

The Influence of SMART Agri Radio on the Promotion and Profitability of Agribusiness in Davao Del Sur

John Wesley R. Fernandez*, Luciano D. Nasibog Jr.

Institute of Graduate and Professional Education, Davao del Sur State College
Digos City, Davao del Sur, Philippines

*Corresponding Author Email: johnwesley.fernandez@dssc.edu.ph

Date received: May 11, 2025

Date revised: June 4, 2025

Date accepted: July 1, 2025

Originality: 99%

Grammarly Score: 99%

Similarity: 1%

Recommended citation:

Fernandez, J. W., & Nasibog, L., Jr. (2025). The influence of SMART Agri Radio on the promotion and profitability of agribusiness in Davao Del Sur. *Journal of Interdisciplinary Perspectives*, 3(7), 903–913.
<https://doi.org/10.69569/jip.2025.388>

Abstract. SMART Agri Radio is a community radio station of Davao del Sur State College established with the help of the Department of Agriculture. This quantitative, non-experimental research design was conducted to determine if there is a significant relationship between the extent of exposure to SMART Agri Radio programs and the influence of these programs in disseminating information and promoting profitability, as well as the perceived barriers and challenges hindering the optimization of radio broadcasting in Davao del Sur. This research was conducted with 229 respondents residing in Davao del Sur, utilizing a descriptive-correlational and descriptive-comparative research design, and a researcher-made questionnaire. Data was computed and analyzed using statistical computing software. Respondents are primarily female, mostly young adults who are married farmers with completed secondary education and 5 to 10 years of experience in agriculture or agribusiness. The extent of exposure to SMART Agri Radio programs among listeners in Davao del Sur was favorable, indicating that respondents generally had a positive perception of the program. Most listeners tuned in from their homes for an hour or less, preferring content related to agriculture and agribusiness, particularly that hosted by their favorite program presenters. The level of influence of SMART Agri Radio programs in disseminating information and promoting agribusiness practices among listeners was found to be significant, with a perceived positive impact on profitability. A significant relationship was found between the extent of exposure to SMART Agri Radio programs and the influence of these programs on information dissemination and profitability. A significant relationship was also found between perceived barriers and challenges in radio broadcasting and their impact on profitability. Findings indicate that these barriers substantially hinder the optimization of radio broadcasting in Davao del Sur, thereby affecting the profitability of listeners. Addressing these challenges could improve the program's reach and effectiveness.

Keywords: Agribusiness; Davao del Sur; Farmers; Profitability; SMART Agri Radio.

1.0 Introduction

SMART Agri Radio is a community radio station of Davao del Sur State College established with the support of the Department of Agriculture. It is a young and growing radio station in Davao del Sur, and this study will be the first to determine whether the station has a significant influence among its listeners within Davao del Sur. Over the years, it has become evident that rural people, and people who are marginalised and powerless within their communities, are excluded from development processes meant to address their basic needs. Resultantly, they find themselves at the end of the communication trajectory as mere receivers of information. Due to certain constraints, they often cannot understand the information received (Mohammed, 2021). Years ago, the emergence

of rural radio stations played a crucial role in sharing data and knowledge, serving as an advanced mechanism for transmitting information and enhancing focused initiatives (Antwi et al., 2022). According to Meena et al. (2020), in this age of information, it provides a high level of assistance in national development, especially for farmers, as it advances living standards and expands farming capabilities. Radio plays a vital role in disseminating information about agricultural development (Bhatti et al., 2022).

There are several types of radio, including commercial and community radio. Commercial radio serves as a platform that generates profit through advertisements, whereas volunteers typically run community radio, and it is not for profit. According to King (2017), as a non-profit media organization, it is expected to be run by dedicated volunteers who are willing to serve the community, which presents a struggle and challenge for community radio. Also, community radio plays a paramount role in the development of the community. Community radio stations have been highly engaged in addressing social, economic, cultural, educational, health, environmental, sanitation, and disaster issues effectively and strategically using local languages in context. It is also used to express and share indigenous views, thoughts, ideas, problems, and perspectives of local people (Yemer, 2020). It has long been recognized as a powerful tool for empowering marginalized communities, providing them with a platform to voice their concerns, share their stories, and access essential information (Rastogi & Suryavanshi, 2024).

Radio emerged as a mass media tool from its early days of introduction in the late 19th century. Quite surprisingly, even after more than a hundred years of its existence, and amid remarkable advancements in the field of information and communication technologies, Radio still plays a pivotal role in education, in general, and distance education in particular (Sarmah & Lama, 2017). Moreover, according to Ayesha (2023), radio is the most commonly used tool for information dissemination in developing countries. It was demonstrated that it is also one of the factors contributing to cultural change, improved health, and agricultural development. In the study by Jamali et al. (2018), it was stated that accurate, meaningful, and relevant information can facilitate agricultural development by serving as a key factor in decision-making, particularly in finance, workforce management, supervision, and livestock management. Additionally, radio programs are highly effective, especially for farmers who lack knowledge of farming. Radio was used to acquire some additional skills, information, and enhance expertise. It is also beneficial to farmers because the radio is an audio device that requires minimal time to use, allowing them to continue with their daily activities while listening (Gill et al., 2024).

Community radio stations play an essential role in the farming system of Indian farmers. It disseminates beneficial and sustainable information, such as providing precautions and advice on the effects of chemical fertilizers and other substances that can have adverse impacts on plants (Khan et al., 2020). It is a vital tool for knowledge sharing, particularly in rural places where it may facilitate local conversations among geographically dispersed listeners (Abdulai et al., 2021). It provides a forum for exchanging regional expertise and expressing viewpoints from underrepresented groups within a community (Alam, 2015). According to Iheanacho (2023), community radio programs are a boon to farmers, increasing the productivity and yield of crops. Ragasa et al. (2021) emphasized that radio programming has a substantial positive impact on technology awareness but a limited impact on the actual adoption of most agricultural practices being promoted.

With the help of the radio, citizens rely on their primary source of knowledge, thanks to the accuracy of information dissemination, which serves as a guide in their daily lives. It also becomes the basic medium due to its accessibility and low cost (Navarro et al., 2019). Aside from entertainment, radio is considered one of the best media for educating farmers about technology and agricultural information. It also helps close the knowledge gap between scientists and farmers, improves socioeconomic status, and raises farmers' awareness (Goudappa et al., 2017). In Asia, community radio stations play a crucial role in the farming systems of Indian farmers by disseminating useful and sustainable information, including precautions and advice on the effects of chemical fertilizers and other substances that can harm plants (Khan et al., 2020). Among Asian countries, the Philippines has the most significant number of broadcasting stations under the supervision of the Broadcast Media Council (Songco, 2016). With the help of the radio, citizens rely on it as a source of knowledge, thanks to the accuracy of the information it disseminates, which serves as a guide in their daily lives. It also becomes the basic medium due to its accessibility and low cost (Navarro et al., 2019). Additionally, Nirmala (2015) emphasizes the role of community radio in women's empowerment through education and awareness programs. In contrast, lower engagement among male respondents may be attributed to their higher involvement in work outside the home, limiting their time for radio consumption. Shiferaw (2020) found that married individuals tend to listen to the radio more frequently than unmarried individuals, as it complements their daily routines without requiring full

attention. Conversely, separated individuals exhibit lower engagement, possibly because they seek alternative forms of entertainment and distraction beyond the radio. Ajaebgu et al. (2015) found that university students often face challenges in incorporating it into their daily routines, despite having access to the radio.

In Mindanao, the community radio provides opportunities for community voices to be heard on local issues leading to discussion, the community-centered radio program helped community leaders become more aware of the needs of their community, organize community action that met those needs, and provide services that were not previously offered (James et al., 2019). Moreover, the study by Jamali et al. (2018) stated that accurate, meaningful, and relevant information can facilitate agricultural development, as it serves as a key factor in making informed decisions, particularly in finance, workforce management, supervision, and livestock management. Therefore, the above premises motivated the researcher to conduct the study, as although many studies have proven that radio is influential in agribusiness development and other aspects of listenership, the influence of SMART Agri Radio on listeners within Davao del Sur remains unknown.

2.0 Methodology

2.1 Research Design

The study employed a quantitative non-experimental design utilizing a descriptive correlation technique. A non-experimental design gives the researcher the advantage of collecting necessary data and drawing conclusions based on that data (Roberts, 2021).

2.2 Research Locale

The study was conducted in various areas where SMART Agri Radio programs reached in the province of Davao del Sur, one of the provinces in the Davao region. These areas include Sta. Cruz, Matanao, Kiblawan, Bansalan, Magsaysay, Sulop, Hagonoy, Malalag, Padada and Sta. Cruz.

2.3 Research Participants

To emphasize, the proponent selected the intended individuals who were qualified according to the criteria set for this study. Respondents were Filipinos residing in Davao del Sur, could be single or married, regardless of gender, and must be 18 years old or older, and must be listeners of SMART Agri Radio. The researcher used the snowball sampling design and technique to gather data from 229 respondents (Table 1). The agreeable participants are then asked to recommend other contacts who fit the respondents' criteria and might also be willing participants. These participants, in turn, recommend other potential participants, and the process continues.

Table 1. Respondents' Sample Size for each Municipality

Municipality	Sample Size
Sta. Cruz	31
Matanao	23
Kiblawan	22
Bansalan	16
Magsaysay	16
Sulop	16
Hagonoy	15
Malalag	15
Padada	15
Total	229

2.4 Research Instrument

The researcher used a research-made survey questionnaire to gather the needed data for the study accurately. The questionnaire was prepared, reviewed, pretested, and carefully reviewed before being administered to the selected respondents. There was one (1) set of questionnaires divided into four (4) parts: a). Demographics of the selected participants, including age, sex, civil status, and Educational Attainment. Years involved in agriculture/agribusiness. The level of exposure to SMART Agri Radio programs among farmers in Davao del Sur, and c). The level of effectiveness of SMART Agri Radio programs in disseminating information and promoting agribusiness practices among farmers. The final section addressed the perceived barriers and challenges hindering the optimization of radio broadcasting in Davao del Sur. As a researcher-made instrument, it had undergone pre-testing to assess its validity and reliability. Experts' evaluation of the instrument revealed that it is valid and reliable.

2.5 Data Gathering Procedure

Before collecting the actual data, the researcher obtained a permit from Davao del Sur State to conduct the study. Only after the license to conduct the study was issued did the researcher proceed with the data gathering. Informed consent was obtained from pre-identified respondents. Following this, the researcher conducted a face-to-face survey of the listeners residing in Davao del Sur, using a validated, researcher-created questionnaire. The data gathered were tabulated by the researcher, computed, and analyzed with the help of a statistician. Results were analyzed, discussed, and presented to the advisory committee.

2.6 Ethical Considerations

This study observed ethical considerations, such as ensuring that proper consent of the respondent was obtained before the interview commenced. The researcher also allowed the respondents to express their insights and ensured that their profiles were kept confidential. Unfolding the respondent's profile is a serious violation.

3.0 Results and Discussion

3.1 Socio-demographic Profile of SMART Agri Radio Listeners

Table 2 shows the demographic profiles of the respondents residing in Davao del Sur. It provides essential insights into the audience composition of SMART Agri Radio. Understanding these socio-demographic characteristics builds a strong foundation for analyzing the study's findings.

Table 2. Socio-demographic Profile of the SMART Agri Radio Listeners in Davao Del Sur, February (2025)

Profile	F	RF (100%)
Age		
18-25 years old	40	17.50
26-35	52	22.70
36-45	52	22.70
46-55	41	17.90
56 and above	44	19.20
Sex		
Female	128	55.90
Male	101	44.10
Civil Status		
Married	136	59.40
Single	67	29.30
Widow	18	7.90
Separated	8	3.50
Educational Attainment		
Primary education	50	21.80
Secondary education	99	43.20
Tertiary education	40	17.50
Bachelor education	30	13.10
Postgraduate degree	10	4.40
Occupation		
Farmers	101	44.10
Employees	70	30.60
Self-employed	32	14.00
Students	26	11.40
Years Involved in Agriculture/Agribusiness		
5-10 years	131	57.20
11-20	45	19.70
21-30	25	10.90
30-40	16	7.00
41 years and above	12	5.20

Two age brackets have the highest frequency: respondents aged 26 to 35 and 36 to 45 years old (22.70%). Conversely, the lowest frequency is observed among respondents aged 18 to 25 (17.50%). These findings imply that SMART Agri Radio is particularly popular among individuals in their late twenties to mid-forties, likely due to their active engagement in agricultural work. The radio accompaniment during work offers music, news, education, and agricultural content. This aligns with Krause's (2020) assertion that radio programming provides entertainment, information, and social interaction through various formats such as talk shows and interviews.

On the other hand, the lower engagement among younger respondents suggests a generational shift in media consumption. The younger demographic, being digital natives, tends to prefer social media and other online platforms over traditional radio. Regarding gender, female respondents represent the highest frequency (55.90%), while male respondents make up 44.10%. This suggests that women are more engaged with SMART Agri Radio, possibly due to their roles in household management, where radio serves as both an entertainment and information source.

The majority of respondents are married (59.40%), while the lowest frequency is observed among those who are separated (3.50%). This implies that married individuals integrate SMART Agri Radio into their daily lives, allowing them to stay informed while performing household and farming tasks. Regarding educational attainment, the highest frequency is among respondents who completed secondary education (43.20%), while the lowest is among those with post-graduate education (4.40%). This suggests that individuals with secondary education rely on SMART Agri Radio for agricultural knowledge and practical insights, particularly through expert-led programming. Conversely, respondents with post-graduate education may already possess substantial knowledge and use the radio primarily as a supplementary information source or for occasional relaxation.

Regarding occupation, 44.10% are farmers, which highlights SMART Agri Radio's strong appeal to farmers, who utilize it for both knowledge acquisition and entertainment purposes. The majority of listeners were found to be involved in agriculture or agribusiness, with 5 to 10 years of experience (57.20%), while the lowest frequency is among those with over 41 years of experience (5.20%). This suggests that individuals with 5 to 10 years of experience rely on SMART Agri Radio as a valuable source of guidance in their agricultural ventures. They often depend on it for updated farming techniques and market information. Meanwhile, respondents with over 41 years of experience may have already accumulated extensive practical knowledge and view the radio as a secondary or refresher source of information.

Overall, these demographic insights highlight the diverse listening behaviors and accessibility challenges SMART Agri Radio's audience faces. The findings emphasize the station's crucial role in education, dissemination, and community engagement, particularly among farmers and rural households. Addressing signal coverage issues in remote areas could enhance the radio's effectiveness in reaching a broader audience.

3.2 Extent of Exposure to SMART Agri Radio Program among Listeners in Davao del Sur

Table 3 presents the extent of exposure to SMART Agri Radio programs among listeners in Davao del Sur. It was evaluated based on target audience, program content, and reach. The overall findings yielded a grand mean score of 3.84, indicating a favorable level of exposure. This suggests that respondents generally engage with the radio program and find its content relevant to their needs.

Table 3. *Extent of Exposure to SMART Agri Radio Programs among Listeners in Davao del Sur, February (2025)*

Indicators	Std. Deviation	Mean	Remarks
Reach	0.81	3.71	Favorable
Programs	0.74	3.82	Favorable
Target audience	0.75	3.99	Favorable
Overall	0.77	3.84	Favorable

SMART Agri Radio's reach resulted in a mean score of 3.71, which, although the lowest among the three indicators, still indicates a favorable level of exposure. This suggests that respondents generally perceive the station's signal as clear and accessible, even in remote areas. Additionally, promotional efforts effectively attract new listeners, while interactive features such as the "Question of the Day" segment contribute to audience engagement. On the other hand, program content (3.82) reflected a favorable response from listeners. This suggests that the program effectively caters to its audience's interests by delivering high-quality, diverse, and engaging content. Extension programs in rural communities are crucial in connecting farmers and other stakeholders to the rural development agenda. The relevance of these programs in agriculture largely depends on their ability to meet farmers' needs, as they are the primary stakeholders at the grassroots level (Maulu et al., 2021). This implies that the radio station contributes to agricultural development by serving as a reliable source of information for farmers and agribusiness practitioners.

The results indicate that exposure to SMART Agri Radio among listeners in Davao del Sur, in terms of target audience, received the highest mean score of 3.99, signifying a favorable level of engagement. This implies that

respondents regularly listen to the program, often tuning in from their homes for less than an hour at a time. They prefer content related to agriculture and agribusiness, which aligns with their interests and occupations. Additionally, the program schedule appears to be well-suited to the daily routines of its audience, and the program hosts play a significant role in influencing listener engagement. Community radio stations, such as SMART Agri Radio, serve as platforms for amplifying the voices of marginalized individuals, promoting inclusivity, and addressing local concerns.

3.3 Level of Influence in Information Dissemination and Promoting Agribusiness Practices among Listeners

Table 4 presents the results of the level of influence of SMART Agri Radio Programs in disseminating information and promoting agribusiness practices among listeners. The findings suggest that programs have a significant impact on disseminating agricultural information and promoting agribusiness practices among their listeners. These results suggest that the programs effectively support knowledge acquisition, profitability, behavioral change, productivity, and engagement through the use of rewards.

Table 4. *Level of Influence of SMART Agri Radio Programs in Information Dissemination and Promoting Agribusiness Practices among Listeners in Davao Del Sur, February (2025)*

Type of Influence	Std. Deviation	Mean
Knowledge	0.73	3.94
Profitability	0.80	3.86
Behavioral change	0.77	3.82
Productivity	0.80	3.75
Rewards	0.80	3.77
Overall	0.78	3.83

Among the measured aspects, knowledge acquisition recorded the highest mean score of 3.94, indicating that programs are particularly effective in enhancing listeners' awareness and understanding of agricultural topics. Including expert insights, interviews, and discussions contributes to the intellectual development of listeners, providing them with relevant and practical information that enhances their understanding and knowledge. This aligns with the findings of Antwi-Boateng et al. (2023), who reported that 69.50% of respondents consider FM radio a vital source of knowledge, reinforcing the role of radio as both an educational and informational medium. The influence on profitability was also notable (3.86). This suggests that listeners benefit from disseminating agricultural best practices, expert advice, and financial literacy discussions, leading to improved agribusiness profitability. As community radio serves as a crucial medium for supporting decision-making in rural areas, its role in generating economic gains is well-documented.

The programs also influenced behavioral changes among listeners, as indicated by a mean score of 3.83. Exposure to SMART Agri Radio led to positive transformations in farming practices, skills development, and the adoption of modern agricultural technologies. Additionally, the programs shaped daily routines and influenced overall attitudes toward agriculture. This aligns with research by Ajaegbu et al. (2015), which highlights the role of radio in fostering emotional support, motivation, and attitudinal shifts among audiences. SMART Agri Radio programs also contributed to increased productivity among listeners, with a mean score of 3.77. Listeners reported improvements in farm management and creativity, guided by timely tips and best practices shared through the radio programs. Despite low radio ownership rates in some rural areas, radio remains a powerful tool for agricultural extension services. Research by Kelemu et al. (2016) highlights the potential of radio in enhancing the productivity of smallholder farmers, demonstrating its role in supporting national agricultural initiatives.

The findings highlight the substantial influence of SMART Agri Radio in promoting agribusiness practices and information dissemination. The substantial impact on knowledge acquisition and profitability suggests that these programs are critical in educating farmers and agribusiness owners. However, strategies such as interactive programming, audience engagement initiatives, and targeted incentives should be further explored to maximize influence. Additionally, efforts should be made to strengthen the impact of less popular program aspects, such as rewards, by integrating more tailored incentives that align with audience needs. SMART Agri Radio can further enhance its role in supporting sustainable agricultural development by continuously refining content and engagement approaches.

3.4 Level of Perceived Influence on Profitability of SMART Agri Radio Programs among Listeners

Table 5 shows the results of listeners' perceived influence on the profitability of SMART Agri Radio programs. The findings indicate that listeners have a positive perception of the programs' influence on profitability. This suggests that the programs effectively support agribusiness profitability by providing relevant information, practical insights, and a suitable platform for farmers and agribusiness owners to enhance their financial outcomes.

Table 5. *Level of Perceived Influence on the Profitability of SMART Agri Radio Programs among Listeners in Davao del Sur, February (2025)*

Types of Influence	Std. Deviation	Mean	Remarks
Influence the listeners towards agribusiness profitability.	0.88	4.10	Positive perception
Provide the A program suitable for agribusiness profitability	0.85	3.97	Positive perception
The host provides the needed information for agribusiness profitability.	0.88	3.90	Positive perception
It is the ideal platform for boosting agribusiness profitability.	0.90	3.87	Positive perception
Listeners achieve agribusiness profitability by listening to SMART Agri radio	0.98	3.79	Positive perception
Overall	0.90	3.93	Positive

The positive perception of profitability suggests that SMART Agri Radio plays a significant role in informing listeners about best agricultural practices, market trends, and financial literacy, thereby contributing to improved decision-making and increased income generation. The structured programming, expert interviews, and discussions help farmers optimize their agricultural activities, leading to increased efficiency and profitability. SMART Agri Radio programs bridge the gap between agricultural experts and farmers, ensuring that essential information reaches those who need it most. Rewards had the lowest mean score among the measured factors, with a score of 3.77, although it was still categorized as influential. The results suggest that SMART Agri Radio has a meaningful impact on the profitability of its listeners, reinforcing the importance of radio as an educational and economic empowerment tool. To maximize its influence, further improvements can be made by expanding program accessibility, increasing interactive content, and integrating more financial literacy segments tailored to the needs of agribusiness. Additionally, strategic partnerships with agricultural institutions and economic organizations could expand the scope of information provided, ultimately benefiting a wider range of farmers and agribusiness stakeholders.

3.5 Perceived Barriers and Challenges Hindering the Optimization of Radio Broadcasting in Davao del Sur

Table 6 shows the results of perceived barriers and challenges hindering the optimization of radio broadcasting in Davao del Sur. Moreover, the results show that listeners perceive the influence of SMART Agri Radio positively, as its programming aligns with their interests and moods. However, a notable challenge is that the programs may not be suitable for all age groups, limiting their accessibility to a broader audience. The findings suggest that while the content effectively engages its target audience, there is a need for diversification to accommodate varying demographics. Research on community radio highlights its potential to improve public awareness and well-being, as frequent engagement with community radio has been linked to increased community involvement (Krause, 2020). Expanding program diversity and ensuring inclusivity in content design could enhance its overall impact.

Table 6. *Perceived Barriers and Challenges Hindering the Optimization of Radio Broadcasting in Davao del Sur in terms of Reach, February (2025)*

Barriers and Challenges	SD	Mean	Remarks
Reach			
SMART Agri Radio's five times a week broadcast from 8:00 am to 5:00 pm can limit its reach	0.96	3.57	Positive perception
SMART Agri Radio's promotions are not enough to capture listeners' attention	0.98	3.54	Positive perception
Weather conditions can affect the transmission of SMART Agri Radio signals.	0.92	3.53	Positive perception
Other Radio frequency overpowered the frequency of SMART Agri radio	0.94	3.52	Positive perception
The listener's topography. You have many obstacles that hinder the broadcast of SMART Agri Radio.	1.06	3.44	Neither positive nor negative perception
Overall	0.97	3.52	Positive perception
Radio Content			
It is influential to the listeners	0.89	3.83	Positive perception
Catches the interest of listeners through the programs being aired	0.85	3.81	Positive perception
Provide the needed information	0.98	3.78	Positive perception
Timeslot matches the mood of interest of the listeners	0.92	3.76	Positive perception
It is not suitable for all ages	1.10	3.41	Neither positive nor negative perception
Overall Mean	0.95	3.72	Positive perception

Furthermore, Table 7 shows that geographical and technical constraints also influence the effectiveness of radio broadcasting. Various physical obstacles, such as mountains, buildings, and trees, interfere with radio signals, leading to reception difficulties. Additionally, adverse weather conditions and frequency interference from nearby radio stations hinder access to SMART Agri Radio programs. Another limitation is the station's broadcasting schedule, which operates from 8:00 AM to 5:00 PM on weekdays. This restricts access for individuals who may be occupied during these hours. Similar findings were reported by Ribba (2019), who noted that poor signal quality often discourages listeners from tuning in, thereby reducing the dissemination of critical information.

Table 7. *Perceived Barriers and Challenges Hindering the Optimization of Radio Broadcasting in Davao del Sur in terms of Radio Content of SMART Agri Radio Programs, (February 2025)*

Barriers and Challenges	Std. Deviation	Mean	Remarks
It is influential to the listeners	0.89	3.83	Positive perception
Catches the interest of listeners through the programs being aired	0.85	3.81	Positive perception
Provide the needed information	0.98	3.78	Positive perception
Timeslot matches the mood of interest of the listeners	0.92	3.76	Positive perception
It is not suitable for all ages	1.10	3.41	Neither positive nor negative perception
Overall Mean	0.95	3.72	Positive perception

The results underscore the need for strategic interventions to optimize the reach and content of SMART Agri Radio. Investments in signal enhancement technologies and expanding broadcast hours could be considered to improve accessibility. Additionally, incorporating more diverse content tailored to different age groups and interests may help broaden audience engagement. Strengthening partnerships with local government units, educational institutions, and agricultural agencies can also facilitate the dissemination of agricultural information through alternative platforms, such as digital media and community outreach initiatives. By addressing these barriers, SMART Agri Radio can further maximize its role in empowering listeners with relevant and timely agricultural knowledge.

3.6 The Program Hosts' Performance influences listeners' Satisfaction with SMART Agri Radio

Table 8 displays the results of the listeners' satisfaction with SMART Agri Radio regarding the program hosts' performance. The overall satisfaction of listeners with the performance of program hosts was neutral (3.33). This suggests that while the audience does not express strong dissatisfaction, they are also not highly satisfied, indicating room for improvement in engaging and meeting listener expectations.

Table 8. *Listeners' Satisfaction with SMART Agri Radio on the Program Hosts' Performance, February (2025)*

Radio Program Hosts	Std. Deviation	Mean	Remarks
Dear Inday and Dodong program	1.04	3.66	Satisfied
ATI-SOA program	0.78	3.61	Satisfied
Balitanghalian program	0.95	3.55	Satisfied
MagUmaSenso Ta! Program	0.93	3.39	Neutral
Agrigosyo program	0.81	3.32	Neutral
Bida-Estudyante	0.94	3.32	Neutral
Agribida program	0.97	3.31	Neutral
Kooltura program	0.81	3.27	Neutral
DSSC Today program	0.94	3.26	Neutral
Entablado on air program	0.90	3.19	Neutral
Masaganang ani program	0.84	3.18	Neutral
Paghayupan 101 program	0.96	3.15	Neutral
Institute in Focus Program	0.78	3.13	Neutral
Overall Mean	0.90	3.33	Neutral

Although most respondents remain uncertain about their level of satisfaction, specific programs stand out due to their well-received hosts. This implies that while some hosting styles resonate with the audience, others may not generate the same level of engagement. The neutral perception could stem from a lack of interest in specific programs or varying expectations regarding hosting styles. Given this, there is an opportunity to refine hosting techniques and enhance listener interaction. The findings underscore the need for strategic enhancements in host training and content delivery to improve listener engagement and satisfaction. Identifying and adopting best practices from well-received hosts can improve the overall appeal of the program. Further research on audience preferences could provide valuable insights into the elements that contribute to listener satisfaction. Enhancing

audience interaction through live discussions, interactive segments, and listener feedback mechanisms may foster a stronger connection between program hosts and their audience. Refining hosting styles and engagement strategies can ultimately contribute to a more impactful and engaging radio experience for listeners.

3.7 Relationship between the Extent of Exposure to SMART Agri Radio Programs and the Influence of SMART Agri Radio Programs in Disseminating Information and Towards the Profitability

Table 9 shows that the three factors – reach, Radio Content Programs, and Target Audience – exert a statistically significant impact on profitability. Among these factors, the Target Audience has the highest F-value, suggesting that it has the most substantial influence on the effectiveness of SMART Agri Radio programs.

Table 9. Relationship between the Extent of Exposure to SMART Agri Radio Programs and the Influence of SMART Agri Radio Programs in Information Dissemination and Towards the Profitability in Davao del Sur, February (2025)

Extent of exposure	Sum of Squares	Df	Mean Square	F	P-value
Reach	74.308	59	1.259	2.856	.000*
Radio content programs	70.826	59	1.200	3.704	.000*
Target audience	78.655	59	1.333	4.423	.000*

*-Significant at 0.05 level

The significant relationship between listeners' exposure to SMART Agri Radio programs and their influence on information dissemination and profitability highlights the importance of audience engagement. The frequency with which listeners tune in directly affects their ability to absorb and apply the information provided, ultimately influencing their profitability in the agribusiness sector. This highlights the importance of strategic programming that aligns with the needs and listening habits of the target audience.

3.8 Relationship between the Perceived Barriers and Challenges Hindering the Optimization of Radio Broadcasting in Davao Del Sur and the profitability of agribusiness in Davao del Sur

Table 10 shows that Reach Barriers and Radio Content Program Barriers have a significant impact on profitability, as evidenced by their p-values (.000), which is below the 0.05 significance level. The F-values (2.901 for Reach Barriers and 4.957 for Radio Content Program Barriers) suggest that challenges related to radio content have a more substantial effect on profitability than reach-related obstacles. This underscores the importance of optimizing radio content to enhance its influence on listeners' agribusiness profitability. The significant relationship between perceived barriers in radio broadcasting and profitability highlights the critical role of effective content delivery. Radio programs designed to disseminate agricultural information must be accessible, engaging, and tailored to the audience's needs to maximize their impact. Addressing content-related barriers, such as program relevance, listener engagement, and format adaptability, could increase knowledge retention and application among listeners, thereby enhancing their agribusiness success.

Furthermore, the demographic profile of respondents indicates that the majority were farmers (44.10%), suggesting that SMART Agri Radio primarily reaches individuals directly involved in the agricultural sector. However, the relatively lower engagement of students (11.40%) indicates an opportunity to expand outreach to younger audiences who may benefit from agribusiness education. Strengthening signal reach and ensuring consistent broadcast accessibility, particularly in rural areas, may further enhance the program's influence.

Table 10. Relationship between Perceived Barriers and Challenges Hindering the Optimization of Radio Broadcasting and Agribusiness Profitability in Davao del Sur, February (2025)

Perceived Barriers and Challenges	Sum of Squares	Df	Mean Square	F	P-value
Reach barriers	64.816	59	1.099	2.901	.000*
Radio content	82.589	59	1.400	4.957	.000*

*-Significant at 0.05 level

Ultimately, these findings underscore the need to overcome broadcasting challenges to optimize the dissemination of agricultural information, enhance listeners' profitability, and broaden its impact.

4.0 Conclusion

Most respondents were female, primarily young adults aged 26 to 45, who were married farmers with secondary education and had between five and ten years of experience in agriculture or agribusiness. Findings indicate that respondents listen to the program occasionally. The extent of exposure to SMART Agri Radio programs is favorable. The level of influence of SMART Agri Radio programs in information dissemination and promoting

agribusiness practices was significant, demonstrating that these programs effectively contribute to knowledge dissemination and the adoption of agribusiness practices.

Respondents exhibited a positive perspective, suggesting that they acknowledge the program's contribution to their financial success in the agribusiness sector. They expressed a positive perception of all statements related to signal reach and radio content as barriers and challenges hindering the optimization of radio broadcasting in Davao del Sur, ON the other hand, a significant relationship was found between the extent of exposure to SMART Agri Radio programs and the influence of these programs on information dissemination and profitability. A significant relationship was also found between perceived barriers and challenges in radio broadcasting and their impact on profitability.

Furthermore, given that SMART Agri Radio is influential, it is recommended that active listeners, notably farmer respondents, allocate sufficient time to listening to the radio. Increased engagement with the program can enhance their understanding and application of agricultural and agribusiness knowledge. Moreover, SMART Agri Radio should consider upgrading its programs by enhancing how hosts and speakers deliver content and incorporating additional learning materials to improve its effectiveness. It is also essential for SMART Agri Radio to expand its workforce. Additional personnel with clearly defined roles and responsibilities can enhance program quality, operational efficiency, and influence. They can also optimize their reach by aligning their broadcasting schedule with standard radio airtime. Additionally, strict adherence to scheduled program times is crucial in attracting and retaining listeners.

5.0 Contributions of Authors

This research is the result of a collaborative effort between the authors. Mr. Fernandez, the primary author, was responsible for data gathering, writing, data encoding, and interpretation. At the same time, Dr. Nasibog served as the research adviser, supervising the study's conduct, as well as proofreading and editing the results.

6.0 Funding

Partly funded by the scholarship, the primary author from the Sugar Regulatory Administration availed.

7.0 Conflict of Interests

No conflict of Interest.

8.0 Acknowledgment

The researchers would like to express their profound gratitude and sincere appreciation to the individuals who, in one way or another, contributed significantly to the completion of this study. To the Divine God, thank you for your divine intervention during times of trouble and doubt in finishing this study. Your presence and divine intervention were felt throughout the entire study, from its inception to its completion. Thank you very much.

9.0 References

- Abdulai, A. R., Chireh, V. K., & Tchoukaleyska, R. (2021). Engaging diverse audiences: The role of community radio in rural climate change knowledge translation. *Journal of Community Engagement and Scholarship*, 13(3), 8. <https://doi.org/10.54656/WYQW9689>
- Ajaegbu, O. O., Akintayo, B. J., & Akinjiyan, M. M. (2015). Radio listening habits among university students and their attitude towards programmes (A study of Redeemers University students). *Research on Humanities and Social Sciences*, 5(12), 2. <https://core.ac.uk/download/pdf/234674604.pdf>
- Alam, M. A. (2015). Community radio. *Academia*. Retrieved from <https://tinyurl.com/34xfbfry>
- Al-Hassan, S., Andani, A., & Abdul-Malik, A. (2011). The role of community radio in livelihood improvement: The case of Simli Radio. *Field Actions Science Reports. The Journal of Field Actions*, 5(3), 11. <https://journals.openedition.org/factsreports/869>
- Antwi-Boateng, O., Musa, M. D., & Andani, M. A. I. (2023). Audience listenership of FM radio: A case study of rural development in Northern Ghana. *Cogent Arts & Humanities*, 10(1). <https://doi.org/10.1080/23311983.2023.2184750>
- Antwi, E., Tham-Agyekum, E. K., Aidoo, D. C., Boansi, D., & Okorley, E. L. (2022). Patronage of farm radio as an agricultural knowledge source for farmers: Experiences from Ghana. *Journal of media and communication Studies*, 14(1), 8–16. <https://doi.org/10.5897/JMCS2021.0757>
- Ayesha, M. (2023). Enhancing agricultural practices: The impact of local radio programs on small-scale farm extension. *Academic Journal of Science, Engineering and Technology*, 8(5), 1–8. <https://topjournals.org/index.php/AJSET/article/download/631/787/747>
- Bhatti, M., Tahir, R., & Siddique, R. (2022). Role of radio in agriculture development. *Global Digital & Print Media Review*, 5, 68–82. <https://tinyurl.com/38snvujp>
- Gill, A. A., Alam, M. K., & Khan, M. K. (2024). Effects of agriculturally based radio programs on the adoption of innovations by the farmers of Sargodha and Khushab Districts. *International Research Journal of Social Sciences and Humanities*, 3(1), 189–212. <https://irjssh.com/index.php/irjssh/article/view/95>
- Goudappa, S. B., KK, S., & Kalyanrao, J. (2017). Radio listening behaviour of rural youths in Kalaburgi District of Karnataka. *Indian Research Journal of Extension Education*, 17(2), 14–18. <https://seea.org.in/uploads/pdf/1255-2294-1-SM.pdf>
- Iheanacho, C. C. (2023). Impact of community radio programs in rural development. <https://www.researchgate.net/publication/373767642>
- Kelemu, K., Kassa, T., & Daniel, F. (2016). Impact of radio on technical efficiency of farmers: The case of wheat producing farmers in Ethiopia. *Ethiopian Journal of Applied Science and Technology*, 7(1), 68–82. <https://tinyurl.com/yx8byzue>
- Khan, N., Siddiqui, B. N., Khan, N., Ahmad, Z., Ismail, S., Javed, H. H., Ali, S., Kazim, R., Azam, T., & Khan, K. A. (2020). Mass media role in agricultural and rural development. *International Journal of Advanced Research in Biological Sciences*, 7(4), 199–209. <https://tinyurl.com/ytpbrctw>
- Krause, A. E. (2020). The role and impact of radio listening practices in older adults' everyday lives. *Frontiers in Psychology*, 11, 603446. <https://doi.org/10.3389/fpsyg.2020.603446>
- King, G. (2017). History of struggle: The global story of community broadcasting practices, or a brief history of community radio. *Westminster Papers in Communication and Culture*, 12(2). <https://doi.org/10.1007/s11192-018-2957-6>
- Jamali, H. R., Nabavi, M., & Asadi, S. (2018). How video articles are cited: The case of JoVE. *Journal of Visualized Experiments. Scientometrics*, 117(3), 1821–1839. <https://doi.org/10.1007/s11192-018-2957-6>
- James, R. W., Romo-Murphy, E., & Oczon-Quirante, M. M. (2019). A realist evaluation of a community-centered radio initiative for health and development in Mindanao, Philippines. *Asia Pacific Journal of Public Health*, 31(6), 559–571. <https://doi.org/10.1177/1010539519870661>
- Maulu, S., Hasimuna, O. J., Mutale, B., Mphande, J., & Siankwilimba, E. (2021). Enhancing the role of rural agricultural extension programs in poverty alleviation: A review. *Cogent Food & Agriculture*, 7(1). <https://doi.org/10.1080/23311932.2021.1886663>
- Mwaniki, F. N., Gichuki, C., Mwangi, M., Mburia, P., & Wandago, B. (2017). Addressing challenges in communicating adaptation practices to smallholder farmers in Kenya through a radio intervention. *Journal of Agriculture and Environment for International Development JAEID*, 3(2), 279–322. <http://repository.must.ac.ke/handle/123456789/1112>

- Meena, N. C., Badodiya, S. K., & Sharma, D. (2020). Extent of information and communication technology (ICT) exposure of dairy farmers in morar block of Gwalior district. *International Journal of Current Microbiology and Applied Sciences*, 9(9), 3289–3294. <https://doi.org/10.20546/ijcmas.2020.909.408>
- Mohammed, J. (2021). The role of radio in promoting agricultural development: A case study of National Agricultural Extension and Research Liaison Services (NAERLS), Zaria. *NTAtvc*, 4(1). <https://tinyurl.com/24uzku3n>
- Nirmala, Y. (2015). The role of community radio in empowering women in India, *Media Asia*, 42(1-2), 41–46. <https://doi.org/10.1080/01296612.2015.1072335>
- Radadiya, J. (2021). Role of community radio in rural development. *Vidhyayana - An International Multidisciplinary Peer-Reviewed E Journal*, 6(6). <https://tinyurl.com/59v93sf3>
- Ragasa, C., Mzungu, D., Kalagho, K., & Kazembe, C. (2021). Impact of interactive radio programming on agricultural technology adoption and crop diversification in Malawi. *Journal of Development Effectiveness*, 13, 1-20. <https://tinyurl.com/3vecsh4c>
- Rastogi, S., & Suryavanshi, R. (2024). Empowering communities: Assessing the effectiveness of programs and listenership of community radio. *ShodhKosh: Journal of Visual and Performing Arts*, 5(1), 632–641. <https://doi.org/10.29121/shodhkosh.v5.i1.2024.973>
- Sarmah, B., & Lama, S. (2017). Radio as an educational tool in developing countries: Its evolution and current usages (Paper presentation). *International Conference on Developmental Interventions and Open Learning for Empowering and Transforming Society*, Guwahati, India. <https://tinyurl.com/4wx2tief>
- Shiferaw, Y. (2020). Rural women's radio listening behavior and program preferences in SNNPRS, the case of Sidama and Gedeo Zones. *Journal of Media and Communication Studies*, 12, 39–45. <http://dx.doi.org/10.5897/JMCS2020.0694>
- Yemer, D. (2020). The role of community radio for integrated and sustainable development in Ethiopia: A critical review on the holistic approach. <http://dx.doi.org/10.31124/advance.12993014>