KNOWLEDGE GAP HYPOTHESIS IN MEDIA REPORTING ON CLIMATE-SMART AGRICULTURE IN SELECTED RURAL COMMUNITIES IN EKITI STATE

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Abstract

Research Problem: *Agriculture is the most susceptible sector to climate change especially in Sub- Saharan Africa where rainfed and small-scale farming is the most common. Such systems are not well adapted and so the farmers are vulnerable to climate change. This study examined the knowledge gap hypothesis in media reporting on climate-smart agriculture in selected rural communities in Ekiti State, Nigeria.*

Methods/Theory: *The study was guided by the Knowledge Gap Theory and Diffusion of Innovation Theory. The mixed method was used with survey and in-depth interviews among farmers in three selected local governments in Ekiti State.*

Results: *The findings revealed a moderate awareness of climate-smart agriculture among the respondents. However, the difference in the level of media usage and literacy affected the way farmers processed and received climate-smart agriculture information. It was found that radio is the most accessible means of communication but language barrier, framing of the message, and irregular broadcasts of climate-smart agriculture were some of the challenges affecting good communication.*

Conclusion: *The study concludes that although media plays a very critical role agricultural education, its inability to localize information about climate-smart agriculture further widens the gap between literate and less-literate farmers which widen the knowledge gap between the two classes.*

Key Contribution to Knowledge: *This study adds to existing knowledge on how media practices influence inequality in climate-smart agriculture awareness and adoption with respect to the nexus of communication, literacy, and agricultural adaptation in rural communities.*

Recommendation: *The recommends that local government agencies, NGOs, and agricultural extension workers should organize community awareness programmes through town hall meetings, market outreaches, and the use of respected local opinion leaders to demystify climate-smart agriculture practices in simple, practical ways.*

Introduction

Agriculture is prone to risks because agricultural production depends on many natural events and factors, which includes climatic, environmental, technological changes, pest attacks, fungal infections, soil erosion, and poor soil fertility. Moreover, the presence of local and global economic risks, including the changes in crop prices and crop production inputs, crop yields, and gaps in the full knowledge of the situation in the future, causes agricultural producers to struggle with estimating these effects or carrying them independently because of their randomness and inability to control them (Abu El-Nin & Al-Qarqari, 2019).

These issues are further worsened by the effects of climate change, which has posed serious threats to agriculture livelihoods all over the world. Its adverse effects on industries are rampant, and agriculture is the most susceptible, especially in Sub-Saharan Africa, where rainfed, small scale, and climate-sensitive farming systems are most common (Adeyeye et al., 2020; Akintayo & Fawole, 2021). Such systems are described by their low adaptive capacity making the farmers in the rural community more vulnerable to risks. Climate change has been studied in terms of its impact on food security and rural livelihoods, including the necessity of sustainable agricultural activities, including climate-smart agriculture (FAO, 2013; Lipper et al., 2014).

However, despite the fact that climate smart agriculture has been suggested as an integrated approach to improve productivity, develop resilience, and minimise emissions, studies show that the practice has not spread evenly among smallholder farmers in Sub-Saharan Africa and it is limited by structural challenges like low levels of literacy, access to media, and extension services (Nyasimi et al., 2017; Partey et al., 2020). Media and agricultural communication studies indicate that information access is relevant in decision-making amongst the farmers (Adekoya, 2010; Asenso-Okyere & Mekonnen, 2012). However, there is a question on whether the media is narrowing the knowledge gap on climate-smart agriculture between the rural farmers or it is creating a bigger gap.

While several studies in Nigeria have investigated the role of media in agricultural development (Owolabi, 2014; Nwabueze, 2019), there is limited studies on how media coverage of climate smart agriculture, in particular, shapes the distribution of knowledge among the rural communities. Most existing works focus broadly on agricultural information dissemination but the subtle influence of the media framing, language, and access to the development of climate smart agriculture knowledge in the rural communities are not addressed. This study is necessary especially in Ekiti state, where agriculture is a major source of livelihood, and the knowledge of climate smart agriculture may make the difference in the sustainability of agriculture.

Statement of the Problem

Media play a very critical role in agricultural development and this is achieved through its influence on the manner in which farmers seek and utilize information. Due to the rising climate change threats in Nigeria, the necessity of the climate-smart agriculture has become a burning issue. Although some studies have explored climate smart agriculture awareness and adoption in Sub-Saharan Africa, there has not been enough studies on the specific influence of media coverage on the Knowledge Gap Hypothesis as applied to farmers. Most existing studies on climate change

communication in Nigeria focuses broadly on general awareness and adaptation strategies (Adeyeye et al., 2020; Akintayo & Fawole, 2021), as they did not expored how various rural population groups receive, perceive, and are deprived of climate smart agricluture knowledge after exposure to the media. The limited studies that connect the media and agriculture usually focuses on the channels of dissemination or extension services (Adekoya, 2010; Owolabi, 2014), and not on the nuances between how knowledge gets disseminated across socioeconomically heterogeneous populations. This lapse is crucial since rural communities are not a homogenous group: literacy, income, access to media, and language influence the way farmers can interact with agricultural information. Failure to localize media messages or make them accessible puts at risk its role in reinforcing rather than closing the inequality gap and extending the knowledge gap. It is against this background that this study explores the role of media reporting in climate smart agriculture knowledge among rural farmers in Ekiti State.

Objectives of the Study

i. Determine the level of awareness of climate-smart agriculture among residents of selected rural communities in Ekiti State.

ii. Analyze the relationship between media consumption patterns and the level of knowledge acquired about climate-smart agricultural practices.

iii. Determine the extent to which media exposure influences the knowledge gap in climate-smart agricultural practices among rural farmers

iv. To identify the key challenges rural farmers face in understanding and adopting climate-smart agriculture based on media-reported information.

Conceptual Clarification

Media Reporting and the Dissemination of Agricultural Innovations

In most places where extension services are poor, mass media has been a key means of agricultural communication. Radio, television, newspapers, and mobile communication are among the tools that farmers usually use to receive information about innovations, weather, and farming approaches. The success of such reporting, however, is determined by the framing of the message, channels that should be used to transmit the message, and language accessibility. Rural farmers find it difficult to comprehend and implement agriculture information when it is very technical, or not translated into their local languages (Akintayo & Fawole, 2021).

Adeyeye, Adebiyi, and Ayodele (2020) revealed that farmers who received frequent access to agricultural radio programmes in Southwestern Nigeria had an increased awareness of climate-smart agricultural practices. However, they also noted that content was usually limited, centred on urban dwellers, and could not be accessed by the rest of the farming population, an indictment often levelled at Nigerian media of being elitist in its construction. This points at the fact of an imbalanced distribution of agricultural knowledge and challenges inclusivity in the media coverage.

Climate-Smart Agriculture and Its Communication Challenges

Climate-smart agriculture involves merging productivity, climate resilience and sustainability via activities like agroforestry, drought-tolerant crops, irrigation enhancement and conservation cultivation (FAO, 2023). Despite its extensive advocacy as a solution to food insecurity in Sub-Saharan Africa, little awareness exists among the rural farmers in Nigeria because of communication block and

poor localization of information about climate smart agriculture.

According to Ajibade and Adebayo (2019), farmers who have access to cooperatives or mobile phones had higher chances of adopting climate smart agriculture indicating that communication channel access directly influences behavioural change. This observation is consistent with the Knowledge Gap Hypothesis, according to which, people with higher social capital and access to media gain more with agricultural information. In the same light, Akintayo and Fawole (2021) found that the adoption of climate smart agriculture was also higher when the messages were aired in local languages via radio. That means that the adoption of climate smart agriculture is not only about the availability of the information but also about the inclusivity of communication tactic. In the absence of localized, participatory, and redundant messaging, climate smart agriculture can turn into knowledge that will only be accessible to the privileged, which will only increase inequalities. This supports the importance of critically analyzing the reporting and receiving of CSA messages which is the main issue of this study.

Theoretical Framework

This study is guided by Knowledge Gap Theory and the Diffusion of Innovations Theory. The Knowledge Gap theory was propounded by Tichenor, Donohue, and Olien. The theory posits that when new information gets into the society provided by mass media, people in higher socioeconomic status learn it faster and more effectively than those in lower status. This gap is associated with education, access to the media, understanding, and social networks (Chukwuere & Onyebukwa, 2020). The knowledge gap theory has been applied to a great extent in other studies to explain how the health or political information incurs greater inequality among the social classes. The theory discusses whether media reporting on climate smart agriculture in Ekiti State does reduce the knowledge gap between rural farmers or does it instead increase the gap in knowledge between educated or more connected farmers. Such a strategy introduces a new dimension since knowledge deficiencies in the agricultural sector are not merely a literacy issue but also the credibility of sources of information and access to agricultural cooperatives.

Diffusion of Innovations Theory, on the other hand, was propounded Everett Rogers. The theory posits that new ideas and practices passed through societies through innovators, early adopters, early majority, late majority, and laggards. The adoption is influenced by communication channels, the character of innovation, time, and social system (Rogers, 2003; Ajibade & Adebayo, 2019).

Although most researchers have applied the theory to group farmers into categories of adopters, this study questions the way mass media coverage relates to local trust systems to speed up or slow down diffusion of climate smart agriculture. This study contrasts with earlier literature in the sense that it shows that cultural suspicion, institutional credibility and past experiences of farmers with failed innovations influence adoption patterns contrary to diffusion as portrayed in previous literature, which takes diffusion as a linear, predictable process. The reason why this study is an extension of the theory is that it puts diffusion in the context of rural Nigeria and shows that effective adoption is not only about exposure to innovation, but also about the perceived agreement between climate smart agriculture messages and the life realities of farmers.

Methodology

This study adopted mixed-methods using both survey and Key Informant Interviews (KIIs). The population consisted of about 12,000 rural farmers in three local government areas (LGAs) in Ekiti State (Ikole, Ido-Osi, and Gbonyin). The sample size was determined

using Taro Yamane (1967) formula at 95 percent confidence level and 5 percent margin of error which produced 387 sample size. This was approximately to 400 to give room to non-response. Multi-stage sampling method was used. In the first stage, the three LGAs were purposely sampled on the basis of their agrarian nature. In the second stage, two rural communities were randomly chosen from each LGA, resulting in six communities. Proportionate stratified random sampling was applied to select farmers from each community, using extension agents' farm records as the sampling frame. Data were collected through a structured questionnaire which was designed using a 5-point Likert scale. For the qualitative component, six KIIs were conducted (one per community). Participants included agricultural extension officers and local media practitioners. A semi-structured interview guide was used to elicit insights on how information about climate-smart agriculture is produced, disseminated, and received at the grassroots level. The quantitative data were analyzed using descriptive statistics (frequencies, percentages, means, and standard deviation). Meanwhile, the qualitative data were analyzed thematically in line with the study objectives.

Data Analysis/Presentation

The data presentation and analysis were in two parts-- starting with presentation of data generated from the survey method and the other from the interview.

Data Presentation and Analysis for Survey

A total of 400 respondents were sampled. Out of that, a total of 371 copies of the questionnaire (representing a 92.7% return rate) were retrieved and found useable, whereas 29 copies of the questionnaire representing 7.2%, were not retrieved or were retrieved but wrongly filled and, as such was not included in the analysis. Therefore, this study's analysis revolved around the 93.5% valid copies of the questionnaire.

Table 1: Level of awareness of climate-smart agriculture among residents of selected rural communities in Ekiti State

Survey Item	SA	A	N	D	SD	Mean	Std Dev	Decision
I have heard of climate-smart agriculture before.	72	177	61	61	0	3.70	0.96	Accepted
I understand what climate-smart agriculture means.	114	53	102	50	52	3.34	1.40	Accepted
Climate-smart agriculture practices are commonly discussed in my community.	62	59	33	83	134	2.55	1.51	Rejected
I can identify at least one practice that is considered climate-smart.	87	145	61	25	53	3.51	1.31	Accepted
There is enough awareness about climate-smart agriculture in my locality.	56	92	109	57	57	3.09	1.27	Accepted

I am aware that climate-smart agriculture helps reduce the effects of climate change on farming.	51	8	38	73	201	2.02	1.40	Rejected
Mean of means	**3.03**							

Source: Field Survey (2025)

The data reveals a moderate level of awareness of climate-smart agriculture among residents of selected rural communities in Ekiti State. A significant majority indicated they had heard of climate smart agriculture before and understood its meaning, as reflected in items 1.1 (Mean = 3.70) and 1.2 (Mean = 3.34), which were accepted. Respondents also demonstrated the ability to identify at least one climate smart agriculture practice (Mean = 3.51), and many believed there was some level of awareness in their locality (Mean = 3.09). However, it is important to note that items such as climate smart agriculture being commonly discussed in the community (Mean = 2.55) and awareness of climate smart agriculture's impact on climate change (Mean = 2.02) were rejected. This suggests that while some individuals have personal knowledge or exposure to climate smart agriculture, community-wide awareness and discussions remain relatively weak. The Mean of Means of 3.03 further supports that awareness is present but not robust, pointing to the need for intensified community-based sensitization and farmer outreach.

Table 2: Relationship between media consumption patterns and the level of knowledge acquired about climate-smart agricultural practices.

Survey Item	SA	A	N	D	SD	Mean	Std Dev	Decision
I regularly receive agricultural information from radio or television programmes.	69	56	44	152	50	2.84	1.35	Rejected
My main source of information about new farming methods is the mass media.	99	50	74	60	88	3.03	1.52	Accepted
The more I engage with agricultural media content, the more I understand climate-smart agriculture practices.	81	49	73	103	65	2.94	1.41	Rejected
I get clearer farming information when it is presented in my native language.	155	55	91	14	56	3.64	1.43	Accepted
I learn more from agricultural messages that are repeated often in the media.	141	125	26	14	65	3.71	1.45	Accepted
I find it easier to understand CSA practices when explained through local radio programs.	33	97	100	5	136	2.69	1.42	Rejected
My level of knowledge on CSA is influenced by how often I access farming-related media content.	112	91	91	28	49	3.51	1.34	Accepted
Mean of means	**3.19**							

Source: Field Survey (2025)

Data from this table highlights the potential of media as a vehicle for improving knowledge of climate smart agriculture, albeit with inconsistent impact. Respondents agreed that messages in native languages (Mean = 3.64) and repeated agricultural broadcasts (Mean = 3.71) enhance understanding of climate smart agriculture, indicating that linguistic accessibility and repetition are key to message retention. Similarly, many affirmed that their climate smart agriculture knowledge is influenced by how often they access media (Mean = 3.51). However, the claim that media is their main source of agricultural knowledge (Mean = 3.03) received only moderate agreement, while regular access to agricultural programs (Mean = 2.84) and ease of learning through local radio (Mean = 2.69) were rated lower. This disparity suggests that while media has the capacity to build knowledge, its reach, format, and language determine its effectiveness. The Mean of Means of 3.19 reflects a mildly positive relationship, indicating that the media is a useful but under-optimized channel for climate smart agriculture education in these communities.

Table 3: Extent to which media exposure influences the knowledge gap in climate-smart agricultural practices among rural farmers.

Survey Item	SA	A	N	D	SD	Mean	Std Dev	Decision
Farmers who have access to media know more about climate-smart agriculture than those who do not.	110	53	86	8	114	3.10	1.60	Accepted
Illiterate farmers are less likely to benefit from climate-smart agriculture information in the media.	37	70	63	83	118	2.53	1.36	Rejected
Media programmes on climate-smart agriculture favour educated or literate farmers more than others.	63	37	147	51	73	2.91	1.30	Rejected
The knowledge gap between farmers increases due to unequal access to farming information.	108	62	119	52	30	3.45	1.26	Accepted
Media reporting sometimes uses terms that are too technical for some farmers to understand.	77	41	69	104	80	2.81	1.43	Rejected
Farmers who own mobile phones or radios are better informed about climate-smart agriculture.	39	55	59	185	33	2.68	1.15	Rejected
Climate-smart agriculture information in the media is not well-tailored to the needs of less-educated farmers.	143	62	61	35	70	3.47	1.53	Accepted

Mean of means	**2.99**

Source: Field Survey (2025)

This table points clearly to the presence of a knowledge gap in climate smart agriculture practices, driven largely by disparities in media access and literacy levels. Respondents affirmed that farmers with access to media are generally better informed (Mean = 3.10), and that unequal access to information increases the knowledge gap (Mean = 3.45). They also believed that CSA information in the media is not well-tailored to the needs of less-educated farmers (Mean = 3.47). However, responses to items regarding media favouring literate farmers (Mean = 2.91), technical language (Mean = 2.81), and the limitations faced by illiterate farmers (Mean = 2.53) were more neutral or negative. The Mean of Means of 2.99 implies that the knowledge gap is real, but may be more complex than a direct result of media exposure.

Table 4: Key challenges rural farmers face in understanding and adopting climate-smart agriculture based on media-reported information

Survey Item	SA	A	N	D	SD	Mean	Std Dev	Decision
I find climate-smart agriculture information in the media difficult to understand.	68	69	128	95	11	3.24	1.11	Accepted
The use of English in climate-smart agriculture broadcasts makes it hard for many farmers to follow.	129	57	85	23	77	3.37	1.52	Accepted
Climate-smart agriculture is not explained with practical examples that farmers can relate to.	55	1	75	141	99	2.39	1.29	Rejected
I do not adopt climate-smart agriculture because I don't understand it well enough.	98	20	82	77	94	2.87	1.52	Rejected
The media rarely covers climate-smart farming methods that apply to my farming practice.	174	32	66	56	43	3.64	1.47	Accepted
Many farmers in my area are unaware of climate-smart agriculture because they lack access to reliable info.	27	107	66	31	140	2.60	1.42	Rejected
I would understand and use climate-smart agriculture better if media reports were more localized and visual.	129	20	23	51	148	2.81	1.77	Rejected
Mean of means	**2.99**							

Source: Field Survey (2025)

This data reveals that rural farmers face several challenges in understanding and adopting climate smart agriculture information shared via the media. Items indicating that CSA content is hard to understand (Mean = 3.24), the use of English limits comprehension (Mean = 3.37), and the media rarely tailors content to local practice (Mean = 3.64) were accepted,

pointing to real structural and language-based obstacles. Nevertheless, many respondents did not fully agree with statements that they avoid climate smart agriculture because they don't understand it (Mean = 2.87), or that climate smart agriculture isn't explained with relatable examples (Mean = 2.39). Responses were also mixed regarding the impact of localized and visual media (Mean = 2.81) and lack of access to reliable sources (Mean = 2.60). The Mean of Means of 2.99 confirms that comprehension and adoption challenges are significant, especially when content is not tailored or when linguistic and educational barriers exist.

Analysis for the In-depth Interview

This qualitative component involved six KIIs (one per community), conducted with agricultural extension officers and local media practitioners, using a semi-structured interview guide to elicit insights on how climate smart agriculture-related information is generated, disseminated, and received at the grassroots level. Their responses were analyzed according to the four research questions guiding the study.

Level of awareness of climate-smart agriculture among residents of selected rural communities in Ekiti State.

Most of the respondents agreed that while some farmers have heard of climate-smart agriculture, true understanding is still limited. According to the extension officer from Ikole, "Many of them confuse climate smart agriculture with just regular organic farming. They know about practices like mulching and early planting, but they don't know it's part of climate smart agriculture." Another officer noted that awareness has improved slightly in recent years due to training organized by NGOs and government initiatives. One of the respondents from Ido-Osi said, "We try to break it down for them. For example, instead of 'climate-smart agriculture,' we say 'ọna titun lati ba ayipada oju-ọjọ ṣiṣẹ.'" This shows how language adaptation helps bridge understanding. However, there was a consensus that awareness is not yet widespread, and most farmers still do not fully grasp the concept or benefits of climate smart agriculture.

Relationship between media consumption patterns and the level of knowledge acquired about climate-smart agricultural practices

The respondents agreed that radio remains the most used and trusted medium for agricultural information. According to one of the respondents "Once it's from the radio, they believe it, but it must be in Yoruba." One of the respondents explained that climate smart agriculture topics are rarely prioritized: "We only touch it when a guest brings it up or during special agricultural programmes." Most of the respondents believed that farmers who engage more with media content do understand climate smart agriculture better, but this is dependent on language and message repetition. One interviewee said, "When they hear something once, it enters one ear and goes out. If they hear it five times in different ways, it begins to make sense."

Extent to which media exposure influences the knowledge gap in climate-smart agricultural practices among rural farmers

Respondents largely agreed that media-based climate smart agriculture education benefits educated or semi-literate farmers more, thereby widening the knowledge gap. An information officer stated, "Even when the content is in Yoruba, if they use scientific terms like 'carbon footprint,' many farmers get lost." Less literate farmers, especially women and the elderly, were identified as being more excluded due to language difficulty, limited access to media, and lack of ownership of radios or phones. One of the respondents said, "Some old women in the village tell me they don't understand what the radio is saying, even in

Yoruba, because of the speed and big words." There was a strong suggestion that media reporting unintentionally excludes low-literacy groups, reinforcing the knowledge gap hypothesis.

Key challenges rural farmers face in understanding and adopting climate-smart agriculture based on media-reported information

A dominant concern across interviews was that climate smart agriculture messages in the media are often not practical or relatable. The extension officer mentioned, "They hear climate smart agriculture on the radio, but they don't see anyone doing it around them, so they don't trust it." Another officer emphasized that lack of localization and technical language hinder adoption: "Terms like 'conservation agriculture' or 'soil carbon' mean nothing to a cocoa farmer in Ijurin." Respondents also observed that media alone is insufficient to drive behavioral change; instead, they advocated for media-community collaboration. A useful recommendation came from one of the respondents, who said: "Let's start using farm demonstrations and local farmers themselves as media voices. People believe people they know." This shows that participatory strategies, such as showcasing local adopters of climate smart agriculture, could improve both understanding and uptake.

Discussion of findings

The first objective examined the level of awareness of climate-smart agriculture among residents of selected rural communities in Ekiti State. Survey results have shown that respondents had a moderate awareness satisfaction rate of climate smart agriculture. Whereas many percentages said they heard of climate smart agriculture and were able to point out at least one climate-smart practice, only a small proportion knew what it meant or what its values are in combating climate change. The awareness related questions averaged between 2.02 to 3.70 and mean of means was 3.03. It was corroborated by information provided by key informants and by these people, most farmers in the rural areas knew about some practices (such as early planting or use of compost) but they had no idea that they are connected with climate-smart agriculture. There was an effort to make ideas foreign to the location locally applicable with much of the climate-smart agriculture concepts getting interpreted using local terms and analogies. The results are consistent with those of other studies on the same topic, including Adeyeye et al. (2020) and FAO (2023), which further stressed that despite the gradual increase in awareness of climate smart agriculture, the overall levels of understanding are low, particularly in rural areas. Part of the results supports diffusion of innovations theory, which assumes that innovation diffuses according to a variety of processes through the stages of awareness to adoption. Regarding climate smart agriculture in Ekiti State, there is awareness, however, communication has not led to spatial diffusion because it has been rather shallow and not meaning clear. The results also justify the Knowledge Gap Hypothesis: the more literate or exposed the people were, the more informed they were, strengthening inequalities between populations that lived in the country.

The second objective analyzed the relationship between media consumption patterns and the level of knowledge acquired about climate smart agriculture practices. The statistics indicated a slight positive correlation between the interest in media and awareness of climate smart agriculture. A relatively high score was also obtained in items like: climate smart agriculture information in local languages enhances knowledge and climate-smart agriculture multiple messages in the media facilitate learning and got a mean score of more than 3.5. Nevertheless, the frequency of the media coverage of climate-smart agriculture and the accessibility to the latter were less positively estimated, and some of the

questions received the score, which was below the average, which indicated the absenteeism. The mean of means (3.19) implies that media by contributing to the development of knowledge about climate smart agriculture is also restricted by irregular exposure, language barrier and lack of localization. Interviews also proved that the main medium was the radio with climate smart agriculture related content however, being irregular and in many instances too technical. These concurred with Akintayo and Fawole (2021) who inferred that it is the culturally meaningful and regularly occurring radio programmes that are more familiarized among rural farmers. It is also in tune with what Ajibade and Adebayo (2019) emphasised which was the repetitive exposure and media through the native languages of farmers. Media is a highly important means of communication, according to the Diffusion of Innovations Theory, but the effectiveness of such a resource in this context is obstructed by format and framing issues.

Furthermore, the study examined the extent to which media exposure influences the knowledge gap in climate smart agriculture practices among rural farmers. Findings indicated that most of the respondents agreed with the idea that exposure to media is meant to benefit more educated farmers, and less-literate or resource-poor farmers frequently do not reap the benefits of climate smart agriculture - related messages. Questions that measured the importance of media usage in dissociation of climate smart agriculture information produced rather conflicting results, a mean of means of 2.99 that balances on the neutral mark but with a considerable consensus in items involving disparities in accessibility and media bias in communities of literate people. The interviews paid emphasis on the fact that women, the aged, and illiterate farmers are usually disregarded by the media messages through language use, technical jargon or the inability to use the radio or phones. These observations are directly in favour of the Knowledge Gap Hypothesis. According to the assumptions of Tichenor et al., better-educated and well-connected to communication devices, people learn more efficient and quicker than those that have fewer resources at their disposal through mass media. Similar disparities caused by the media as recorded by Chukwuere & Onyebukwa (2020) and Ojebuyi & Salawu (2021) were also observed in their studies in areas of rural development and public health.

Lastly, the study identified the key challenges rural farmers face in understanding and adopting climate smart agriculture based on media-reported information. Both quantitative and qualitative findings inferred numerous obstacles to the knowledge and the uptake of climate smart agriculture. The larger group of the respondents claimed that climate smart agriculture messages in most cases lack feasibility or relatability, particularly when represented in English or tech terms. The mean of means was also at a value of 2.99, showing a borderline agreement. Interviewees emphasized that climate smart agriculture ideas are relatively abstract and are ineffectively represented, and they are detached against the realities of farming on a daily basis. They also said that only media campaigns are not enough and participatory approaches, like involving the voice of farmers or the community protests, are more effective. This is in agreement with Nwammuo & Okoye (2019) and Ojebuyi & Salawu (2021) who stressed that structural and content barriers weaken the media comprehension of rural farmers. The difficulties also support the Diffusion of Innovations Theory which names the compatibility and the complexity effects as the determinants of adoption. An inappropriate climate smart agriculture information that is complex or that is incompatible with local realities will never be adopted.

Conclusion

This study concludes that although climate-smart agriculture is slowly becoming

acceptable to the rural farmers in Ekiti, there exist some major gaps in access and interpretation as well as implementation of the knowledge of climate-smart agriculture. Conceptually, this reiterates the essence of media as a medium and an obstacle in the dissemination of agricultural knowledge. The results are focused on the fact that media, especially radio, is the most convenient tool to create awareness; nevertheless, its uneven coverage, use of technical terms, and a lack of localization are the factors that hinder its efficacy. This fits with the previous research like Mwaura (2021) and Adebayo (2019), which also indicates that rural radio has potential but has difficulty with contextual relevance. The research supports the Knowledge Gap Hypothesis revealing the impact of the educational background, exposure to media, and socio-economic advantage on the way the farmers perceive and embrace climate smart agriculture practices. Farmers who are literate, younger, and financially stable gain a better position to reap the benefits, whereas, older, less literate, female, and poorer groups are marginalized. This affirms the stand of Tichenor et al. (1970) that the greater flow of media may unwittingly enlarge the differences that already exist. However, contrary to some earlier studies which proposed that the knowledge gap can be bridged over time, the present study indicates that unless there is a conscious localization and participatory communication, the gap can remain the same or even increase in rural Ekiti. Moreover, through the prism of the Diffusion of Innovations Theory, the results affirm the importance of communication in adoption placed by Rogers (2003) but goes further to point out how the complexity of messages, cultural incompatibility, and poor participation structures serve to hinder diffusion.

Recommendations

i. It has been established that many rural farmers have limited awareness of climate smart agriculture. Therefore, there is need for more grassroots sensitization. Local government agencies, NGOs, and agricultural extension workers should organize community awareness programmes through town hall meetings, market outreaches, and the use of respected local opinion leaders to demystify climate smart agriculture practices in simple, practical ways.

ii. Given that radio is the most accessed medium by rural farmers, media producers should ensure more regular and consistent climate smart agriculture broadcasts. To improve comprehension, content should be delivered in local dialects using storytelling, folktales, songs, and farmer-to-farmer interviews. This approach will make climate smart agriculture knowledge more relatable and easier to adopt.

iii. Since the study found that there is a knowledge gap between literate and non-literate farmers regarding climate smart agriculture practices. Agricultural stakeholders should therefore invest in inclusive media initiatives such as distributing solar-powered/wind-up radios to poor households, creating listening groups for non-literate farmers, and embedding media literacy sessions in farmers' cooperatives.

iv. Since results indicated that farmers better understand CSA when demonstrated practically, agricultural extension workers in collaboration with local media should co-create visual and demonstration-based tools such as photo guides, short videos, and on-field demonstrations. These tools will enhance farmers' ability to translate CSA information into practice.

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