

**INFLUENCE OF VERNACULAR RADIO PROGRAMS ON VALUE ADDITION TO
AGRICULTURAL PRODUCTS IN NYARIBARI CHACHE SUB-COUNTY, KENYA: A
CASE OF EGESA FM**

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Abstract: *Farmers in Kenya face the challenge of decreased demand during surplus, their produce rot in farms and this leads to huge losses. To avoid more losses, farmers sell their produce in raw forms to middlemen at throw away prices. The farmers are unable to maximize their profits because they lack information on what to do. This leads to demoralization, hunger and poverty. This study sought to explore the influence of Egesa FM programs on the value addition practices of farmers in Nyaribari Chache Sub-county, the study also sought to: establish farmer's perceptions of the programs and find out the challenges farmers face while relying on Vernacular radio for value addition messages. The study focused on two administrative wards of Nyaribari Chache Sub-county: Kiogoro and Keumbu. A sample size of 364 individual farmers was selected with the aid of the Krejcie and Morgan table for determining sample size and three key informants who included the assistant head of Egesa FM radio doubling up as a program presenter at the station and two agricultural extension officers; one from Keumbu and the other Kiogoro ward were purposively identified and selected. The study adopted both qualitative and quantitative research methods to collect data through questionnaires, in-depth interviews and content analysis on Egesa FM programs particularly 'Oboremi Bwaito'. The data was analyzed and presented with the aid of frequency distribution tables and narrations from which conclusions and recommendations were made. The study found that the program's delivery of agricultural information to rural farmers in an effort to increase awareness on value addition in Nyaribari Chache Sub-county was hindered by inappropriate broadcast time, limited airtime for the program and limited information on value addition. To increase farmers' awareness on value addition best practices in the sub-county the researcher has recommended that, Egesa FM broadcast their agricultural program between 7.00pm to 9.00pm and improve their content on value addition best practices. The study will contribute to the practice of journalism and in particular demonstrate the ability of radio programs in improving people's lives. The findings will also generate insight into how vernacular radio stations can structure and allocate airtime for the benefit of their target audience.*

Keywords: value addition, vernacular radio programs

Introduction

The Media has a central position in development; it has the ability to reach diverse audiences with messages of great influence. Buckley et al., (2008) posits that broadcasting has and will always have a position of great influence on the cultural, social and political aspects of the people. Mass media has the power to influence public opinion; it has always shaped the discussions that go on among audiences. According to Melkote (2001), researchers agree on their views and observations about the impact and power of mass mediated

communication. Mass media such as, radio, Television and others shape to a great extent the attitudes and views of people towards certain issues and topics. The media in Kenya is a powerful driver of change. It affects the social, political and economic aspects of the people (Oriare, 2010). The media moves people to positions of being able to make sound decisions on the issues that affect them.

Baran (2006) defines mass communication as the process of creating shared meaning between the mass media and their audience. For people to share the meaning of a mass medium, they must first comprehend the messages being disseminated through the mass media. Initially, there was a top-down flow of information where the people would receive messages from the government and this was to the limitation of the audience (Okigbo, 1996). As Buckley et al (2008) observes a back and forth information flow can be enhanced if mass media adapt a participatory communication approach, where listeners of these mass media channels also give their views regarding the topics that are brought forth for discussion.

It is important as Mwakago (1986) illustrates for the environment and setting to be carefully looked into for effective communication to take place. Such considerations should happen for instance in the villages of developing countries. The factors that ought to be looked into include: culture of the people, the lingua-franca of the people the communicator wishes to engage among others (Mwakawago, 1986).

Radio has been called 'the medium of the people' by many communicators and it is the single most medium that can get to all segments and age groups of society (Okigbo,1995). In those countries experiencing extreme poverty conditions radio can still relay information to the populace. Radio is very accessible because of its affordability and is the main and maybe only way for the people experiencing extreme poor conditions to get information, (Buckley et al., 2008).

The advantages of radio are unlimited; the radio handsets are cheaper and easily accessible, radio can 'speak' on the issues that affect the most vulnerable in society and this they do in the language of the people, the language that speaks to the core of these groups. The languages that have been ignored in most parts of the African continent; "officially ignored" are actually the languages that the semi-illiterate majority uses for communication (Orao, 2009). FAO (2006) observes that 82% of the world population consists of illiterate people.

One of the main shortcomings for development content on African radio as Myers (2008) notes is that there is very little money and the need to come up with programs on such a constrained budget poses a big challenge for the producers of programs. The radio environment in Africa is not 'conducive' enough for program producers to come up with development oriented programs because of the financial situations that constrain them and because these programs require a huge budget (Myers, 2008).

In order to improve the living standards and the environment of people, there is need for radio that is development oriented focuses on community's participation in the production of development programs (Myers, 2008). Moemeka, A. (1985) researched the use of mass media in National development and observed that any communication message which completely ignores the values that underlie the context in which the people communicate, cannot produce the attitude and behavior changes necessary for rural development. If well used, radio can be the best way to educate, sensitize, inform, promote social-economic development and create unity and patriotism among the people (Okigbo, 1996).

Norrish (1998) observes that it is no longer considered enough for media professionals to isolate themselves from the audiences they are supposed to address. For the local radio stations airing these programs to achieve

farmer participation, the program producers and the experts in agriculture should spend much of their time recording the programs, doing a background check on the topics they wish to discuss and working with other stakeholders like the ministry of agriculture and other development partners in the area of agriculture.

Mohammad R. et al., (2010) posit that radio can be a powerful medium that provides farmers with information if it comes up with new programs and messages on modern agricultural methods. They however indicate that, the level of education of the farmer is crucial to enabling them encode the messages that are broadcast on the programs. When there is participation from the farmers during the programs, there is a high chance for the programs to become more effective as the farmers feel part of the program. Nakabugu (2010) posits that rural radio provides an opportunity for farmers to interact among themselves and with other stakeholders for instance, experts on crops and animals, agricultural extension officers and other key people in agriculture. He further observes that rural radio being community oriented, can be exploited for the purpose of mobilizing people towards community development.

Chapman R. et al., (2003) observes that since 1960 international organizations have used radio in various ways. These organizations include: United Nations Children Fund (UNICEF), Food and Agricultural organization (FAO), among other international organizations. The power of rural radio as a tool for agricultural extension is on its ability to get to people with little or no education and to equip them with knowledge and information on best agricultural methods in their own language; the language they can understand and relate to (Chapman, 2003). Radio as an extension tool should therefore endeavor to create and bring about change in the lives of the people they disseminate information to by providing them with the information they require for such change.

Campaigns that allow active participation of the people were for instance used in South Africa to engage farmers in trying to find solutions to the challenges they were experiencing in their farming activities. In a campaign done by farm Radio international in South Africa, the finding was that the campaign encouraged small scale farmers to adapt new and improved agricultural practices and methods.

In Kenya there are over 20 radio stations with a local outreach. These stations have become popular because they broadcast in a language well known and spoken by the people (Oriare, 2010). Their outreach is wide and their messages impact upon each group differently. Agriculture is practiced in the rural areas where majority of the population lives. White (2008) has observed that the rural people are the specimens for experimentation of the various agricultural methods and such experiments are done on their pieces of land. For Kenya to achieve the objectives of its vision 2030 especially on the agricultural pillar, a participatory approach is required especially on coming up with program content and being actively involved on the discussions that directly affect the farmers.

Local radio stations have given the rural majority in Kenya 'a voice' it is worth noting that many communities in Kenya now can identify with a radio station broadcasting in their own language (Oriare et al., 2010). The communities participate in the local radio discussions on the issues central to their lives and this is easy for them because they do so in their own local language. These radio stations have encouraged participation in all aspects of the people's lives.

Radio was and continues to be the main source of information for a majority of Kenyan people (MCK Report, 2014). Radio is affordable and its reach is not limited to the urban areas; it can reach even the remote areas of the country. The price of a radio set is fairly low and the signal is usually good even in the very remote places. Today people can access radio even on their mobile phones.

In Kenya today, each community has at least one vernacular radio station some even have two or three or more. Vernacular radio therefore is central to making people identify with their language, continuation of community traditions and in the process bring new technologies to the people (Oriare et al., 2010). In Kenya, the broadcasting environment comprises a mix of commercial/ private and public/community radio. This is a comparatively new development emerging from a tradition of state monopoly of airwaves. The radio tends to have the widest circulation within communities in Kenya (Mbeke, 2008).

During the election campaign in 2007 and the subsequent post-election violence (PEV), vernacular radio stations came under scrutiny for disseminating dangerous propaganda and hate-speech through their live talk-shows and call-in pro (Kriegler Report, 2008). The Kenya National Commission on Human Rights (KNCHR Report, 2008) summarized the role of the vernacular media in the post-election violence as follows:

The media, and particularly local language media, influenced or facilitated the influencing of communities to hate or to be violent against other communities. Radio stations broadcasting in vernacular language were culpable in this respect. The Commission of Inquiry on Post Election Violence Waki Report (2008) agreed with the human rights report observing that victims of PEV: recalled with horror, fear, and disgust the negative and inflammatory role of vernacular radio stations in their testimony and statements to the Commission. In particular, they singled out Kass FM as having contributed to a climate of hate, negative ethnicity, and having incited violence in the Rift Valley.

The role of vernacular radio stations was tarnished during and after the PEV in 2008 as mere mouth-pieces for ethnic hatred. However, in its policy briefing paper of 2008 the British Broadcasting Corporation international charity World Service Trust pointed out the positive role that some of the FM stations had played in the aftermath of the PEV in 2007/2008:

More recently, most local language stations appear to have been playing an important role in calming tension and promoting dialogue. (Waki Report, 2008)

It cannot be denied that Kenya's local language radio stations played and still play a crucial role in influencing decisions and shaping emotions within their audiences. It is for this reason that the researcher seeks to find out its power and relevance in enhancing value-added agriculture.

Whereas radio has very many positive impacts as mentioned earlier, these strengths have been used to promote the narrow selfish interests of the ruling class and the rich who own the media outlets. This does not have to be the case however. There is need for vernacular radio to be objective and balanced when reporting on various issues. The positive roles of radio in Kenya and other African countries in general cannot be overlooked in the efforts to achieve national development.

One of the key policy issues as enshrined in Kenya's agricultural policy is encouraging diversification into non-traditional agricultural commodities and value addition to reduce vulnerability. Value-added agriculture is the process of changing the form of a raw agricultural commodity through any of the following methods: packaging, drying, blending, storing among other processes that make the product different when comparing it to the primary agricultural commodity. (Alila & Atieno, 2006).

Middle income economy status for Kenya should translate to better livelihoods; increased school enrolment, better housing, healthcare, access to clean water and food security. But this seems not to be the case as many Kenyans in the rural areas are still poor (Braganza, 2014). Masinde (2014) argues that middle income status would not take away the country's poor infrastructure, insecurity and high cost of production challenges. He

further says that statistical figures alone are not important if they don't transform rural livelihoods. It is important for the country to attract investments in value addition in agriculture because it is the backbone of the economy.

Using banana as a substitute for sugar when sweetening biscuits- themselves made out of banana flour is among the things a women group in Kisii has come up with in order to beat the economic challenges its members face. Kenyuni women Group from Nyaura ward in Kisii County was founded 16 years ago with the aim of helping women in the area escape widespread poverty (Africa Review, 2013)

Kisii region is a region where banana grows easily and nearly every household has planted some. Growing banana for sale was one of the initial activities the group started, but it was not long before they realized that their effort was only benefiting the middlemen. They decided to engage in value addition experts to figure out the way forward. Through trial and error, they discovered that not all banana species could produce usable flour. They then classified their product into two: banana to be ripened and that for processing flour (Africa Review, 2013)

Today banana flour is the most popular value added commodity in Kisii and even beyond. With banana flour one can bake virtually everything that was once made by wheat flour for instance: cakes, biscuits, and chapatti. The banana flour is changing the region's baking industry. Using traditional methods, the bananas are harvested, peeled, cut into small pieces and then dried under the sun before being ground into flour using a mortar and a pestle. It is then sifted and packaged for sale at the group's small shop (Africa Review, 2013)

The group has further adapted quick banana ripening methods to cope with the demand, which apart from being used as sweeteners for their banana flour are being used to make banana jam. To do this, the group uses a ripening chamber that resembles a cupboard where the bananas are laid on several top shelves while the bottom one is lined with avocado. Locked in the ripening chamber, avocado produces a gas that acts as a catalyst to banana ripening process and instead of five days it takes two and half days to get ready and ripe bananas for use. In this way the group is able to cope with soaring demand that comes from domestic consumers as well as small scale entrepreneurs who are using banana flour to bake things which were traditionally baked using wheat flour. (Africa Review, 2013). After adapting value addition, the group's income increased from \$2800 to \$10800 a year.

Statement of the problem

Produce from agriculture is commonly marketed with minimal processing resulting in low revenue earning capacity to farmers and creation of fewer employment opportunities for citizens. Farmers in Kisii and all over Kenya face the challenge of decreased demand during surplus, their produce rot and this leads to huge losses for the farmers. This situation forces most of the farmers to sell the produce in raw forms to middlemen at low prices to avoid more losses. According to Mbiuki (2011) the loss resulting from exports of raw agricultural produce is not less than KSh. 82bn every year produce.

Kenyan farmers produce a wide variety of agricultural products, but have not yet optimized the economic benefits they can derive from these products. This has led to demoralization of farmers, hunger and poverty. The farmer needs to be informed on how to add value to the produce after harvest to curb selling it raw forms at lower prices to middlemen. The farmer, who in most cases is semi-illiterate, needs a form of communication that speaks to his core; in a language he understands. Vernacular radio, unlike other forms of mass media, uses a language that can be understood by majority of the members in a community. For agricultural information to

achieve intended impact there is need for comprehension by the farmer. How then can farmers in Nyaribari Chache mitigate the issue of selling their produce in raw forms to middlemen? This study explores this question by focusing on the influence of Egesa Radio programs on the value addition practices of farmers in Nyaribari Chache Sub-county.

Objectives:

The general objective of this study was to explore the influence of Egesa FM programs on value addition practices of farmers in Nyaribari Chache sub-county

The specific objectives of this study were:

1. To establish farmers' perceptions of Egesa FM programs
2. To examine the challenges farmers face while relying on the programs for information on value addition.

Significance of the Study

The study will be useful to researchers and academia in the field of communication studies as it will be a source of reference in forming their future research topics and studies. It will contribute to the practice of journalism and in particular demonstrate the ability of radio programs in changing people's lives. The findings of this study will generate insight into how vernacular radio stations can structure and allocate airtime for the benefit of their target audiences.

Study area

In this study, the target population was all the farmers in Nyaribari Chache which was approximately represented by the households in the Sub-County which amount to 28825 according to the latest census report.

The researcher selected two administrative wards that were reflective of the qualities of the entire sub-county from which the sample was drawn. These wards were Kiogoro ward with 2910 households representative of individual farmers and Keumbu ward with 3338 households. The sample size was determined by Krejcie and Morgan table after which a sample for each ward was proportionately calculated upon which questionnaires were administered to owners of households who are farmers.

The number of farmers in Kiogoro ward was 2910 while that of Keumbu was 3338 giving a total of 6248. The sample size for this study using the Krejcie and Morgan table is therefore 364 individual farmers, the researcher used proportionate sampling to get a representative sample from each ward; with 171 and 193 representing Kiogoro and Keumbu respectively.

Research Methodology

A case study approach was adopted since one vernacular radio station was selected for the research. The research design that was used in this study was the descriptive survey research design. Mugenda and Mugenda (1999), observe that descriptive research is appropriate because of its specific nature and the fact that it facilitates a general understanding and interpretation of the problem. It was used to obtain information concerning the state of the phenomenon to describe what exists with respect to the variables or conditions in a situation. The issue of this study being the influence of Egesa radio programs on the value addition practices

of farmers in Nyaribari Chache Sub-County was thus aimed at addressing the essential questions in this research

Qualitative approach that is usually suitable in natural settings, involved collection of data that was in form of words rather than figures and this enabled the researcher to gain in-depth information on the phenomena under study. Quantitative approach involved collection of data that was in form of closed ended statements and figures; the data was then subjected to statistical analysis. The study combined the two approaches because they complement each other (Kothari, 2003).

Results and Discussion

Farming activity

The study findings reveal that most farmers are involved in more than one farming activity with the majority of the respondents undertaking subsistence farming which is 67.03 percent, 8.71 percent keep livestock, 4.95 percent are cash crop(tea and coffee) farmers, 3.30 percent practiced fish farming while 2.20 percent practiced other farming activities that were not listed. Majority of the respondents in the study area remain largely small scale farmers because of limited land among other factors. They only provide enough for their families owing lack of ready market and low income on their produce.

Farmers source of agricultural information

According to the study findings, 167 (46.70 percent) reported to get agricultural information from radio making it the dominant source. Radio is the dominant information source because of its accessibility and affordability. Most farmers have heard about value addition on radio and some of them are practicing a new method learned from radio. Respondents carry their radio handsets even to their farms where they continue to listen to programs. Once in a while an expert on agriculture is brought on board to discuss a specific issue. Some of the issues discussed by these experts include; pest control, animal vaccines, animal feeds, land preparation, new farming methods, animal breeds among other issues. The study further indicated that farmer friends are the second source of agricultural information at 64 (18.13 percent) Information shared include; farming methods, prices of inputs among others, 62 (17.03 percent) of respondents reported to get agricultural information from extension officers which included information on pests and diseases, hybrid seeds, better farming methods and fertilizer application. They meet fellow farmers at shows, homes and in barazas. 28 (7.69%) of the respondents get information from Barazas where they are informed about the availability of free seeds from the government and the time to collect the seeds. These barazas are organized by area chiefs in collaboration with NGOs, seed and fertilizer companies. 8 (2.20 percent) of the respondents get information from seminars. These seminars are also organized by seed and fertilizer companies. TV was at 17 (4.67%) while newspaper and magazines at 11 (3.02%). Internet was the least utilized agricultural information source with 3 (0.82) respondents.

Table 1 Source of agricultural information

| Source | Frequency | Percentage |
|--------------------|-----------|------------|
| Radio | 170 | 46.70 |
| Fellow farmers | 66 | 18.13 |
| Extension officers | 62 | 17.03 |
| Barazas | 28 | 7.69 |
| Seminars/workshops | 8 | 2.20 |
| Television | 17 | 4.67 |

| | | |
|---------------------|----|------|
| Newspaper/magazines | 11 | 3.02 |
| Internet | 3 | 0.82 |

Researcher's field work 2017

Radio is the main source of agricultural information as shown in the table above; this is attributed to the availability of the radio handsets. Most farmers own a radio and therefore the high frequency on radio as a source of agricultural information. The characteristics of radio: affordability, portability, availability also gives radio an advantage over the other media. Very few farmers own smart phones and this explains the reason internet is the least utilized agricultural information source. Officers of agricultural extension are not the main source of agricultural information because they are few in number hence cannot reach most farmers.

Agricultural information disseminated

According to the research findings, the dominant agricultural information accessed on Egesa radio is on better crop rotation practices and fertilizer application, other information broadcast include: improved seedlings, introduction to new herbicides and pesticides, crop disease treatment and control, new methods of crop preservation, introduction of new animal vaccines and drugs.

Table 2 Agricultural information

| Agricultural information | Frequency | Percentage |
|---|-----------|------------|
| Crop rotation best practices and fertilizer application | 350 | 96.15 |
| Improved seeds | 325 | 89.28 |
| Crop disease treatment and control | 319 | 87.64 |
| New methods of crop reservation | 164 | 45.05 |
| Animal vaccines and drugs | 102 | 28.02 |
| Farmer cooperatives | 98 | 26.92 |
| Processing and packaging of produce | 43 | 11.81 |

Researcher's Field work 2017

The results above show that the dominant agricultural information disseminated is on improving yields. This therefore means that the main focus of radio program producers is to equip farmers with skills on how to realize high yields. Issues on value addition are rarely discussed and this is mainly because program producers are not working with extension officers to develop better programs. The producer of the program 'Oboremi Bwaito' cited limited resources for the program as a hindrance to working well with officers of agricultural extension, he also pointed out that most of them had little to no knowledge on value addition best practices.

Listening to radio

Most farmers who were the respondents in this study said that they listen to radio every day. Evidence from this research study shows that almost all the respondents to this study listen to radio at least daily.

The radio listened to in most cases is owned by the farmer and a few people listen to radio owned by friends. This therefore means that majority of the farmers own a radio handset and only the few who do not own listen to their friend's radio. The research findings further indicate that, 270 (74.58%) of the farmers owned the radio they listened to, 86 (24.29%) indicate that the radio they listened to was owned by their family, the minority 4 (1.13%) indicated that the radio they listened to was owned by their friends.

Table 3 Radio ownership

| Radio ownership | Frequency | Percentage |
|------------------------|------------------|-------------------|
| Own | 264 | 74.58 |
| Family | 86 | 24.29 |
| Friends | 4 | 1.13 |
| Total | 354 | 100% |

The researcher further found out that majority of the respondents listened to Egesa radio; 352 (98.6%) of the respondents listen to Egesa radio and 6 (1.4%) indicated that they did not listen to Egesa radio. It is therefore clear that most people listen to Egesa radio in this area. The researcher further investigated the listening habits of the respondents; at what time they like tuning in and what program was aired at that time. From the findings, the mid morning show from 10am-1pm had the most listeners; it is worth noting however that if a true picture is to be depicted an analysis of people’s concentration during this show is crucial. During this show, farmers for instance are tuned in to radio but also going on with their daily farm activities and therefore uptake of information may be passive. Most farmers claim to be settled between 7pm-10pm and listening to radio without divided attention then. Therefore, the fact that most people (who listen to Egesa radio) tune in during the mid morning program does not suggest comprehension and understanding of the issues discussed during that show. For effective comprehension and uptake of agricultural information farmers need to pay undivided attention.

The researcher also wanted to find out whether farmers listened to the 10 minute agricultural documentary broadcast on Egesa radio, the researcher found out that 351 (98.31%) of the farmers listened to the daily 10 minute agricultural program ‘Oboremi Bwaito’ and hence they had the information required to meet the objectives of this study.

Table 4 listening to the program Oboremi Bwaito

| Listening to program | Frequency | Percentage |
|-----------------------------|------------------|-------------------|
| Yes | 348 | 98.31 |
| No | 6 | 2.6 |
| Total | 354 | 100 |

Majority of the respondents listen to the program, this is attributed to the fact that majority own a radio handset and the program is broadcast on a daily basis. The respondents listen to the program because it gives them helpful insights into their daily farming activities. They also like the program because most of them know the host whom they have met during agricultural field shows and during village interviews with farmers. Respondents tune in to get information on what fellow farmers are doing to increase their yields.

Content analysis of Egesa radio programs

This section comprises a content analysis of Egesa radio programs for the period starting 6th March 2017 to 19th March 2017. The researcher chose this period because the presenter and producer of the program ‘Oboremi Bwaito’ had hinted that between those dates, they were going to run a special feature on value addition initiatives by various farmers. It is worth noting that despite the fact that the program ‘Oboremi Bwaito’ is only aired during the morning show for 10 minutes, the researcher decided to listen to all programs broadcast to get a better understanding of the stations choices and preferences. The researcher found out that there are five areas of programming namely: economy, agriculture, healthcare, education and politics. On economy Egesa radio

discusses business opportunities, prices of commodities in other parts of the country, on agriculture Egesa radio brings out issues on Fertilizers(alternative fertilizer) markets, improved seeds, pesticides, food preservation, increased yields (farm utilization). Vacancies and school registration opportunities are discussed, political parties, coalitions, independent candidates, winners and losers in party primaries, manifestos and on health family planning issues are discussed where women are encouraged to find a family planning method that suits them , vaccines, preventive measures for illnesses especially Malaria (use of mosquito nets)

Table 5 Topics discussed

| General Area | Specific Issues | Nature of discussion |
|--------------|---|---|
| Economy | Business opportunities, prices of commodities in other parts, | Panels of experts call ins from listeners. |
| Agriculture | Fertilizers(alternative fertilizer) markets, improved seeds, pesticides, food preservation, increased yields (farm utilization) | An expert in livestock/crop or from a seed company, call ins to ask questions |
| Education | College/vacancies opportunities, | Advertisement, a host form the institution interviewed, SMS |
| Politics | Political parties, coalitions, independent candidates, winners and losers in party primaries, manifestos | A political analyst, politician, independent candidates. SMS from listeners |
| Healthcare | Family planning, vaccines, preventive measures for illnesses especially Malaria (use of mosquito nets) | Medic, Marriage counselor, Call ins from listeners |

Researchers field work 2017

The morning program *bokaboka* [wake up wake up] is allocated four hours. It is during this show that the agricultural radio program *Oboremi Bwaito* [Our farming] is aired for only 10 minutes. The producer of the program said that is all the time he has for the documentary because there are also other programs in the line-up, he however said he will be grateful if he had more time for the documentary. From 10am-1pm the program *Omogusii N'ekebago* [*Omogusii* and work] is aired 10am-1pm and encourages listeners to work hard to earn a living especially in their farms, the kind of songs played during this program also echo the message which is to work hard. Phrases like *ng'ai okebwaterete* [where are you catching it; work from], *ekioro* [lazy thing] are very prominent, from 1pm-4pm *Ebirundo bie Egesa* [fast speed of Egesa] is aired where gospel and secular music is played, in the researchers own opinion, the program is more inclined to the youth because of the nature of discussions during the show for instance, what is trending on social media and the use of phrases like *tbt* attract a relatively youthful audience. From 4pm-7pm Egesa radio airs *Entabanania* where people call in to say what they are carrying home to their families and from 8pm-11pm *Rimore* (torch) discusses family issues especially on marriage. Between 7pm-9pm, the station mostly airs news and hosts politicians and other stakeholders for interviews sometimes they bring an agricultural expert, a marriage counselor, health expert among others.

The topics discussed on each program of Egesa radio are the similar in content. In as much as there are different guests brought on each program, the presenters stick to a conventional way of presenting their program. Farmers know that every day, the program 'Oboremi Bwaito' will run for ten minutes and therefore tune in whenever they can. There is very little time allocated to the program 'Oboremi Bwaito', the program presenter

has been in talks with the management of the radio station to allow for allocation of more time but this has not been realized because of the commercial interests of the media house.

Influence of Egesa radio programs on agricultural Value addition practices

The first objective of this study was to explore the influence of Egesa radio programs on value addition to agricultural products in Nyaribari Chache sub-county. To achieve this, the respondents were asked questions in relation to the following indicators: source of information on value addition, extent to which the program has influenced respondents to adapt better farming methods and the level of adaption of a value addition method by the respondents.

Farmers main source of information on value addition

To determine the reliability of radio in disseminating information on value addition and its ability to influence the audience, respondents were asked to select from a list on the questionnaire the method they relied on to get information on value addition.

Majority of the respondents 116 (32.42 %) heard about value addition best practices on radio, fellow farmers were at 91 (25.55 %), agricultural extension officers followed at 86 (24.17%), chief's baraza at 29 (8.24 %), field days at 21 (5.77 %), Television at 8 (2.20%), pamphlets at 4 (1.10 %) and internet at 2 (0.55%). Respondents were further asked if they have practiced any form of agricultural information heard on radio and most of them could relate to the fact that they had adopted one or two methods they had learnt.

The dominance of radio as the source of agricultural information is attributed to its nature to overcome illiteracy, availability; every household has a radio set, distance barriers and other geographical and financial factors.

Respondents reported to receive information on new methods on produce preservation, other information included packaging, labeling, differentiation and branding. The dominant value addition information they received from the programs was on drying and storage of vegetables using solar driers. Most farmers claimed to have seen the solar driers during field days but had not used them to preserve their vegetables because the equipment was expensive and many farmers did not know where to purchase it.

Influence to become a better farmer

The farmers were asked to indicate whether they thought the program had helped them to become better farmers. According to the findings, 345 (96.43%) of the farmers reported that the program had influenced them to become better farmers while 13 (3.57%) disagreed. This shows that the agricultural program 'Oboremi Bwaito' has influenced majority of the respondents to become better farmers. The farmers indicated that they had been able to try out new farming methods mentioned in the program, those who had not been able to practice a new farming method heard from the program sighted lack of capacity to implement the method because it either required an expert on the ground to demonstrate or it was an expensive venture whose cost they would not afford.

It is worth noting that the reason the producer started the program was to influence the Abagusii people become better farmers, with limited but productive land, the producer wanted to be able to work with development partners, especially those in the agricultural sector to sensitize people on better farming methods and to be able to tell the success stories of other farmers. The producer was usually guided by Kenya's vision 2030 which

aspires to make Kenya an agriculturally productive society with the aim of curbing food insecurity among the Kenyan population.

The techniques of farming that the program talked about include: agro forestry, soil conservation, farm utilization, fertilizer application, methods to improve productivity, top dressing and control of field pests, cross breeding and use of greenhouse. Other techniques were: green house technology, horticulture, use of composite manure, modern methods of controlling diseases for animals and crops, techniques of applying farm inputs, market infrastructure for the produce and so on.

The producer reported that since 2006 when the program started, farmers had formed

Net working groups such as farming welfare forum (FWF), where they visited each other. They also used this forum to exchange information about markets and to seek expert advice to enhance farming.

Practicing a new value addition method learnt from the program

The farmers were further asked to indicate whether they had been able to practice new value addition methods heard on the program.

Table 6 Practicing new method of value addition

| Farmers | Frequency | Percentage |
|----------------|------------------|-------------------|
| Yes | 224 | 62.57 |
| No | 134 | 37.43 |
| Total | 358 | 100 |

According to the findings, 224 (62.57%) of the farmers had been able to practice new value addition methods learnt from the program while, 134 (37.43%) of the farmers indicated that they had not been able to practice new value addition methods. This was because they were not able to acquire the basic equipment for value addition and they also indicated that most of these basic value addition equipment belonged to groups and therefore an individual farmer was not better placed to practice this methods at home. Majority of the respondents had not practiced a new value addition method as individuals but they had heard it on radio and had been able to practice it in their farmer groups.

How farmers use information on value addition from the programs

The farmers have created various value chains with the aid of agricultural extension officers which help them in adding value to their produce, these include: the dairy value chain, the poultry value chain, fruits/vegetables value chain among other value chains. Further, the farmers indicated that they used vegetable solar driers to dry their vegetables so that they could not go bad. According to the findings, the farmers are practicing juice making, vegetable drying using vegetable solar driers, making of banana crisps and chips, baking banana and pumpkin cakes, banana ripening and grain drying.

Farmers perception of Egesa FM programs

The second objective of this study was to find out famers perceptions of Egesa FM programs. To achieve this, the respondents were asked questions in relation to the following indicators: topics presented and farmer’s needs, the extent to which the program content is relevant to the respondents and level of satisfaction with the value addition information broadcast.

Topics presented and farmers needs

From the findings, respondents indicated that they liked information on better methods of farming; they got to know pesticides and herbicides to use against diseases in animals as well as farm inputs. The farmers also reported that they liked the mode of presentation as it echoed their real issues in as far as better farming is concerned, the presentation is also easy to follow and the program is educative.

The farmers were asked to indicate whether they thought the topics that are presented address their needs. From the findings, 87.25% of the respondents reported that the topics that are presented address their needs while 12.75% disagreed.

Table 7 Topics and farmers needs

| Perception | Frequency | Percentage |
|--------------|------------|------------|
| Agree | 301 | 87.25 |
| Disagree | 44 | 12.75 |
| Total | 345 | 100 |

Researcher’s Field work 2017

Rating of the content of the agricultural program

The respondents were further asked to rate the content of the program ‘Oboremi bwaito’. From the findings, 182 (52.75%) rate the content as good, 103 (29.86%) feel that the content is fair. 56 (16.23%) indicated that the content is very good and 4 (1.16%) feel that the program’s content is poor.

The findings were as shown below

Table 8 Rating of content

| Rating | Frequency | Percentage |
|--------------|------------|------------|
| Very good | 56 | 16.23 |
| Good | 182 | 52.75 |
| Fair | 103 | 29.86 |
| poor | 4 | 1.16 |
| Total | 345 | 100 |

Researcher’s Field work 2017

From the findings, 182 (52.75%) of the respondents rate the content as good because it addresses agricultural issues that are pertinent to the farmers. The issues addressed by the program include: land utilization, crop rotation, animal feeds and vaccines, improved seeds, fertilizer application, markets for farm produce and farmer cooperatives. A few respondents 4 (1.16%) said the program’s content is poor because it does not provide adequate information as far as their needs are concerned; they also sighted shallowness in the presentation of the information. Farmers also received information on appropriate farm inputs that help increase production. In addition, the program sensitized farmers on how to prepare the land for planting

Level of satisfaction with the information on value addition broadcast

The farmers were asked to indicate the satisfaction level of farmers pertaining value addition received from the program. The study findings revealed that majority of respondents were less satisfied with value addition information delivered by the program representing 67.61%. 1.7% reported to be very satisfied, 14.77% satisfied, 15.34 not satisfied while 0.57% were not decided.

Table 9 Level of satisfaction

| Level of satisfaction | Frequency | Percentage |
|-----------------------|-----------|------------|
| Very Satisfied | 6 | 1.7 |
| Satisfied | 54 | 14.77 |
| Less satisfied | 246 | 67.61 |
| Not Satisfied | 56 | 15.34 |
| Not decided | 2 | 0.57 |

Researcher’s field work 2017

Majority of the farmers; 246 (67.61%) in this study were less satisfied with the value addition information broadcast on the program. They pointed out inadequate content on value addition during the agricultural program, limited airtime allocated to agricultural program, inappropriate broadcast time for agricultural program as the reasons for them being less satisfied with the value addition information disseminated on vernacular radio. The respondents who were undecided are those who had little understanding of what value addition means and attribute their lack of decision on the issue to lack of awareness on the value addition to agricultural produce. The 6 (1.7%) of respondents who were very satisfied is those that have heard about value addition best practices on radio and have put them into practice and are enjoying the benefits of their ventures. The program producer cited inadequate time for the program as the main reason for limited content.

Challenges farmers face while relying on Egesa radio programs for Value addition information

The study also sought to establish challenges farmers face while relying on Egesa radio programs especially the program ‘Oboremi Bwaito’ for information on value addition in the third objective of this study. The study findings indicated that the greatest challenge is inappropriate broadcast time of agricultural related programs representing 223 (61.26%) Others were reported to be inadequate broadcast time at 104 (28.57%) limited content on value addition at 31 (8.52%) and, poor signal at 6 (1.65%). This is as shown in table below.

Table 10 Challenges farmers face

| Challenge | Frequency | Percentage |
|------------------------------|-----------|------------|
| Inappropriate broadcast time | 223 | 61.26 |
| Inadequate broadcast time | 104 | 28.57 |
| Limited content | 31 | 8.52 |
| Poor signal | 6 | 1.65 |
| Total | 360 | 100 |

Researcher’s field work 2017

Egesa radio, being a Commercial Vernacular radio station driven by profits, it cannot afford to air their own sponsored agricultural program at prime time (when there is the highest viewership), this is taken up by paid sponsors who broadcast programs beneficial to them. The station sponsored agricultural programs are

broadcast during off pick hours with few listeners hence less impact. Such a program is ‘Oboremi Bwaito’ [our farming] aired between 6 am and 10am for 10 minutes every day from Monday to Friday. The other challenge is limited airtime (10 minutes daily) for the agricultural feature, this limits farmer’s access to adequate information from the program; the other is inadequate content on value addition. Another challenge is lack of a physical demonstrator to help farmers implement the techniques heard on radio. The agricultural extension officers showed willingness to partner with program producers for maximum impact. Despite the fact that the program producer has worked with some of them, there is need he says, for most of them to research on new agricultural methods if they are to remain relevant to the farmer.

What can be done to address these challenges?

The study findings indicate that most farmers felt that agricultural programs should be broadcast between 7pm-9pm. This is to enable them get maximum benefit from information disseminated. At this time most of them are done with their daily chores and tuned in to radio for news and entertainment.

Table 11 Appropriate broadcast time

| Broadcast time | Frequency | percentage |
|----------------|-----------|------------|
| 6am-10am | 45 | 12.59 |
| 10am-1pm | 74 | 20.67 |
| 1pm-4pm | 14 | 3.91 |
| 4pm-7pm | 57 | 15.92 |
| 7pm-9pm | 168 | 46.93 |

Researcher’s fieldwork 2017

Asked what they feel can be done to address the issue of limited content, majority of the respondents wanted farmers who had put the techniques into practice to be invited to the shows to explain in detail the process and its profitability. Others wanted experts in the area of value addition to give their voice during these programs; to break down information on value addition to farmers. The producer of the program admits that he has been requested to broadcast the program at a different time and to also give it more air time, this is something he has been working to achieve over the years but with many programs competing for air time at the station, it will take some time before this is realized.

Summary

The findings of this study, which sought to explore the influence of Egesa radio programs on the value addition practices of farmers in Nyaribari Chache Sub-county, are in support of the existing literature. The results indicated that most rural residents earn their living from subsistence farming, most of the residents are semi-illiterate and poor having primary and below level of education, which are some of the factors hindering agricultural information flow and adoption of new farming strategies to achieve value addition in Nyaribari Chache Sub-county. The study also established that the farmers had been able to use information from the programs to improve their value addition practices. Some of the farmers had been able to practice a new value addition method learnt from the program. The study found out that the farmers had learnt how to make juices from their fruits, how to dry their vegetables for storage, how to blend their agricultural products, how to extract butter and ghee from milk.

The farmers had also learnt to form farmer cooperatives which could help to link farmers to buyers instead of having to deal with unscrupulous middlemen. The study also found that the program 'Oboremi Bwaito' is useful to farmers. In relation to the program content, most farmers indicated that the content of the program 'Oboremi Bwaito' was good. The farmers however noted that they were not satisfied with the value addition information broadcast on the program, they felt the content on value addition was limited and that the program did not bring on board farmers who had tried the various value addition ventures and value addition experts to talk during the program.

Influence of the programs on the value addition practices of farmers

The first objective of this study was to explore the influence of the programs on the value addition practices of farmers in Nyaribari Chache. The study established that the program 'Oboremi Bwaito' had influenced most farmers to become better farmers.

The study also established that respondents had used information from the program to improve their value addition practices. Some of the farmers had been able to practice a new value addition method learnt from the program. The study found out that the farmers had learnt to make juices from their fruits, how to dry their vegetables for storage, how to blend their agricultural products, how to extract butter and ghee from milk.

The farmers had also learnt to form farmer cooperatives which could help to link farmers to buyers instead of having to deal with unscrupulous middlemen. The researcher further found out that the program 'Oboremi Bwaito' is useful to farmers. In relation to the program content, most farmers indicated that the content of the program 'Oboremi Bwaito' was good. The farmers however noted that they were not satisfied with the value addition information broadcast on the program, they felt the content on value addition was limited and the program did not bring on board farmers who had tried the various value addition ventures and value addition experts to talk during the program. The study established that the farmers had started using solar driers to dry vegetables so that they could transport them to other places for sale. In addition, as a result of training in the program, farmers were in a position to avoid banana spoilage by making banana chips and drying them for preservation, they also made banana crisps which they packaged and sold. Farmers also extracted cream from milk and made yogurt for sale. Though the practice of value addition is not widely practiced in the sub-county, those who had used the information from the program said they had seen its benefit.

Farmers perceptions of the programs

The second objective of this study sought to investigate the attitudes of the farmers towards the programs of Egesa radio. For most study respondents, the program is good and the topics brought forth for discussion are of great benefit to them.

In relation to the program content, most farmers indicated that the content of the program 'Oboremi Bwaito' was good. Despite the fact that the station addresses their information needs, the farmers however noted that they were not satisfied with the value addition information broadcast on the program, they felt the content on value addition was limited and that the program did not bring on board farmers who had tried the various value addition ventures and value addition experts to talk during the program.

Challenges Farmers face

On the challenges farmers face while relying on Egesa radio programs to get information on value addition, farmers identified inappropriate broadcast time, limited content, limited content on value addition and others

pointed out poor signal as the hindrance to effective delivery of agricultural information. To solve such problems, most farmers prefer agricultural programs to be broadcast from 7.00pm to 9.00pm, followed by those who wish such programs to be broadcasted from 10am to 12 noon while the least want this programs done at lunch hour(between 1 to4.00pm). Others would wish to see the content for the agricultural programs improved and more airtime to be allocated to the agricultural programs.

The study also found out that despite most farmers tuning in to Egesa radio, most of them did not participate in the programs. The younger respondents however indicated that they used mobile line to call or send short mobile messages and also used social media such as Facebook and WhatsApp. Elderly interviewees mostly from the age of 40 years and above reported that they rarely made their contributions due to lack of airtime to contact the producer.

In addition, the study established that most of the farmers had challenges participating in the program. For example, the study found that there was no permanent contact line particularly for the program. The program producer used the station's general mobile line which was constantly engaged making it difficult for them to contribute in whichever ways. Other farmers had financial challenges. Further, the producer read the contact number a bit fast. However, some farmers used short messages, calls, facebook and emails in very rare cases to participate in the programs.

Conclusion

These are the conclusions of the researcher based on the study findings:

Egesa radio programs have a great influence on the farmers' value addition practices in Nyaribari Chache. The programs, especially the agricultural program have enabled farmers to get new knowledge on the current agricultural technologies. As mentioned earlier in this study, there are few agricultural extension officers compared to the number of farmers. Egesa radio programs can therefore aid in the spread of new agricultural innovations especially on value addition.

The dominant agricultural information accessed on Egesa radio is on better crop rotation practices and fertilizer application, other information broadcast include: improved seedlings, introduction to new herbicides and pesticides, crop disease treatment and control, new methods of crop preservation, introduction of new animal vaccines and drugs. It therefore means that there is not much emphasis on value addition.

The agricultural program has educated farmers on the various methods of food preservation and value addition. Through solar drying their vegetables, the farmers have been able to avoid wastage which was initially a big problem. Making of banana flour by drying and grinding bananas has also reduced wastage. The farmers are also able to ripen their fruits; avocado and bananas in their improvised ripening chambers. The farmers in Nyaribari Chache Sub-county also practice other modern methods of farming learnt from the program,

The agricultural program on Egesa radio is useful to farmers in Nyaribari Chache Sub-county and has had a significant impact on the farmer's agricultural practices. The farmers however feel that the time allocated for the program is not enough. The time of the day the program is aired is also inconvenient for most farmers who at this time are busy working on their fields.

The time the program 'Oboremi Bwaito' is aired is inconvenient to most farmers as most of the times it coincides with their working hours. In addition, the time allocated for the program is not enough. The study

also concludes that although most farmers listen to the program 'Oboremi Bwaito', their participation in the program is minimal.

Despite limited content, the topics presented in the agricultural program address farmers' needs on farming and best value addition practices. It is worth noting that farmers also get agricultural information from agricultural extension officers, field days, fellow farmers, Television, ASK shows, seminars, trainings, NGOs and seed and fertilizer companies.

The study also concludes that farmers are in a position to avoid food spoilage by engaging in various value addition ventures like the very basic ones which include drying. Farmers can also form farmer cooperatives to help them implement the value addition methods learnt from the program and value addition chains to mitigate the problem of selling their produce cheaply to middlemen for fear that if they don't sell their produce will go bad.

Despite the fact that radio is the main source of agricultural information for farmers in Nyaribari Chache Sub-county, most farmers are not satisfied with the value addition information broadcast. There is need therefore, for the producer of the program to improve the content of the program by involving farmers who have been successful in their value addition ventures, experts on value addition should also come on board during the program to respond to farmer concerns and include other topics like where to get market for the value added products.

Recommendations

The researcher identified a number of aspects that can be adopted by Egesa radio and other vernacular radio stations, researchers, the county and national government in order to increase awareness on value addition to agricultural produce in Nyaribari Chache sub-county and other parts of the country. These include;

Egesa radio to broadcast major agricultural programs in the evening starting from 7.00pm to 9.00pm because at such a time almost all farmers are relaxing at their homes and can attentively listen to all agricultural information targeting them and their agricultural ventures without divided attention.

Egesa radio should host farmers who have tried various value addition methods during the agricultural programs. Other agricultural stakeholders like field officers and agro-processing value chain and development officers should also be invited to these programs to be able to reach a large number of people due to their limited number.

For the producers of agricultural programs to come up with more programs and for the programs on issues value addition to agricultural produce to be allocated relatively more airtime. With more time allocated to discussing how farmers can add value to their produce, they will be more informed and reap more from their produce.

Farmers should join farmer groups and cooperatives where they can discuss information received from radio for effective uptake. These will help the farmers understand the agricultural information better and even secure more markets and better prices for their products.

Government to offer support to those vernacular radio stations broadcasting agricultural programs. This can be done through offering subsidies or tax waiver to those vernacular radio stations broadcasting agricultural programs to encourage production of more of these programs.

County governments should facilitate extension so as to supplement the information already delivered through radio to farmers in various wards. This should be done by having a budgetary allocation for production of pictorial pamphlets that are demonstrative of the various value addition activities to allow farmers to practically observe what they hear on radio.

County governments and cooperatives to set up agro-processing factories to protect farmers from unscrupulous middlemen and to enable them add value to their produce through simple value addition techniques.

Recommendation for a further study

As a result of limited time and resources the researcher concentrated on two wards in Nyaribari Chache Sub-County and one case of vernacular radio. Therefore, for a study that is to give a true picture of in the country, there is need for comparative studies to be done in different parts of the county and country

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