

DETERMINANTS OF KNOWLEDGE AND UTILIZATION OF KRISHI COMMUNITY RADIO PROGRAMMES AMONG THE LISTENERS

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ABSTRACT

In the information age, community radio plays a crucial role in bridging the gap between agricultural research and rural farmers. This study explores the Krishi Community Radio Station (KCRS), run by the University of Agricultural Sciences, Dharwad, focusing on listener preferences and factors influencing knowledge and programme utilization. The study was conducted in Dharwad district (2023–24) using an ex-post facto design, 120 purposively selected KCRS listeners (Farmers) from eight villages were surveyed. Statistical tools like Correlation, Garrett Ranking, and Regression Analysis were employed. Programmes such as Varada Basanna, Farmers Interview, avind dramatized formats were highly preferred for their relatable and engaging nature. Farmers expressed a need for timely, practical content on inputs, technologies, and expert interaction. Significant positive relationships emerged between knowledge/utilization and factors like social participation, mass media exposure, and social media use. Regression results showed that media exposure and social participation influenced knowledge, while education and media exposure impacted practical application. The study emphasizes the value of participatory formats, media reinforcement, and community involvement. It concludes that for stations like KCRS to foster rural development, content must be relevant, accessible and delivered through interactive, diverse platforms.

Keywords: radio, KCRS, preference, knowledge, utilization

INTRODUCTION

In an era where timely and accurate information plays a crucial role in transforming livelihoods, especially in rural areas, community radio has emerged as a potent medium for communication and knowledge dissemination. Among these, the Krishi Community Radio Station (KCRS), functioning under the University of Agricultural Sciences, Dharwad, stands out as a dedicated initiative aimed at addressing the informational needs of the farming community. By broadcasting region-specific content in the local language, KCRS strives to close the information gap between agricultural research institutions and grassroots-level farmers.

Community radio offers a unique participatory platform where farmers are not only passive recipients but also active contributors in shaping the discourse around agriculture (Attuh and Kankam, 2022; Pratik and Vinaya, 2023). KCRS, through its tailored programming, provides insights into modern farming practices, weather forecasts, pest and disease management, government schemes, and success stories from the field, helping enhance productivity

and income levels. However, the degree to which such information is accessed, understood, and applied by the target audience can vary significantly due to a variety of factors including socio-demographic characteristics, technological access, and content relevance.

Understanding listener preferences and the underlying factors that influence knowledge gain and practical application is essential to improving the reach and impact of such radio programmes. This study was thus undertaken with the objective of analyzing the preferences of listeners and identifying the critical factors that affect their knowledge and utilization of KCRS programmes. By doing so, the study aims to provide actionable insights for enhancing content effectiveness, promoting participatory engagement, and ultimately contributing to the sustainable development of rural farming communities.

This study provides a comprehensive picture of KCRS listeners' preferences, the impact of media exposure and social participation, and the pathways through which these factors influence both knowledge and utilization of agricultural radio programmes.

OBJECTIVES

- (1) To ascertain KCRS listeners' preferences for the broadcasted and to be broadcasted programmes
- (2) To identify the factors influencing knowledge and utilization of KCRS programmes

METHODOLOGY

The present study was conducted during the year 2023–24 in the Dharwad district of Karnataka to assess the knowledge, utilization, and preferences of listeners towards the Krishi Community Radio Station (KCRS) programmes broadcasted by the University of Agricultural Sciences, Dharwad. An **ex-post facto research design** was employed as the phenomena under investigation had already occurred. A

multi-stage sampling method was used to select eight villages from the KCRS broadcast area, and from each village, 15 respondents were purposively chosen, resulting in a sample size of 120 farmers.

Data were collected using a structured and pre-tested interview schedule covering listener profiles, knowledge and utilization of radio content, preferences for programmes, and perceived constraints. Various statistical tools including frequency, percentage, correlation, Garrett ranking, and multiple linear regression analysis were employed to analyze the collected data. The study aims to provide insights into the effectiveness of KCRS programming and the factors that influence listener engagement and application of disseminated information.

RESULTS AND DISCUSSION

Preferences for Broadcasted and Additional Programmes

Table 1. Preferences of KCRS listeners for the broadcasted programmes

(n=120)

Sr. No.	Programmes	Garrett Mean Score	Rank
1	Varada Basanna	47.37	I
2	Farmers interview	46.20	II
3	Scientists' interview	45.07	III
4	Weather forecast	39.16	IV
5	Dramatized agricultural programmes	37.38	V
6	Season based agriculture programmes	36.92	VI
7	Pakshika salahe	34.52	VII
8	Phone-in and phone-out programme	33.41	VIII
9	Folk songs	28.78	IX
10	Season based horticulture programmes	28.73	X
11	Krishi avishkaragalu/ Yashogathe	27.69	XI
12	Season based animal husbandry programmes	26.24	XII
13	Krishi Kutumba	19.27	XIII
14	Adugemaneyannagisi Arogya Kendra	19.01	XIV
15	Chinnaraloka	17.05	XV
16	Agricultural technologies	16.72	XVI
17	Programmes on special days	16.61	XVII
18	Vachanotsava	16.32	XVIII
19	Awareness programmes	15.81	XIX
20	Gramadarshana	12.21	XX

The findings in Table 1 indicate that among the current programmes, the *Varada Basanna* programme emerged as the most preferred, achieving a Garrett mean score (GMS) of 47.37. This programme, known for its informal discussions on animal husbandry and recognized by a national award, resonated strongly with listeners who found the content both informative and engaging. Following closely were programmes such as the *Farmers Interview* (GMS=46.20), *Dramatized Agricultural Programmes*

(GMS=45.07), *Scientists Interview* (GMS=39.16), and *Season Based Agriculture Programmes* (GMS=37.38).

Listeners attributed these preferences to several factors. For instance, the *Farmers Interview* programme was favoured because it provided first-hand accounts and insights from fellow community members sharing similar experiences. Similarly, the *Scientists Interview* programme was appreciated for its practical and trustworthy information,

while the dramatic presentation in the *Dramatized Programmes* made technical agricultural content more engaging and easier to understand.

Programmes with lower GMS scores included those that addressed more specialized topics such as season-based horticulture (GMS=28.73), animal husbandry (GMS=26.24), and community-oriented segments like *Gramadarshana* (GMS=12.21). The relatively lower scores for these programmes were linked to limited familiarity or recall among listeners, suggesting that while some content areas are vital, the mode of presentation and relevance to the listener’s immediate context greatly influence engagement. The results partially align with the findings of Yadav *et al.* (2017), Naik (2016).

Additional programme suggested

Table 2 : Distribution of KCRS listeners according to additional programmes suggested (n=120)

Sr. No.	Additional programmes that are suggested	Frequency	Percent
1	Farming inputs available in the university	35	29.17
2	Farmers and scientists discussion forums	17	14.17
3	Cropping and sowing advices before start of the monsoon	15	12.50
4	Programmes on recent technologies	15	12.50
5	More programmes on dryland farming	10	8.33

Note: Multiple responses are possible.

When considering additional content, 29.17 per cent of respondents expressed a preference for programmes related to farming inputs available at the university, reflecting the importance of institutional support (such as the Beeja Mela for Kharif and Rabi crops) in the agricultural calendar. Furthermore, 14.17 per cent of respondents wanted to see more farmers’ and scientists’ discussion forums, where direct interaction could help clarify doubts and disseminate practical advice. Others recommended pre-monsoon sowing advisories and programmes on new technologies such as nano urea, liquid fertilizers, and drone technology, highlighting the listeners’ appetite for timely and advanced agricultural practices (Table 2).

Factors Influencing Knowledge and Utilization of KCRS Programmes

Table 3 of the study provided insights into the relationship between various independent variables and the knowledge and utilization levels of KCRS programmes. Key

findings include:

Table 3 : Factors influencing knowledge and utilization of KCRS programmes (n=120)

Sr. No.	Independent Variables	Knowledge	Utilization
X ₁	Age	-0.154	-0.072
X ₂	Education	0.071	-0.098
X ₃	Gender	0.096	0.141
X ₄	Family size	0.073	0.128
X ₅	Family occupation	0.054	0.080
X ₆	Land holding	0.137	0.177
X ₇	Family income	0.087	0.087
X ₈	Mass media exposure	0.192*	0.230*
X ₉	Social media utilization	0.211*	0.209*
X ₁₀	Extension contact	0.145	0.091
X ₁₁	Social participation	0.239**	0.192*

** - significant at one per cent level of probability;

* - significant at five per cent level of probability;

Knowledge

- Social Participation had a positive and significant correlation (r=0.239 at the 1% level), indicating that listeners who are more involved in community activities tend to be better informed about the radio programmes. The result allies with the findings of Schafer and Schemer (2024).
- Mass Media Exposure (r=0.192) and Social Media Utilization (r=0.211) also showed positive and significant correlations at the 5 per cent level, which suggests that additional exposure through magazines, newspapers, and platforms like WhatsApp and Facebook reinforces knowledge about the programmes (Komodromos, 2021).
- Other variables such as age, education, gender, family size, family occupation, land holding, family income, and extension contact did not show significant correlations with knowledge.

Utilization

- Similar trends were observed for programme utilization. The analysis revealed that Mass Media Exposure (r=0.230), Social Media Utilization (r=0.209), and Social Participation (r=0.192) were significant at the 5 per cent level which partially allies with the results of Khodifad and Solanki (2023).
- In contrast, demographic and socioeconomic factors like age, education, gender, and others remained non-significant, emphasizing the role of media exposure and community engagement over inherent demographic characteristics. This aligns with the results of Das *et al.* (2021)

Extent of contribution to knowledge and utilization

The regression analyses (Tables 4 and 5) expanded on these correlations:

Table 4 : Multiple linear regression analysis of the independent variables with knowledge among KCRS listeners

(n=120)

Sr. No.	Independent Variables	Regression coefficient 'b' value	S. E (b)	't' value
X ₁	Age	-0.505	0.536	0.941
X ₂	Education	-0.021	0.219	0.095
X ₃	Gender	0.327	0.669	0.490
X ₄	Family size	0.412	0.538	0.767
X ₅	Family occupation	-0.088	0.316	0.279
X ₆	Land holding	0.063	0.301	0.209
X ₇	Family income	0.324	0.516	0.628
X ₈	Mass media exposure	0.116	0.056	2.087*
X ₉	Social media utilisation	0.151	0.173	0.874
X ₁₀	Extension contact	-0.019	0.044	0.430
X ₁₁	Social participation	0.271	0.112	2.418*
	R value	0.381		
	R ² value	0.145		

** - significant at one per cent level of probability;

* - significant at five per cent level of probability;

Table 5: Multiple linear regression analysis of the independent variables with utilization among KCRS listeners

(n=120)

Sr. No.	Independent Variables	Regression coefficient 'b' value	S. E (b)	't' value
X ₁	Age	-0.512	0.983	0.521
X ₂	Education	-0.835	0.401	2.082*
X ₃	Gender	1.811	1.225	1.479
X ₄	Family size	1.236	0.985	1.254
X ₅	Family occupation	0.125	0.578	0.216
X ₆	Land holding	0.316	0.552	0.573
X ₇	Family income	0.800	0.945	0.847
X ₈	Mass media exposure	0.240	0.102	2.355*
X ₉	Social media utilisation	0.481	0.316	1.521
X ₁₀	Extension contact	-0.022	0.080	0.274
X ₁₁	Social participation	0.294	0.205	1.432
	R value	0.446		
	R ² value	0.199		

** - significant at one per cent level of probability;

* - significant at five per cent level of probability;

Knowledge

- *Mass Media Exposure* (t=2.087) and *Social Participation* (t=2.418) emerged as significant predictors of knowledge about KCRS programmes. Together, all selected variables explained 14.50 per cent of the variance in knowledge levels, underlining the influence of external

media sources and community involvement in building awareness.

Utilization

- For the utilization of the programmes, *Education* (t=2.082) and *Mass Media Exposure* (t=2.355) were found to be significant. The combined effect of all

independent variables explained 19.90 per cent of the variance in programme utilization. This suggests that beyond mere awareness, educational background plays an important role in how listeners apply the information received through KCRS programmes.

The preference patterns indicate that the familiarity of programme subjects with the agricultural practices and daily experiences of the listeners plays a major role in engagement. For example, the strong affiliation with the *Varada Basanna* and *Dramatized* programmes reflects not only the quality of content but also the mode of delivery, which appeals to the listeners' interests and experiences as reported by Chapman *et al.* (2011). The fact that additional suggested programmes are centered on practical issues—such as availability of inputs and emerging technologies—further reinforces the audience's focus on immediate and actionable information.

The significant influence of media exposure and social participation on both knowledge and utilization of the programmes supports the idea that information is more effectively assimilated when disseminated through multiple channels. The supportive role of mass media helps reinforce the broadcast content while social participation fosters discussion, further deepening understanding and practical application. Moreover, the importance of education in enhancing programme utilization highlights the role of cognitive capacity and prior knowledge in processing and applying new information as reported by Samadder *et al.* (2024). While other variables like age, education, gender, family size, family occupation, land holding, family income and extension contact did not influence and were non-significant with knowledge and utilization of KCRS programmes. This is contradictory to the results of Ganvit and Chandravadia (2024) but partially ally with the results of Cubos and Vargas (2021).

CONCLUSION

The study suggests that the success of KCRS programmes rely not just on content relevance but also on delivery channels and community engagement. The clear preference for interactive and familiar formats, along with the demonstrated influence of mass and social media, indicates that future programme design should consider bolstering these elements. Aligning with earlier studies by Sharma (2012), and Kumar *et al.* (2015); Zade *et al.*, (2024); Boppana *et al.*, (2023); Patel *et al.*, (2022), the study provides a nuanced understanding of how communication modes and community dynamics drive knowledge acquisition and behavioural change in the agricultural sector.

RECOMMENDATIONS

Participatory formats like Farmer interviews, Phone-in Phone-out, Dramatized programmes should be encouraged as they enhance listener engagement, relatability and knowledge retention. Since media exposure significantly influences both knowledge and utilization, policymakers should support campaigns and partnerships that broaden awareness of community radio services, including through mobile alerts, social media and local events. Krishi Community Radio station and also other community radio stations should adopt a hybrid communication model that includes both traditional and digital platforms for wider and interactive reach. Agricultural universities, government extension departments and NGOs should jointly formulate policies to recognize and support community radio as an essential tool for rural development, including funding, capacity building and research.

ACKNOWLEDGEMENT

I sincerely thank Dr. Surekha Sankangoudar, Professor and Unit Head, Krishi Community Radio Station, University of Agricultural Sciences, Dharwad, Dr. Manjula Patil, Associate Professor, Department of Human Development and Family Studies, College of Community Science, University of Agricultural Sciences, Dharwad and Dr. Gadde Sriharsha, PhD Research scholar, Department of Extension and Communication Management, College of Community Science, University of Agricultural Sciences, Dharwad. Their support played crucial role in guiding my research and I am truly grateful for their expertise.

CONFLICT OF INTEREST

There are no conflicts of interest with respect to publication of this paper by the authors.

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Received : April 2025 : Accepted : June 2025