AN ASSESSMENT OF MALAWI BROADCASTING CORPORATION (MBC) RADIO IN THE DISSEMINATION OF AGRICULTURAL INFORMATION: A CASE STUDY OF BALAKA DISTRICT

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Abstract

This study assessed the effectiveness of the Malawi Broadcasting Corporation (MBC) Radio in disseminating agricultural information to small-scale farmers of Balaka District in Malawi. It was a survey research with small-scale. Data were collected from a sample of 382 respondents selected through purposive sampling technique using a semi-structured questionnaire and was analysed by using the Statistical Package for the Social Sciences (SPSS). Findings show that small-scale farmers do listen to agricultural programmes and put into practice whatever they learn from the programmes and as a result they realise bumper yields, reduced poverty and hunger. The agricultural programmes by Malawi Broadcasting Corporation Radio, to a larger extent, have a positive effect on the small-scale farmers and the radio proved to be a very fruitful medium for disseminating agricultural programmes. Based on these findings, it is recommended that the government and the organisations involved in producing and sponsoring the agricultural programmes should scale up such efforts and ensure that there is sustainability.

Keywords: Agricultural information; Malawi Broadcasting Corporation (MBC) Radio; Information Needs, Small-scale farmers

1. Introduction

Agricultural information is very crucial to the life of a farmer. It allows farmers to make informed decisions regarding their agricultural activities (Demiryurek, *et al.* 2008). It is very important in fighting poverty and achieving food security (Kizilaslan, 2006). Farmers need to be informed and educated about improved agricultural practices to enable them to increase their harvests and income (Okwu, Kuku and Aba 2007).

Agricultural information reaches the farmers through different types of media. Some of them being extension agents, agriculture shows, farmer-to-farmer contacts, print and electronic media and many others. Radio is the medium that is immediate and transcends geographical boundaries. It plays a very important role in creating awareness about new agricultural technologies among farmers at a faster rate than personal contacts (Irfan, *et al.*, 2006). Ango, Yakubu and Usman (2012) contend that radio and television are considered as the major sources of information in the rural populace and are the main communicating tools for disseminating agricultural information to the farmers, highly relevant to farmers and normally applied by them in solving their problems. Adekunle, *et al.* (2002) identified various communication channels being used for the dissemination of agricultural information and radio was the most preferred medium.

Information and communications technology - or technologies (ICT) encompasses: radio, television, cellular phones, and many others. The major concern of ICT in agriculture is meeting farmers' needs for information. The potency of modern electronic technology can be exploited for infotainment of farming community (Guenthner and Swan, 2011). Sturges and Chinseu (1996) indicated that information delivery in Malawi was a one-way which is a top down flow and farmers use radio and other forms of technology-based communication like audio visual aids, as supplementary by face-to-face contact.

Information needs of farmers vary because the intended purposes for them are many. Chisenga, Entsua-Mensah and Sam (2007) pointed that small-scale poultry farmers were actively seeking information on local available markets, prices for local poultry and poultry products, and information on imported products, mainly to be used in the strategic approach to the conduct of their business. Meitei and Devi (2009) established that farmers also need other types of information like health, education and training. Such information complement each other in agricultural development.

Rusakova, *et al.* (2007) indicated that application of meteorological information benefits farmers in having improved efficiency and ensures sustainability of their farm management. Nkhata (1993) outlined the role Malawi Broadcasting Corporation radio plays in national building. The government uses MBC Radio as a tool for disseminating information in economic, health and education development. It is also used for reviving and maintaining cultural heritage among others.

Farmers do differ in preferences of information sources. Sadaf, Javed and Luqman (2006), revealed that a large majority of rural women preferred Female Extension Agents as sources of agricultural information. This shows that sex play a role for preferences of information sources. Onuekwusi and Gideon (2007) and Adekunle *et al* (2002) indicated that in Nigeria radio is the preferred source of information. It is recommended therefore, that sources of information should be used on priority basis by extension personnel and agricultural programmes by the broadcast media to ensure that the information reaches the farmers.

There are many studies that have been carried out in the field of broadcasting media and agricultural information. Their findings, in some cases tend to differ while others are similar. However, in Malawi very few studies have been done in this area and none assessed the effectiveness of Malawi Broadcasting Corporation in the dissemination of agricultural information, hence the need to conduct one.

2. Background to the Study

Malawi is a small landlocked country in Southern Africa. Its economy largely depends on agriculture. More than 80 percent of the population is rural and the majority are small-scale farmers who mostly rely on maize for subsistence and other crops like cotton, groundnuts, cassava, potato, tobacco for cash.

As one way of developing agriculture, the Malawi government established Bunda College of Agriculture to train agriculture scientists and Natural Resources College (NRC) to train agricultural extension officers. The government also established agriculture research stations like Makoka, Bvumbwe, Chitedze, Lunyangwa and Baka to carry out agriculture research.

Initially the extension services were mainly conducted by the Ministry of Agriculture and Food Security. However, today some no-governmental organisations like World Vision International, Action Aid and others have taken a greater responsibility for extension work based on participatory methods. The Ministry of Agriculture and Food Security has offices throughout the country and within the reach of most farmers.

The Malawi Broadcasting Corporation Radio is a public radio which was established on 1st January, 1964 by an Act of Parliament to inform, educate and entertain the public. It has a twochannel radio network, Radio 1 and Radio 2. Radio 1 broadcast in English, Chichewa, Tumbuka, Yao, Lomwe, Sena, and Tonga. Radio 2 broadcasts in English and Chichewa on FM stereo. Both radios cover the whole country.

Agricultural programmes, on radio are mostly sponsored by different organizations. The ministry of Agriculture and Food Security produces and sponsors three programmes aired on MBC Radio. The programmes are Ulimi wa Lero (Modern Farming), Ulimi Msabatayi (Farming in focus: a weekly review week) and Zokomera Alimi (Farmers' choice). However, depending on the need at that particular time the Ministry of Agriculture and Food Security produces other programmes like "Fertilizer Subsidy" for small-scale farmers to know what new activities the government has introduced in the field of agriculture. Agriculture Research Extension Trust (ARET) produces and sponsors a programme called Ulimi Waphindu (Profitable Farming). National Smallholder Farmers Association of Malawi (NASFAM) also produces and sponsors, Ulimi ndi Bizinezi (Farming is Business).

3. The study area

The study area was Balaka district which is one of the smaller but highly populated districts in Malawi. Its population is 316,748 people (Malawi Government. National Statistics Office, 2008), and most of them are small-scale farmers. Farming in the district is mainly for subsistence and maize is the main food crop grown, others being cassava, sweet potato, millet, sorghum, ground nuts and peas. However some farmers also grow cash crops like cotton and tobacco.

4. Objectives of the Study

The general objective of this study was to assess the effectiveness of MBC Radio in disseminating agricultural information to farmers. The specific objectives of the study were:-

- To determine the type of information being disseminated to the farmers by MBC Radio.
- To determine the relevance of MBC Radio programmes to the information needs of the farmers.
- To find out the effect information gathered from MBC Radio has on agricultural practices of the farmers.
- To ascertain the convenience of the language and time the agricultural programmes are presented to the farmers.

5. Justification of the Study

If agricultural information is accessible and well managed, it can make a positive impact on the lives of small scale farmers. The outcomes of the study are likely to improve the use of MBC Radio for the dissemination of agricultural information. The findings shall also be brought to the attention of extension agents, programme producers and all other users of agricultural

information and would assist them in their day-to-day work. Lastly, the findings are an addition to the body of knowledge in the field of agricultural development with regard to the use MBC Radio as a delivery system for agricultural information.

6. Methodology

This is a case study and it adopted a descriptive survey approach. Its population was subsistence small-scale farmers. The research population had a number of things in common. No farmer had more than ten hectares of land. Most of them were semi-literate. The total number of farmers in Balaka is 100,216 (Malawi Government. National Statistics Office, 2008)) which constitute the population of the study.

Purposive sampling technique was adopted in selecting subjects for the study, using the table of "Determining sample size for a given population" published by Krejcie and Morgan (1970). From the population of 100,216 farmers, 382 respondents were sampled. Data were collected with the use of a structured questionnaire from the farmers. Due to low literacy level of some farmers, the questionnaire was interviewer-administered by the researcher and two research assistants by visiting the respondents individually.

The questionnaire had two sections, A and B. Section A was for demographic information of the respondents. Section B comprised questions on listenership pattern, Agricultural programmes and their information content, effectiveness of information in agricultural practices and the effectiveness of radio as a medium. Since the questionnaire was administered face-to-face to the 382 respondents the response rate was 100 percent.

7. Results and Discussion

7.1 Days and time the programmes are aired

Agricultural programmes on MBC Radio are aired in the morning, afternoon and evening. On Thursdays, there is a programme in the afternoon called Ulimi wa Lero. On Fridays there are two programmes one in the morning called Muuni wa Mulimi and the other one in the afternoon called Fertilizer Subsidy. On Saturdays there are four programmes: one in the morning called Zokemera Alimi, two in the afternoon called Ulimi ndi Bizinezi and Mudzi Wobiriwira, there is also one in the evening called Dziwani za IRAD (Irrigation Rural Livelihood Agricultural Development). On Sundays there is one in the evening called Ulimi wa Phindu. Table 1 presents the agricultural programmes, their days and time aired.

Day	Programme	Time
Thursday	Ulimi Wa Lero	13:10
Friday	Muuni wa Mulimi	05:10
	Fertilizer Subsidy	13:45
Saturday	Zokomera Alimi	09:03
	Ulimi ndi Bizinezi	13:30
	Mudzi Wobiriwira	
	Dziwani za IRADI	19:20
Sunday	Ulimi wa Phindu	18:10

Table 1 Agricultural programmes aired on MBC Radio

7.2 Demographic characteristics of the respondents

The gender distribution of the respondents was 165 (43.2%) male and 217 (56.8%) female. The results show that farming in the surveyed district is female dominated.

7.3 Educational Qualification of Respondents

The study shows that 285 (74.6%) of the respondents had formal education. In terms of educational qualification distribution of the respondents, 6 (1.6%) had tertiary education, 81(21.2%) attended secondary school education, 98 (51.8%) had primary school qualification and 97 (25.4%) were without any educational qualification. These results show that the majority (74.6%) of farmers could read and write. Table 2 presents the educational qualifications of the farmers.

Gender	Frequency		Educational qualification			
		Tertiary	Secondary sch.	Primary sch.	None	
Male	165 (43.2%)	4 (1%)	51 (13.4%)	83 (21.7%)	27 (7.1%)	165 (43.2%)
Female	217 (56.8%)	2 (.5%)	30 (7.9%)	115 (30.1%)	70 (18.3%)	217 (56.8%)
Total	382 (100%)	6 (1.6%)	81 (21.2%)	198 (51.8%)	97 (25.4%)	382 (100%)

Table 2: Demographic characteristics and educational qualification of respondents

7.4 Radio ownership

The ownership of radio by the respondents in this study is very important since it is one of the parameters that indicate that agricultural information reached the respondents. Findings show that 237 (62%) respondents had radio sets. The high percentage of radio ownership indicates that many people do have the means to access agricultural programmes through radio. Table 3 presents the radio ownership of the farmers.

Radio Set Ownership	Frequency	Percentage
Have	237	62
Don't Have	145	38
Total	382	100

Table 3: Radio ownership

7.5 Listenership of agricultural programmes on MBC Radio

The majority of the respondents 288 (75.4%) indicated that they listen to agricultural programmes broadcast on the radio. This implies that a very good number of farmers access agricultural information disseminated by MBC Radio. According to the results, the percentage of listenership is higher than that of radio ownership. This shows that those who don't own radios do listen from their neighbours or friends. Only 94 (24.6%) of respondents did not listen to agricultural programmes. Table 4 presents listenership.

Listenership of Programmes	Frequency	percentage
Listen	288	75.4
Don't Listen	94	24.6
Total	382	100

Table 4: Listenership of Programmes

7.6 Reasons for non-listenership of agricultural programmes on radio

The reasons for not listening to the agricultural programmes were: majority of respondents, 66 (17.3%) indicated that they do not have radio sets. Others, 10 (2.6%), said that they are ever busy, 6 (1.6%) said that agricultural programmes do not interest them, 3 (.8%) indicated non-availability of agricultural programmes on their preferred radio stations and 9 (2.4%) had problems with their radios; either they were faulty or had no batteries. The results show that non-ownership of radio sets was the major reason that farmers failed to listen to agricultural programmes. Table 5 presents the reasons for not listening to the agricultural programmes.

Reasons for non-listenership	Frequency	Percentage
No Radio	66	17.3
Busy	10	2.6
No interest	6	1.6
Preferred radio stations have no agri- cultural programmes	3	.8
The radio is faulty	9	2.4

Table 5: Reasons for non-listenership of radio agricultural programmes

7.7 Frequency of listenership of respondents to agricultural programmes on radio

Frequency of listenership was the number of times respondents listened to agricultural programmes on radio in a week. Findings presented in Table 6 indicate that 21 (5.5%) respondents listen to once a week, 27 (7.1%) respondents twice a week, 77 (20.1%) more than twice a week and 163 (42.7%) respondents listen to programmes in an unplanned manner and 94 (24.6%) do not listen. About 163 (42.7%) listen to programmes by chance and this shows that these farmers do not know the importance of agricultural programmes to their agricultural activities. It also suggests that they are ignorant of the days and times the agricultural programme are aired on the radio; hence they do not have a schedule for listening to them.

Frequency of Listenership	Frequency	Percentage
Once a week	21	5.5
Twice a week	27	7.1
More than twice a week	77	20.1
Listen by chance	163	42.7
Do not listen	94	24.6
Total	382	100

Table 6: Frequency of listenership of respondents to agricultural programmes.

7.8 Acceptability of the language used

Malawi has more than ten languages and Chichewa is spoken by the majority of the population. The agricultural programmes are aired in Chichewa. However, not everybody understands it well or speaks it fluently. For information to be well delivered the language must be well understood by both the sender and the receiver. Table 7 shows how different respondents felt about the suitability of the language. Findings show that 276 (90.5%) indicated that the language is very acceptable, 29 (9.5%) said it is fairly acceptable. The results show that the majority of farmers in Balaka understand Chichewa.

Acceptability of the language	Frequency	Percent
Very acceptable	276	90.5
Fairly acceptable	29	9.5
Total	305	100

Table 7: Acceptability of the language in which the programmes were resented

7.9 Suitability of time of presentation of agricultural programmes

On suitability of broadcasting time, the majority of respondents, 260 (68.1 %) indicated that the time was suitable, 28 (7.3%) said it was unsuitable and 94 (24.6%) did not listen to the agricultural programmes. Table 8 presents the results.

Suitability of Time of Airing Programmes	Frequency	Percentage
Suitable	260	68.1
Not suitable	28	7.3
Did not listen	94	24.6
Total	382	100

Table 8: Suitability of time of airing agricultural programmes

7.10 Relevance of radio agricultural programmes to farmers' information needs

Results on the relevance of radio agricultural programmes to the farmers' information needs show that 284 (74.3%) respondents indicated that programmes are very relevant, 4 (1.1%) respondents indicated that they are fairly relevant and 94(24.6%) respondents indicated that they do not listen to them. Having the majority of the respondents indicating that the programmes are very relevant shows that the producers identify the information needs of the farmers and factor them in when producing the agricultural programmes.

Relevance of Programmes	Frequency	Percentage
Very relevant	284	74.3
Fairly relevant	4	1.1
Did not listen	94	24.6
Total	382	100

Table 9: Relevance of the agricultural programmes to farmers' information needs

7.11 Reasons for listening to agricultural programmes

Table 10 presents the reasons why farmers listen to agricultural programmes. The majority of respondents 282 (73.8%) listens in order to gain knowledge and 6 (1.6%) in order to be entertained. The good listenership of the agricultural programmes means that their intended purpose is being achieved.

Reasons for listening to agricultural programmes	Frequency	Percentage
To be informed	282	73.8
To be entertained	6	1.6
Did not listen	94	24.6
Total	382	100

Table 10: Reasons for listening to agricultural programmes

7.12 Ways of making use of agricultural information

Table 11 shows various areas in which famers apply the knowledge. Most of respondents 214 (56%) apply it in crop rotation, 302 (79.1%) in timely crop planting, and 21 (5.5%) in shifting cultivation. In Balaka shifting cultivation could not be highly practised due to shortage of land. Few respondents 80 (20.9%) apply the knowledge gained in irrigation. The majority of respondents 206 (53.9%) use it in making organic manure and how to apply it. About 188 (49.2%) respondents use the information in sasakawa methods and improved seeds, while 131 (34.3%) respondents use it in soil conservation methods, 129 (33.8%) that they use it in disease, insect and pest control measures and 52 (13.6%) respondents apply the knowledge gained in using animal manure.

Areas Where Knowledge Gained is Applied	Frequency	Percentage
Crop Rotation	214	56
Timely Crop Planting	302	79.1
Shifting Cultivation	21	5.5
Irrigation	80	20.9
Making and Applying Organic Manure	206	53.9
Use of Improved Seeds	188	49.2
Soil Conservation	131	34.3
Disease, Insects & Pests Control Measures	129	33.8
Use of Animal Manure	52	13.6

Table 11: Areas where knowledge gained is applied

7.13 Effects of implementing agricultural information

There are many benefits farmers gain whenever they listen to the programmes and also implement the knowledge gained. A good number of them 267 (87.3%) indicated that they experience higher yields. The majority of respondents 286 (93.5%) reported that they are able to reduce hunger.

There is also an economic benefit as a majority respondents 249 (81.4%) indicated that they reduce poverty. A very good majority 282 (92.2%) indicated that they gain knowledge whenever they listen to agricultural programmes. Knowledge gain is the most important benefit since the programmes are intended to equip farmers with agricultural knowledge so that farming becomes beneficial to them.

Higher Yields	Hunger Reduction	Poverty Reduction	Knowledge Acquisition
267(87.3%)	286 (93.5%)	249 (81.4%)	282 (92.2%)

Table 12: Effects of implementing agricultural information

8. CONCLUSION AND RECOMMENDATIONS

The study established that in Balaka the majority of farmers are literate (74.6%) and farming is dominated by female farmers (56.8%). Findings show that the programmes present relevant information that farmers need. The programmes are produced in Chichewa, the national language which is acceptable by the majority. Ownership of radio sets was high and listenership was good.

The study established that the agricultural programmes aired by MBC Radio had a very good impact on the listeners in terms of knowledge-gain, higher yields, hunger reduction and poverty reduction. In summary, the findings have shown that MBC Radio is an effective information delivery system in disseminating agricultural information and it should continue broadcasting such programmes.

Based on the study findings there is need to introduce adult literacy programmes to farmers who are illiterate since they constituted 25.4% of the population under research. Adult Literacy Programmes will enable them know how to read, write and count, that will assist them in their agricultural practices. There is need to consider introducing radios that are powered by solar energy at a subsidised rate in order to increase radio ownership which could also boost listenership. There should also be more agricultural programmes on private radios to enable farmers to have a wider choice of radio stations to listen to. Producers should consider producing some agricultural programmes in the other major local languages in the country like Chiyao, Chilomwe, Chitumbuka, Chitonga and Chisena besides the national language, Chichewa to enable farmers who are not conversant with Chichewa to also benefit.

MBC Radio should consider rescheduling some of the agricultural programmes to days which have none rather than having four programmes in one day. There is need for extension workers to organize farmer's radio listening clubs. Listening clubs enhance interaction among farmers and also promote discussion of information from agricultural programmes among the members, thereby encouraging them to have active participation and better comprehension of the messages. Extension workers through their interaction with farmers should encourage them to be active listeners of agricultural programmes since such broadcasts contain important information which is beneficial to their agricultural activities.

There is need to introduce more community radios and telecentres in Malawi. A Community radio service serves the interests of a certain area and it airs popular programmes to the audience in that particular locality and there is more participation of the local listeners. Through community radios, the agricultural programmes will be catering for audiences whose information needs are well known, than the bigger media houses that sometimes generalize or overlook them.



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