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Impact of agricultural broadcasting programme through air news on the farmers' adoption of innovative agricultural practices in Bishnupur district of Manipur, India

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Abstract

The main purpose of the study was to ascertain the adoption of innovative agricultural practices of AIR (All India Radio) News programme in Bishnupur district of Manipur. The study was conducted in Bishnupur Block of Bishnupur district in the year 2023-2024. Ex-post facto research designed was applied for this study. The primary data was collected from 120 respondents by personal interview method using pre-structure interview schedule. Adoption of the agricultural broadcasting programme was measured by asking 17 questions in respect of innovative agricultural practices. Finding showed that 49.16 per cent of the respondents have medium adoption level of innovative agricultural practices, followed by 34.17 per cent of the respondents having low adoption level of innovative agricultural practices and 16.67 per cent of the respondents having high adoption level of innovative agricultural practices respectively. It was revealed that out of ten independent variables, i.e. age, education, annual income, occupation, land holding, mass media exposure, scientific orientation, innovativeness, risk orientation and sources of agricultural information are positively and significantly correlate with adoption of farmers towards Agricultural Broadcasting Programme through AIR News.

Keywords: AIR News, adoption, innovative agriculutural practices.

Introduction

Akashvani formerly known as All India Radio (AIR), officially known since 1957 as Akashvani (literary meaning "Voice from the Sky"), is the national public radio broadcaster of India and is a division of Prasar Bharati. It was established in 1936. It is the sister service of Prasar Bharati's Doordarshan, an Indian television broadcaster. Headquartered in the Akashvani Bhavan building in New Delhi, it houses the Drama Section, the FM Section, and the National Service, and is also home to the Indian television station Doordarshan Kendra, (Delhi).

Radio is considered as an effective tool to disseminate agricultural information among the farmers and it is the most powerful mass media for broadcasting Information quickly. A large percentage of farmers opined that the information broadcast through agricultural radio programmes as "practicable". A large percentage of farmers considered the style of presentation of programmes as "understandable" (Kakade *et.al.*, 2013) [2].

All India Radio has been a witness to the course of development of India as an institution of communication given to catalyze the process of change on the one hand and as an upholder as well as preserver of a vibrant cultural heritage on the other. The socioeconomic development of agrarian sector is a vital factor in Indian agriculture. Keeping this in view All India Radio has been playing a vital role continuously by adopting innovative techniques. In keeping with the respective social objectives, the concern of All India Radio has been to aid the process of changing lives of those who exist on the margins of development. Differing perceptions of development potential at different times needed to be unbundled leading to devising of commensurate communication strategies within the typical development framework. The relevance of All India Radio in the process of social development and change has always been robust primarily because of its innate strength to be in tune with time. The crafts and techniques of information dissemination have meticulously addressed the social realities of respective time in its long course of public service and the impact has been discernible in different realms of life of the society in general and agrarian sector in particular (Sekhar *et al.*, 2017) [3].

In Manipur, the agricultural broadcasting programme of AIR News plays an important role in the development activities of farmer. There are three agricultural programme in AIR News i.e. Khungangi Thouram, Lou-U-Singugi Wapham and Mai Paklaba Loumee. Khungangi Thouram is a composite programme of about one hour, which is broadcast everyday on both FM and MW channels from 6:25-7:25 pm. It consists of three parts first one is interview, second is music (mostly khunung eshei) and the third one is again interview. The interview topic is mainly on agriculture, but sometimes it covers other stuffs also. In this programme, it is mostly discuss on the relationship between the farmers and the rural life. Lou-U-Singugi Wapham is just of 5 minutes programme and it's about agricultural

practices like how to cultivate rice, manure and fertilizer application, post harvest technique, etc. Mai Paklaba Loumee is about the interview of progressive farmers. It is of 30 minutes which is broadcast only on FM every Thursday.

Radio is one of the most powerful mass media for the dissemination of agricultural information and its effectiveness has been well established by many researchers. Krishi Samriddhi radio programme is a farm radio programme which is being sponsored by ICAR-Vivekananda Parvatiya Krishi Anusandhan Sansthan, Almora and broadcasted through All India Radio, Akashvani, Almora since July 2009 with the prime objective to disseminate modern agricultural information amongst the local hill farmers as per their need. The present study was conducted to analyze the talks broadcasted in Krishi Samriddhi farm radio programme in a year and its effectiveness as perceived by the farmer listeners (Joshi *et al.*, 2020) [1].

Justification of the study

The finding of the impact (agricultural broadcasting programme through AIR News Manipur) will help the farmer in the improvement of the agricultural management activities like land and water conservation, sustainable agriculture, biotechnology, integrated pest management in crops, crop insurance schemes, environment protection, disaster management and role of panchayats in rural development etc. It will enable appropriate approach to trace out the constraints faced by the farmers. This study would help the researcher, extension worker, VDO, Government, Non-government Organisation, etc. to do the sincere efforts in promoting awareness on the production and productivity of agriculture.

Objectives

- To access the socio-economic profile of the respondents.
- To identify the factor that affects the adoption of innovative agricultural practices by farmers.
- To establish the relationship between the selected independent variables with adoption.

Research Methodology

The study was conducted in Bishnupur district of Manipur. Ex-post facto research design was followed for the present study as it shows the characteristics or phenomenon that is being studied. Multi stages sampling was followed for the present study for the selection of samples required. Manipur has 16 districts and out of which Bishnupur district was selected. There are three blocks in Bishnupur district, out of which Bishnupur block was selected purposively based on maximum areas of farming. Three villages were selected from Bishnupur block and a total number of 120 respondents were randomly selected proportionately on the basis of maximum area of farming.

Methods used for data collection

A pre-tested structured interview schedule focused towards the objectives of the study was developed for data collection. Survey method of data collection with the help of a pre-structured interview schedule was used. The collected data were classified, tabulated and analyzed in light of the objectives.

Data statistical analysis

The data collected from the respondents was converted to 3 point score (Likert Scale) and tabulated. The evaluation of the data and the relationship between the independent and dependent variables was done using Mean, Frequency, Percentage and Correlation.

Results and Discussion

Socio Economic Characteristics of the Respondents

The data presented in Table 1 revealed that that majority (54.16%) of the respondents are middle age (36-55 years), 32.50 per cent old age (above 55 years) and 13.34 per cent of the respondents are of young age (below 35 years). It also indicated that 32.50 per cent of the respondents were educated up-to Junior High School level of education, 18.34 per cent of the respondents had Intermediate education, 17.50 per cent of the respondents had Primary School education, 15 per cent of the respondents had Graduate and above education, followed by 12.50 per cent of the respondents high school and 4.16 per cent were illiterate. It was revealed that (55%) of the respondents income is Rs. 1,00,000 to Rs. 3,00,000, 28.34 per cent of the respondents income is Above Rs. 3,00,000 and 16.67 per cent of the respondents have income upto Rs.1,00,000 rupees. It was revealed that majority (50%) of the respondents were engaged in Agriculture Labour, 31.66 per cent of the respondents were engaged in agriculture only, 10 per cent of the respondents were engaged agriculture and business, followed by 8.34 per cent of the respondents were doing service beside agriculture. It was revealed that majority (50.83%) of the respondents land holding is 1-2 acre, 31.67 per cent of the respondents land holding is above 2 acre and 17.50 per cent of the respondents have land holding of upto 1 acre. It shows that majority (50%) of the respondents have medium level of mass media exposure, 31.66 per cent of the respondents have high level, followed by 18.34 per cent of the respondents have low level. It was revealed that majority (54.17%) of the respondents have medium level of scientific orientation, 34.17 per cent of the respondents have high level and 11.66 per cent of the respondents have low level. It was revealed that majority (55%) of the respondents has medium level of innovativeness, 30.83 per cent of the respondents have high level and 14.17 per cent of the respondents have low level. It was revealed that majority (50%) of the respondents has medium level of risk orientation, 30 per cent of the respondents have high level and 20 per cent of the respondents have low level. It shows that majority (50%) of the respondents have medium level of source of agriculture information, 32.50 per cent of the respondents have low level and 17.50 per cent of the respondents have high level of source of agriculture information.

Table 1: Characteristics of the respondents (N=120)

Sl.no	Attributes	Characteristics	Frequency	Percentage
1	Age	Young (Below 35years)	16	13.34
		Middle (36-55 years)	65	54.16
		Old (Above 55 years)	39	32.50
2	Education	Illiterate	5	4.16
		High School	15	12.50
		Primary School	21	17.50
		Junior High School	39	32.50
		Intermediate	22	18.34
		Graduate and above	18	15.00
3	Annual income	Upto Rs. 1,00,000	20	16.67
		Rs. 1,00,000 to Rs. 3,00,000	66	55.00
		Above Rs. 3,00,000	34	28.34
4	Occupation	Agriculture + Service	10	8.34
		Agriculture + Business	12	10.00
		Agriculture + Labour	60	50.00
		Agriculture Only	38	31.66
5	Land holding	Upto 1 acre	21	17.50
		1-2 acre	61	50.83
		Above 2 acres	38	31.67
6	Mass Media Exposure	Low (11-14)	22	18.34
		Medium (15-19)	60	50.00
		High (20-23)	38	31.66
7	Scientific orientation	Low (10-13)	14	11.66
		Medium (14-16)	65	54.17
		High (17-18)	41	34.17
8	Innovativeness	Low (16-19)	17	14.17
		Medium (20-22)	66	55.00
		High (23-26)	37	30.83
9	Risk Orientation	Low (13-17)	24	20.00
		Medium (18-20)	60	50.00
		High (21-23)	36	30.00
10	Source of agriculture information	Low (13-17)	21	17.50
		Medium (18-22)	60	50.00
		High (23-26)	39	32.50

Adoption of agricultural broadcasting programme through AIR News

Table 2: Distribution of respondents based on the adoption level of Agricultural Broadcasting Programme through AIR News: (N=120)

Sl. No.	Statement	Response					
		Fully adopted		Partially adopted		Not adopted	
		f	%	*f*	%	*f*	%
1.	Adopted any knowledge about agricultural broadcasting programmes through All India Radio	111	92.50	8	6.67	1	0.83
2.	Any recommended techniques or practices about farming listening through AIR's programme	66	55.00	52	43.34	2	1.67
3.	Any recommended resistant variety of crops which was broadcasted in AIR's programme	25	20.83	84	70.00	11	9.16
4.	Pradhan Mantri Fasal Bima Yojana that gives financial support to you	8	6.67	5	4.16	107	89.16
5.	Recommended irrigation system listening through AIR's programme	8	6.67	22	18.34	90	75.00
6.	Recommended cropping pattern by listening through AIR's programme	47	39.16	72	60.00	1	0.83
7.	Adopted chemical fertilizer, pesticide, insecticide in order to bring progress in production of crop by listening through AIR's programme	24	20.00	93	77.50	3	2.50
8.	Adopted the use of green manure than chemical fertilizer by listening through AIR's programme	36	30.00	82	68.34	2	1.67
9.	Adopted the use of NPK in the farming by listening through AIR's programme	21	17.50	91	75.83	8	6.67
10.	Adopted the idea of double cropping by listening through AIR's programme	5	4.16	20	16.67	95	79.16
11.	Adopted the idea of being an agripreneur by listening through AIR's programme	8	6.67	46	38.34	66	55.00
12.	Adopted the use of water conservation method by listening through AIR's programme	11	9.16	89	74.16	20	16.67
13.	Adopted the use of tools and machinery at the time of harvesting by listening through AIR's programme	19	15.83	74	61.67	27	22.50
14.	Adopted the use of traditional method of harvesting by listening through AIR's programme	31	25.83	54	45.00	35	29.16
15.	Adopted the use of vermicompost by listening through AIR's programme	19	15.83	10	8.34	91	75.83
16.	Any recommended agricultural loan for purchasing tools and machineries by listening through AIR's programme	13	10.83	3	2.50	104	86.67
17.	Information regarding the development of livestock by listening through AIR's programme	21	17.50	33	27.50	66	55.00

The above table reveals that majority (92.50%) of the respondents fully adopts any knowledge about agricultural broadcasting programmes through All India Radio, 6.67 per cent of the respondents partially adopt and 0.83 per cent of the respondents does not adopt. It was observed that majority (55%) of the respondents fully adopts any recommended techniques or practices about farming listening through AIR's programme, 43.34 per cent of the respondents partially adopt and 1.67 per cent of the respondents does not adopt. It states that majority (70%) of the respondents partially adopts any recommended resistant variety of crops which was broadcasted in AIR's programme, 20.83 per cent of the respondents fully adopt and 9.16 per cent of the respondents does not adopt. It revealed that majority (89.16%) of the respondents not adopts Pradhan Mantri Fasal Bima Yojana, 6.67 per cent of the respondents fully adopt and 4.16 per cent of the respondents does partially adopt. It revealed that majority (75%) of the respondents not adopts recommended irrigation system listening through AIR's programme, 18.34 per cent of the respondents partially adopt and 6.67 per cent of the respondents does fully adopt. It revealed that majority (60%) of the respondents partially adopts recommended cropping pattern by listening through AIR's programme, 39.16 per cent of the respondents fully adopt and 0.83 per cent of the respondents does not adopt. It revealed that majority (77.50%) of the respondents partially adopts chemical fertilizer, pesticide, insecticide in order to bring progress in production of crop by listening through AIR's programme, 20 per cent of the respondents fully adopt and 2.50 per cent of the respondents does not adopt. It revealed that majority (68.34%) of the respondents partially adopts the use of green manure than chemical fertilizer by listening through AIR's programme, 30 per cent of the respondents fully adopt and 1.67 per cent of the respondents does not adopt. It revealed that majority (75.83%) of the respondents partially adopts the use of NPK in the farming by listening through AIR's programme, 17.50 per cent of the respondents fully adopt and 6.67 per cent of the respondents does not adopt. It revealed that majority (79.16%) of the respondents not adopts the idea of double cropping by listening through AIR's programme, 16.67 per cent of the respondents partially adopt and 4.16 per cent of the respondents does fully adopt. It revealed that majority (55%) of the respondents not adopts the idea of being an agripreneur by listening through AIR's programme, 38.34 per cent of the respondents partially adopt and 6.67 per cent of the respondents does fully adopt. It was observed that majority (74.16%) of the respondents partially adopts the use of water conservation method by listening through AIR's programme, 16.67 per cent of the respondents not adopt and 9.16 per cent of the respondents does fully adopt. It was observed that majority (61.67%) of the respondents partially adopts the use of tools and machinery at the time of harvesting by listening through AIR's programme, 22.50 per cent of the respondents not adopt and 15.83 per cent of the respondents does fully adopt. It was observed that majority 45 per cent of the respondents partially adopts the use of traditional method of harvesting by listening through AIR's programme, 29.16 per cent of the respondents not adopt and 25.83 per cent of the respondents does fully adopt. It was observed that majority (75.83%) of the respondents not adopts the use of vermicompost by listening through AIR's programme, 15.83 per cent of the respondents fully adopt and 8.34 per cent of the respondents does partially adopt. It states that majority (86.66%) of the respondents not adopts any recommended agricultural loan for purchasing tools and machineries by listening through AIR's programme, 10.83 per cent of the respondents fully adopt and 2.50 per cent of the respondents does partially adopt. It revealed that majority (55%) of the respondents not adopts the Information regarding the development of livestock by listening through AIR's programme, 27.50 per cent of the respondents partially adopt and 17.50 per cent of the respondents does fully adopt.

Table 3: Overall distribution of respondents based on the adoption level of the respondents on the Agricultural Broadcasting Programme through AIR News.

SL. No	Adoption	Frequency	Percentage
1	Low (25-29)	41	34.17
2	Medium (30-35)	59	49.16
3	High (36-44)	20	16.67
Total		120	100

The table 3. It was revealed that majority 49.16 per cent of the respondents have medium adoption level, 34.17 per cent of the respondents have low level of adoption and 16.67 per cent of the respondents have high adoption level. Similar findings was also reported by Zondo *et al.*, (2023) [4].

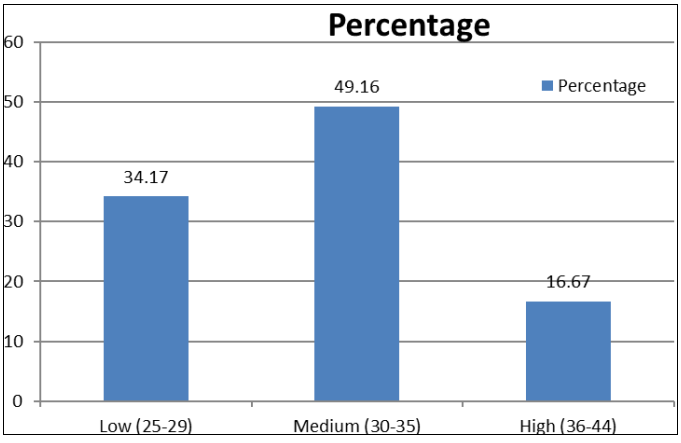

Fig 1: Overall distribution of respondents based on the adoption level of the respondents on the Agricultural Broadcasting Programme through AIR News

Association between Selected Independent Variables with the Adoption of the Respondents towards Agricultural Broadcasting Programme through AIR News

Table 4: Association between selected independent variables and adoption

Sl. No.	Variables	Pearson's correlation coefficient
1.	Age	0.4921**
2.	Education	0.4610**
3.	Annual income	0.6452**
4.	Occupation	0.5397**
5.	Land holdings	0.5359**
6.	Mass media exposure	0.5397**
7.	Scientific orientation	0.4306*
8.	Innovativeness	0.5520*
9.	Risk orientation	0.6204*
10.	Sources of Agricultural information	0.5**

* = Significant at p = 0.05%, **= Significant at p = 0.01%, NS=Non-Significant

The data presented in Table 4 revealed that out of eleven independent variables, i.e. age, education, annual income, occupation, land holding, mass media exposure, scientific orientation, innovativeness, risk orientation and sources of agricultural information are positively and significantly correlated with adoption of farmers towards Agricultural Broadcasting Programme through AIR News.

Conclusion

It is concluded that the socio-economic profile of the respondents, majority of the respondents are middle age (36-55 years), majority of the respondents were educated up-to junior high school level of education, majority of the respondent income is Rs. 1,00,000 to Rs. 3,00,000 rupees, majority of the respondents were engaged in agriculture labour, majority of the respondent land holdings are above 1-2 acres, and majority of the respondents have medium level of mass media exposure, majority of the respondents have medium level of scientific orientation, majority of the respondents have medium level of innovativeness, majority of the respondents have medium level of risk orientation and majority of the respondents have medium level of source of agriculture information. Majority of the respondents had medium level of adoption, followed by low level of adoption and high level of adoption respectively. Subsequently, all of the eleven independent variables, i.e. age, education, annual income, occupation, land holding, mass media exposure, scientific orientation, innovativeness, risk orientation and sources of agricultural information were positively and significantly correlated with adoption of farmers towards Agricultural Broadcasting Programme through AIR News.

References

1. Joshi P, Sanwal R, Chandra N, Roy LM, Mukherjee A, Jethi R, *et al*. A study on talks broadcasted in farm radio programme Krishi Samriddhi and its effectiveness as perceived by listener farmers. Indian J Ext Educ. 2020;56(4):91-96.
2. Kakade O. Credibility of radio programmes in the dissemination of agricultural information: A case study of Air Dharwad, Karnataka. IOSR J Humanit Soc Sci. 2013;12(3):18-22.
3. Sekhar CP. Innovations in agricultural extension by All India Radio. JJT University; c2017.
4. Zondo SNW, Ndoro TJ. Attributes of diffusion of innovation's influence on smallholder farmers' social media adoption in Mpumalanga Province, South Africa. Sustainability. 2023;15(5):4017.