also perceived as serious constraints. Further, lack of credit facilities (74.17%), inadequate transportation facilities or high transportation cost (73.33%) and lack of grading at producer level (72.50%) affected the efficiency of production and marketing. In the market dimension, inadequate storage facilities leading to distress sale (67.50%), existence of numerous middlemen in the value chain (64.17%), and inadequate awareness regarding legal aspects of

export marketing (64.17%) were prominent issues. Small-scale production creating difficulty in attracting major markets (54.17%) and non-availability of market information (54.17%) were also reported by a considerable proportion of respondents.

Under the extension dimension, lack of credibility of online channels (69.17%), lack of follow-up activities by extension personnel (64.17%), lack of farmers' sensitization regarding quality produce and

consumer needs (64.17%), and insufficient extension advisories on post-harvest and export aspects emerged as critical challenges. The findings indicate the need for strengthening market-led extension services, improving storage and transportation infrastructure, ensuring timely market information dissemination and enhancing institutional support for farmers.

Table 3. Suggestions of the farmers

Sl. No	Suggestions	Frequency (f)	Percentage (%)
1	On time supply of inputs during cultivation with subsidized rate	91	75.83
2	Support to enhance the cooperative processing (milling) industry in rural area by farmers	85	70.83
3	Financial Support for the establishment of small scale milling industry in rural area	76	63.33
4	Establishment of rural godowns	94	78.33
5	Expand facilities to PACS for efficient work (procurement of produce at MSP)	101	84.17
6	Direct procurement of rice from millers by organized retailers would help to reduce price of rice	88	73.33

The suggestions offered by the respondents indicated the need for strengthening institutional, infrastructural and marketing support mechanisms. A majority of the respondents suggested expansion of facilities to Primary Agricultural Cooperative Societies (PACS) for efficient procurement of produce at Minimum Support Price (MSP) (84.17%), followed by establishment of rural godowns (78.33%). Timely supply of agricultural inputs at subsidized rates during cultivation was suggested by 75.83 per cent of the respondents.

Further, 73.33 per cent of the respondents expressed that direct procurement of rice from millers by organized retailers would help in reducing the price of rice and improve marketing efficiency. Support for enhancing cooperative processing (milling) industries in rural areas by farmers was suggested by 70.83 per cent of the respondents, while 63.33 per cent emphasized the need for financial assistance for establishing small-scale milling industries in rural areas.

The findings highlight the importance of strengthening cooperative institutions, improving rural storage infrastructure, ensuring timely input supply, and promoting decentralized processing and marketing systems to enhance farmers' income and marketing efficiency.

Table 4. Extension strategies for the market led extension for the paddy farmers

Sl. No	Extension strategies
1	Organization of Farmers' Interest Groups (FIGs)
2	Supporting and enhancing the capacities of locally established groups
3	Motivating the Direct marketing
4	Establishing marketing and agro-processing linkages between farmers' groups, markets and private processors
5	Capacity building of the farmers with respect to the market information and post-harvest management
6	Acquiring complete market intelligence regularly on various aspects of markets
7	Organization of study tours of FIGs
8	Production of video films of success stories of community specific farmers
9	Motivating farmers to use the different ICT tools for the market information
10	Promotion of public/private partnership in management and development of agricultural markets
11	Dissemination of financial and market related information to the farmers

Sl. No	Extension strategies
12	Organising training for the farmers in post-harvest technologies and marketing

The suggested extension strategies emphasized strengthening farmers' organizations, improving market access and enhancing farmers' capacity in market-led agriculture. Formation of Farmers' Interest Groups (FIGs) and strengthening the capacities of existing local groups were identified as important strategies for collective action and better market participation. Respondents also emphasized motivating farmers towards direct marketing and establishing effective marketing and agro-processing linkages among farmers' groups, markets and private processors to improve market efficiency and profitability.

Capacity building of farmers with respect to market information, post-harvest management and post-harvest technologies emerged as a major extension priority. Regular acquisition and dissemination of market intelligence, financial information and market-related advisories were considered essential for informed decision-making by farmers. Further, respondents suggested motivating farmers to utilize different Information and Communication Technology (ICT) tools for accessing timely market information.

The organization of study tours for Farmers' Interest Groups and production of video films showcasing success stories of community-specific farmers were suggested to enhance experiential learning and motivate wider adoption of improved practices. In addition, promotion of public-private partnerships in the management and development of agricultural markets was recommended to strengthen market infrastructure, improve service delivery and enhance marketing opportunities for farmers. Overall, the findings indicate the need for a comprehensive market-led extension approach focusing on collective action, information dissemination, capacity building and institutional linkages.

Results and Discussion

The component-wise utilization index showed that production practices were most utilized (82.09%), followed by post-harvest practices (54.79%) and market information services (46.83%). Export orientation and brand establishment had zero utilization, indicating very limited exposure to value chain-oriented marketing among the farmers. Overall utilization was mostly low to medium, with (46.67%) of farmers in the low category and (39.17%) in the medium category, suggesting partial adoption of market-led extension practices.

Marketing behaviour was generally favorable, with many farmers agreeing that market information, price trends, grades, standards and alternative marketing methods are important. However, actual marketing practice remained conservative. Most farmers sold their produce to village-level traders and the major reason was immediate cash payment. This indicates that liquidity needs and accessibility outweigh price optimization in marketing decisions. The preference for local/village markets and farm-gate sales reflects both convenience and the burden of transport and storage costs.

The most frequently reported constraints were unstable market price, delayed cash payment, high labour cost, lack of quality inputs and inadequate infrastructure for processing, storage and value addition. Farmers also highlighted the need for rural godowns, better PACS functioning, subsidized inputs and support for local milling and procurement systems. These findings suggest that marketing performance is constrained not only by individual awareness but also by institutional and physical infrastructure gaps.

Conclusion

The study concludes that paddy farmers in Shivamogga district possess moderate marketing awareness, but their actual use of market-led extension practices is limited by infrastructure, finance and information constraints. Strengthening market intelligence, post-harvest support, storage facilities and collective marketing can improve farmers bargaining power and returns. Extension strategies should prioritize farmer groups ICT-based market advisories, and stronger linkages among farmers, markets and processors.

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How to cite this article: Kudari MB, Sunil C, a SH, Gopakali P, b MV, b JH. Market-Led Extension Practices of Paddy Manjunath.B.Kudari a & b , 2 C.Sunil a & b , 3 Swaroop. H.G a & b , 4 Pradeep.Gopakali b , 5 MohanakumaraV b , 6 Jeevan HR b & c. *International Journal of Research in Agronomy*. 2026;SP-9(10):120-124. doi: <https://www.doi.org/10.33545/2618060X.2026.v9.i10Sb.6789>