

Research Article

Farmers' access to agricultural information through radio and television: the case of Menoua division in West Cameroon

NDEMDOU B*, FONGANG FGH

Department of Rural Socio-Economics and Agricultural Extension, University of Dschang, P.O. Box 222 Dschang, Cameroon

Abstract

The objective of this study is to analyze the access to agricultural information through radio and television by farmers in the Menoua division in Cameroon. The data in this study are derived from questionnaire surveys conducted with 200 farmers and interview guide surveys conducted with 23 resource persons. Farmers were selected using sampling techniques such as: reasoned choice, snowball and simple random sampling. The results show that, 57% of agricultural surveys have a radio at home that has been obtained through purchase (55.5%) and donation (1.5%). 37.5% of them often listen the radio and 19.5% regularly listen it. 45.5% of surveys listen a radio at home, 11% in the bar and 0.5% at a neighbor's house. 39.5% of farmer's surveys receive agricultural information from the radio. 9 radio stations providing agricultural information to the farmers and the public radio station called CRTV radio in Bafoussam is mostly solicited. 68% of farmers' surveys have a television set mostly obtained through purchase (67.5%) and donation (0.5%). Six various origins of a television set has been identified by farmers: personal efforts, children, a head of household (husband), a wife, a member of family and an acquaintance. 69.5% of agricultural surveys watch television in two ways: often (36.5%) and regularly (33%). 59% watch television at home, 10% in the bar and 0.5% at a neighbor's house. 47% of surveys receive agricultural information on television through five television channels, dominated by private own such as Equinoxe Television (33%). Five opportunities to access agricultural information provided by radio and television have been named: the specialized agricultural programs, the reading of announcements, advertisements, news program and the programs that are not spe-

*Corresponding author: Ndemdou B, Department of Rural Socio-Economics and Agricultural Extension, University of Dschang, P.O. Box 222 Dschang, Cameroon. E-mail: bndemdou@gmail.com

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cialized in agriculture. Farmers consider that the information they receive from these channels is useful for their work.

Keywords: Agricultural information; audiovisual channels; radio; television; farmers; Menoua; Cameroon

Introduction

In this paper, audiovisual channels refer to radio and television. According to an author, "broadcasting is transmitting information over radio waves from a radio or television station to a distant and near audience through their receivers, which help decode the information. Similarly, broadcasting involves the transmission of information by an organization using its radio or television broadcaster to a large, widespread, diverse audience via its receivers" [1]. Radio is regularly used in Algeria only during agricultural campaigns to access to the agricultural information [2]. The potential of radio is that it provides farmers with agricultural information and also points them to resource persons [3]. It is noted that the Western region of Cameroon is covered by 24 radio stations, four of which broadcast from the Menoua Division [3]. Farmers of the West region of Cameroon are usually accessed to agricultural information through radio. Compared to radio, television has the advantage of providing information accompany with images. This is the additional information that drives the farmer to use television. An author notes that in Nigeria, farmers use television as their agricultural information channel [4]. In Algeria, the annual mass extension program (PAVM) broadcasts 30-60 second commercials and programs of at least five and at most six minutes once at the beginning of the week and at week-ends [2]. Generally, farmers are usually accessed to agricultural information through television. So, this study will analyze the access to agricultural information through radio and television by farmers in the Menoua division in Cameroon by focus to the following points: possession at home, mode of acquisition, the origin, access to listen or watch, location, access to agricultural information, channels providing agricultural information and opportunities to access agricultural information.

Literature Review

Despite the fact that we are living in an era revolutionized on all fronts through the influence of new information and communication technologies (NICTs), radio, television and the written press are likely to induce socio-cultural mutations among rural populations [5]. Authors interested in the rural environment are increasingly orienting their work towards the retransmission and dissemination of radio and television programs and broadcasts, with particular emphasis on the relationship of rural broadcasting with radio itself, digital and television [5]. A number of studies have focused on the role of mixed media in rural communication. The authors focused in particular on audiovisual media such as radio and "radiocassette". It emerged that, in the context of rural development, these media are necessary for promoting the achievements of innovations and development programs [1]. In rural development, radio and television are purposely exploited by farmers in countries around the world at different scales [1]. These authors note a variability in the levels of use of these two audiovisual

media, which are much in demand by farmers around the world. Their investigations also show that, according to the farmers surveyed, radio and television are two useful components of audiovisual media in rural areas. With regard to the dissemination of agricultural information through audiovisual media, it is strongly recommended that the government of Bangladesh develops and adopts a strategy that takes into consideration the nationwide commercial communication network, specifically referring to Hridoye Mati O Manush, the author's study area [6]. This network obviously takes into account radio and television, two media highly valued by rural populations. In Bangladesh, agricultural productivity is positively influenced by the content of radio and TV programs. It should be noted that digital audiovisual content makes a vital contribution to the teaching-learning process in Bangladesh [1]. This strongly suggests, according to the authors, that audiovisual content is a factor that stimulates growth in the national gross domestic product of the Bangladesh economy.

In Algeria, national and local radio stations organize monthly broadcasts on an important topic related to development [2]. The four- to five-minute spots or flashes are broadcast to provide technical advice and information to producers about "incentive measures, epizootic problems" [2]. The following summary of the number of broadcasts and radio spots broadcast from 2000 to 2006 has been given in Table 1.

| Period | Number of broadcasts and radio spots |
|-------------------|--------------------------------------|
| 2000/2001 | 3998 |
| 2001/2002 | 1103 |
| 2002/2003 | 837 |
| 2003/2004 | 1168 |
| 1st semester 2006 | 593 |

Table 1: Number of radio programs and spots from 2000 to 2006 in Algeria
Source: INVA in Alger. Summary of the extension component, 2004 [2]

The period from 2000 to 2001 records the largest number of radio spots and programs broadcast, with more than 800 recorded each year. On average 64.1% of households have a radio in Malawi [7]. 46.7% of respondents say that radio is the second best information channel for melon farmers in Nigeria [8]. 22.2% of them prefer to receive agricultural information on the radio. In Kenya, farmers note that radio is the most important agricultural information channel [4]. In Nigeria, 63.2% of farmers say that radio is their information channel and 28.4% of farmers prefer to get their agricultural information through this medium [4]. The least important information channel among radio stations providing agricultural information to farmers in the Western Region of Cameroon are public radio's which represent only 12.5% of the sample [3]. In this region of the country, farmers are more likely to be interested in community radio stations at the expense of public and private commercial stations [3]. The authors point out the fact that they use dialects (local languages) and that the programs are interactive [3].

In a study conducted in rural Arunachal Pradesh, it emerged that mass media is essential for all types of community development, irrespective of the sector, and radio is considered "the lungs and soul of the rural population" in bringing development to the villages" [5]. According to these authors, in rural areas, radio is considered to be the main medium for clusters in the search for audiovisual information. In

the current state, where NICTs dominate the daily lives of human beings, bringing about behavioral changes, radio plays a primordial role in these changes in rural areas: leading the transition from traditional to modern society [9], [5]. Radio therefore plays a key role in facilitating behavioral change. Whether in urban or rural areas, numerous research studies reveal that radio regularly garners the highest number of scores as the main source of newspapers broadcast [9], [5].

According to some authors, community radio is in great demand in rural areas because of the logistical advantages it offers: it's easy to transport, portable, doesn't necessarily need electricity, and can be used as a vacant space for agricultural activities. In India, community radio stations are the forerunners of rural development [9]. Thanks to the variability of local and national radio programs and broadcasts in the Indian state of Arunachal Pradesh, broadcasting has reached its apogee with 5 radio stations, all located in Pasighat, Itanagar, Ziro, Tezu and Tawa respectively. They broadcast in local languages, including English, and in their mother tongue, Hindi [9]. Until 2023, there were 420 radio stations in India, producing a multitude of programs and broadcasts in 23 languages and 146 local languages [9].

For farmers in Vietnam, television facilitates increased crop productivity [10]. Only 5.6% of melon farmers receive agricultural information on television in Nigeria [8]. Television serves as a channel for agricultural information, sometimes providing information to farmers in rural Bangladesh [11]. The number of TV programs and spots broadcast in Algeria from 2000 to 2006 are shown in Table 2 below.

| Période | Number of programs and TV spots | Number of themes |
|-------------------|---------------------------------|------------------|
| 2000/2001 | 230 | 148 |
| 2001/2002 | 320 | 297 |
| 2002/2003 | 242 | 205 |
| 2003/2004 | 207 | 103 |
| 1st semester 2006 | 2600 | 650 |

Table 2: TV programs and spots by theme from 2000 to 2006 in Algeria.
Source: INVA in Alger. Summary of the extension component, 2004 [2].

There is a diversity of themes addressed by these television programs and sports, with at least 100 themes per year. The main reason for this development in the first half of 2006 is the involvement of the Algerian government, which now provides support to farmers and television channels.

Materials and Methods

Population of Study: The population of Menoua Division is made up of four main ethnic groups these are the Bamilekes who are in the majority, and the Mbos, Hausas and Bororos minorities. All of them are yembaphones (the local language spoken in Menoua). The other three groups add their own languages to this mix, including the Mbo language (spoken by the Mbos), Hausa language, and Fulbe language. The population engages in various activities such as trade, craftsmanship, livestock breeding, and, notably, agriculture, which serves as the flagship activity, with over 80% of inhabitants involved.

Study Area: The Menoua Division is one of the 8 divisions in the Western Region, created in 1972. Its main town is Dschang, located 45 km from Bafoussam, which is the capital of the region. With a surface area of 1380 km² [12], Menoua on the West Cameroon Highlands is positioned at an altitude ranging from 1100 to 1500 m [12]. It

constitutes the second level administrative division just after the region. Its administrative organization comprises 6 subdivisions in total, headed by divisional officer: Dschang, Fokoué, Fongo-Tongo, Nkong-Ni, Penka-Michel and Santchou. These administrative districts consist of clusters of villages, which are further subdivided into individual villages. Placed under the authority of a senior divisional officer, it is then composed of 6 district municipalities: Dschang in the center, Fongo-Tongo in the north, Nkong-Ni, Penka-Michel and Fokoué in the east, and Santchou in the south. The location of Menoua division can be seen on a map as shown in Figure 1 below.

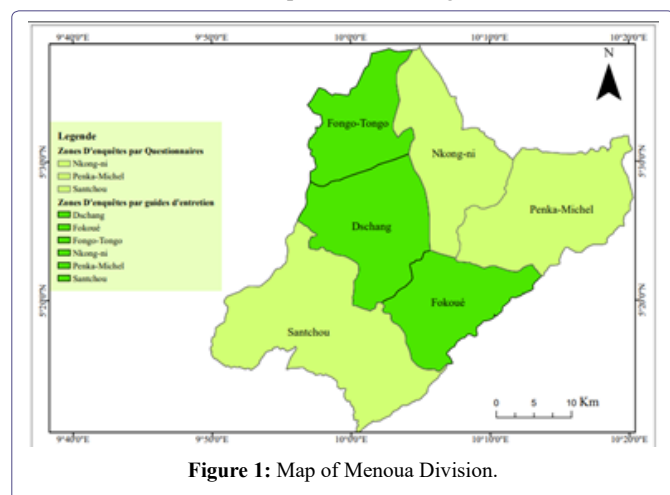


Figure 1: Map of Menoua Division.

Data Collection and Analysis: The data for this survey were collected from a sample of 200 farmers with a minimum age of 21 years and 23 resource persons. All farmers reside in Menoua Division, while some resource persons do not. The surveys were conducted in 3 separate periods. The first one took place from 23 November 2019 to 10 February 2020. It concerned only the farmers of Balessing, Bafou-Nord, Bansa-Ville and Santchou. The second took place in June 2020 and the third in July 2020. They involved interviews with 10 radio station managers, 3 television station managers, 6 decentralized services of the Ministry of Agriculture and Rural Development, 2 divisional services of the ACEFA program, and 2 extension advisers. Farmers were selected using purposive, snowball and simple random sampling techniques. Data from the questionnaire survey were analyzed by the Statistical Package for the Social Sciences (SPSS) software for descriptive statistics. The data from the interview guide surveys were transcribed and analyzed according to the logic of the themes predefined in the survey tools.

Results and Discussion

The radio

Possession of a radio at home: 114 out of 200, or 57% of farmers' surveys, have a radio at home. Table 3 shows the percentage of farmers' surveys who have a radio at home by locality.

| Production basins | Workforce | Percentage |
|-------------------|-----------|------------|
| Santchou | 21 | 10.5 |
| Balessing | 32 | 16 |
| Bansa-Ville | 33 | 16.5 |
| Bafou-Nord | 28 | 14 |
| Total | 114 | 57 |

Table 3: Farmers' surveys with a radio at home.

This table shows that the agricultural production basins of Bansa-Ville (16.5%) and Balessing (16%) recorded a higher percentage of farmers' surveys who have a radio at home. 86 out of 200, or 43%, do not have one. Santchou had the highest number of farmers' surveys who did not have a radio in their homes. In this agricultural production basin, everyone points an accusing finger at the level of isolation of the Mbô plain in Menoua. These results corroborate those of authors who noted in Malawi in 2008 that 64.1% of households had a radio [7]. 42% of farmers' surveys in Santchou say that it is almost useless to have a radio at home. They put forward two reasons: it will be too painful to listen to it and the quality of listening of the sound produced will not be good.

Mode of radio acquisition: For the 114 farmers' surveys who had a radio, 2 modes of acquisition were recorded: purchase and donation. 55.5% (111 out of 114) obtained their radios by purchase and the remaining 1.5% by donation.

In Santchou and Bafou-Nord, 20 out of 21 and 26 out of 28 farmers' surveys, respectively, also used purchases. Three out of 114 farmers' surveys obtained their radios through offers/donations. Thus, the second mode of access was used by only 1.5% of agricultural surveys. This proportion confirms the words of an elderly man in his sixties in Santchou, an elementary school principal who has been retired for 7 years: Nowadays it is each person who manages as he can to look for what will be useful to him. You ask me if I bought my radio or if someone gave it to me. You want me to tell you who gave it to me? Only lucky parents benefit from the impact of their work on their children, and I am not one of them yet. At my age, I still rely only on my own efforts, yet I have worked hard for mine. When we were like you [pointing to the person he was talking to], we helped our parents, but now things have changed. I remember buying my father a radio-cassette set in the 1970s when I was only in the second grade. There, I was returning from vacation to start my 6th grade class in a secondary school in Dschang. Nowadays, young people have their own ways of doing things that perhaps suit their time and the copy of individualism that the West proposes and imposes on them morally.

In Bansa-Ville, a respondent with an almost identical profile holds the opposite view to that of his former colleague, even though he is in his fifth year of retirement. He states: I bought radios for a long time and regularly after my old radio cassette deteriorated. For more than 15 years now, when I really decided to farm on a plantation that I bought from a native of this town, my children are the ones who know how much one buys radios at the market. I use these 15 years as a benchmark because it was at that time that my first son gave me a gift for the very first time, and it was a new 4-battery radio that had just come on the market. Now his little brother has bought me another one that also uses the USB stick.

Origin of the radio: The farmer's surveys acquired their radios from people with different statuses. Table 4 shows the status of the suppliers of radios to their users.

| Status of suppliers | Workforce | Percentage |
|----------------------------|-----------|------------|
| Offspring | 37 | 18.5 |
| Head of household: husband | 18 | 9 |
| Wife | 1 | 0.5 |
| A family member | 9 | 4.5 |
| An acquaintance | 3 | 1.5 |
| Total | 114 | 57 |

Table 4: Status of radio providers to their users.

This table shows that 18.5% of our farmer's surveys received their radios from their offspring while 0.5% received them from their wives. This table shows that 23% of farmers' surveys have personally bought a radio and 18.5% have received theirs from their offspring. One woman, or better still one wife, had a radio in her household. Each of the 9 farmers' surveys, who received their radios from a family member, without it being an offer or a gift, explained that they were the children of their families whom they looked after as adoptive parents. They bought these radios when they were still living with them. When they left to pursue a career, they left them at home where the items had been since their purchase for family use. The 1.5% of respondents who benefited from the generosity of an acquaintance was the 3 who received offers from their relatives.

One of them, a man in his sixties in Bafou-Nord, told us that he has two radios. One of them, the one he bought himself 20 years ago, was no longer able to transmit, following a violent thunderclap that had rumbled through the village less than two weeks before our interview with him in January 2020. The second one had just been bought from him 2 days before our arrival, by a young man in his twenties, who used to leave from the neighboring village in the English-speaking part of the country (Moockbing), to work on his plantation for a daily fee. Since the beginning of the crises in the English-speaking regions of Cameroon, this young man crossed over to be employed by the old man with whom they now share the same family compound and a single modern hut in which they listen the radio together, depending on the time and type of information they need.

Of the farmers' surveys who did not buy a radio themselves, 108 out of 111, or 54%, did not make a request of any kind. Each buyer found value in his or her action. In Balessing, a young married man revealed that what will be useful to him or his household, such as a radio that allows him to learn about his activity (agriculture) through the programs he mentioned, should not be the object of a special request from his wife or his children. The most important thing for him is to have the possible finances to do so.

Access to radio listening: 57% of our farmers' surveys listen to the radio. Two main frequency of listening to the radio were noted: often (37.5%) and regularly (19.5%). 43% do not listen to the radio at all. Table 5 presents the percentage of farmers' surveys by locality according to their access to radio listening.

| Production areas | Access to listening | | No access to listening | | Total | |
|------------------|---------------------|------------|------------------------|------------|------------|------------|
| | Workforce | Percentage | Workforce | Percentage | Workforce | % |
| Santchou | 25 | 12.5 | 25 | 12.5 | 50 | 25 |
| Balessing | 25 | 12.5 | 25 | 12.5 | 50 | 25 |
| Bansoa-Ville | 32 | 16 | 18 | 9 | 50 | 25 |
| Bafou-Nord | 32 | 16 | 18 | 9 | 50 | 25 |
| Total | 114 | 57 | 3 | 43 | 200 | 100 |

Table 5: Farmers' surveys by accessibility to radio.

According to this table, respondents in Bafou-Nord and Bansoa-Ville have the highest level of radio access, with 16% for each basin. Santchou and Balessing exhibit the highest percentage of farmers' surveys who do not listen to the radio at all, with a proportion of 12.5% in each area. In Santchou, farmers in areas where road infrastructures do not exist will find it difficult to access radio information.

In this basin, people are forced to adapt antennas to receive the radio signal. Not all farmers' surveys accept this rule.

The frequency with which farmers' surveys listen to the radio varies from one agricultural production basin to another. In contrast to farmers who listen to the radio often, those who listen on a regular base are distributed as follows: 14 out of 32 in Bansoa-Ville, 9 out of 25 in Santchou and 9 out of 32 in Bafou-Nord, and 7 out of 24 in Balessing. Two reasons justify the higher frequency of regular listening recorded in Bansoa-Ville: more than half of the 20 farmers' surveys had received training in agriculture, and a large number of farmers who are current or retired government employees reside there and carry out agricultural activities.

Location of radio listening: Farmer's surveys listen to the radio in three different places: at home, in the bar and at a neighbor's house. Table 6 shows the percentage of farmers' surveys by locality according to where they listen to the radio.

| Production areas | At home | | At the bar | | At the neighbor's | | Total | |
|------------------|-----------|-------------|------------|-----------|-------------------|------------|------------|-----------|
| | Workforce | % | Workforce | % | Workforce | % | Workforce | % |
| Santchou | 18 | 9 | 6 | 3 | 1 | 0.5 | 25 | // |
| Balessing | 23 | 11.5 | 2 | 1 | // | // | 25 | // |
| Bansoa-Ville | 25 | 12.5 | 7 | 3.5 | // | // | 32 | // |
| Bafou-Nord | 25 | 12.5 | 7 | 3.5 | // | // | 32 | // |
| Total | 91 | 45.5 | 22 | 11 | 1 | 0.5 | 114 | 57 |

Table 6: Farmers' surveys by location of radio listening.

This table shows that 45.5% of farmer's surveys, or 91 out of 114, listen to the radio at home. Bafou-Nord and Bansoa-Ville record 25 out of 32 farmers' surveys each. Santchou has the lowest score, at 18 out of 25. After returning from their plantations, many farmers devote themselves to preparing for the next day's work, which is usually the following day. The reason given by farmers' surveys in Santchou and Balessing is that they need to "save time". 0.5%, or 1 out of 114, listens to the radio at the neighbors' in Santchou. This behavior can be justified by the generosity of the neighbors, the farmers' surveys marital status (bachelorhood), the absence of dependent children and good relations with the neighborhood.

Access to agricultural information through the radio: 79 out of 114, or 39.5% of farmer's surveys receive agricultural information from the radio. Table 7 shows the percentage of farmers' surveys who have access to agricultural information on the radio by locality.

| Production basins | Workforce | Percentage |
|-------------------|-----------|-------------|
| Santchou | 16 | 8 |
| Balessing | 21 | 10.5 |
| Bansoa-Ville | 23 | 11.5 |
| Bafou-Nord | 19 | 9.5 |
| Total | 79 | 39.5 |

Table 7: Farmers' surveys with access to agricultural information via radio.

This table shows that farmers' surveys in Bansoa-Ville (11.5%) receive most agricultural information through the radio, while those

in Santchou (8%) receive the least. Unlike their colleagues, it is possible that farmers who receive information about their activities on the radio have specialized agricultural programs. Our results corroborate those of some authors who found radio to be a popular agricultural information channel for farmers. Then, radio is the second best channel of information for melon farmers in Nigeria (46.7%) and these farmers prefer to receive their information from the radio [8]. In Nigeria, radio is the most important channel that provides agricultural information to farmers [4]. 63.2% of farmers say that radio is a priority channel [8]. Radio is regularly used in Algeria only during agricultural campaigns [2]. The potential of radio lies in its ability to furnish farmers with agricultural information and guide them towards resource persons [3].

Radio channels providing agricultural information: The distribution of farmer's surveys who receive agricultural information through the radio can be illustrated using a figure that presents the numbers and respective proportions per radio channel.

Table 8 shows that 21% of farmers' surveys receive their agricultural information from CRTV radio in Bafoussam. Some farmers' surveys chose all the radio channels as their second and third choice. Surveys added 2 other stations to the list of radios: Bansoa University Radio in Bansoa-Ville and Batcham Radio in Balessing. The local stations Radio-Yemba and Radio Ngié-lah, which broadcast in Dschang and are supposed to be closer to the populations surveyed, each received 4.5% of farmers' surveys choices. This low proportion can be explained by the fact that most of the information they offer to farmers is secondary. The farmers' surveys noted that most often, listening to these radio channels is motivated by the use of the local language and the difficulty of receiving CRTV Bafoussam. Our results differ from those of some authors who show that public radio's (12.5%) are the least important agricultural information channels for farmers in the Western region of Cameroon [3].

| Radio stations | Workforce | Percentage |
|-----------------------|-----------|-------------|
| RFI | 10 | 5 |
| Africa N°1 | 4 | 2 |
| CRTV Bafoussam | 42 | 21 |
| Radio Poala Bafoussam | 3 | 1.5 |
| Radio Yemba | 9 | 4.5 |
| Radio Ngié-lah | 9 | 4.5 |
| Radio Nkwalah | 1 | 0.5 |
| Autres | 1 | 0.5 |
| Total | 79 | 39.5 |

Table 8: Number of farmers interviewed by radio station.

Several farmer's surveys noted factors that most often force some of them to listen to local radio stations. These 2 factors, which are not common to the 4 agricultural production basins, are: the use of the local language and the difficulty of receiving CRTV Bafoussam.

The local language: still called the mother tongue, the local language is most often used in local radio stations to transmit information to farmers. This is done to the great satisfaction of farmers who feel compelled to subscribe to it forever because the satisfaction in terms of supply is there. This reason is even more justified since it has already been observed that the radio channels which farmers listen to the most are the ones that make their place prevail value them [7].

An author follows this same line of thought and speaks of an added advantage: easy accessibility by farmers who have not had the chance to pursue a long period of education and are therefore very poorly educated [3].

Difficulty in receiving CRTV Bafoussam: whether in Bafou-Nord or Santchou, where it is respectively difficult on the one hand and almost impossible on the other hand for listeners to receive CRTV Bafoussam, only local radio stations are listened to. The figures tell us more: in Bafou-Nord, 12 out of 19 respondents said that they receive their agricultural news from local channels, compared to 5 for CRTV Bafoussam. In Santchou, 7 out of 16 farmers' surveys say they receive their agricultural news from local radio stations, compared to 4 for CRTV Bafoussam.

Opportunities to access agricultural information provided by radio: 31 out of 79 farmers' surveys receive agricultural information on the radio thanks to specialized agricultural programs: Bansoa-Ville and Bafou-Nord recorded 11 and 10 farmers' surveys respectively while the other 2 agricultural production basins have 5 each. We note that the farmers' surveys have a solid knowledge of the programs that deal solely with agricultural information on the radio stations. They said that these programs often bring them satisfaction. Our results are similar to those of an author who notes that in Algeria, programs and spots dealing with agricultural information were broadcasted on the radio over a period of five and a half years [2]. These programs and spots were specialized in agriculture.

25 out of 79 farmers' surveys receive agricultural information on the radio through the reading of announcements: 9 in Balessing, 7 in Bafou-Nord, 6 in Bansoa-Ville and 3 in Santchou. Our farmers' surveys revealed that most of these announcements come from state institutions and concern events initiated by members of the government and more precisely politicians in Menoua.

11 out of 79 farmers' surveys receive information on agriculture from radio advertisements: 5 in Bansoa-Ville, 4 in Balessing and 1 in each of the other 2 basins. Farmers' surveys indicated a tendency to associate advertising with non-specialist programs. Advertising spots or flashes are broadcasted in Algeria by local and government radio stations to provide technical advice and information to producers. He specifies that these media have duration of 4 and 5 minutes [2].

8 out of 79 farmers' surveys used the radio news program to obtain information on agriculture. 6 out of 8 of these respondents are in Santchou. Programs that are not specialized in agriculture were chosen by only 4 farmers' surveys.

Television

Ownership of a television set at home: In Menoua Division, 136 out of 200 farmers' surveys, or 68%, each have a television set, while 32% do not. Table 9 shows the percentage of farmers' surveys who have a television set at home by locality.

| Production basins | Workforce | Percentage |
|-------------------|------------|------------|
| Santchou | 39 | 19.5 |
| Balessing | 31 | 15.5 |
| Bansoa-Ville | 32 | 16 |
| Bafou-Nord | 34 | 17 |
| Total | 136 | 68 |

Table 9: Farmers' surveys with a television set at home

This table shows that farmers' surveys with a high number of television sets at home are those found in Santchou production basin (19.5%). In contrast to the television set, there is a large workforce of people here who also make an additional investment in terms of a set to ensure a diversity of channels and better image quality.

Mode of acquisition of the television set: There exist 2 principal ways of acquisition of a television set: purchase and offer/donation. 67.5%, i.e. 135 out of 136, obtained their television sets by purchase. Table 10 shows the percentage of farmers' surveys by locality according to the method of acquisition of a television set.

| Production basins | By purchase | | By donation | | Total | |
|-------------------|-------------|-------------|-------------|------------|------------|-----------|
| | Work-force | Percentage | Work-force | Percentage | Work-force | % |
| Santchou | 39 | 19.5 | // | // | 39 | 19.5 |
| Balessing | 31 | 15.5 | // | // | 31 | 15.5 |
| Bansoa-Ville | 31 | 15.5 | 1 | 0.5 | 32 | 16 |
| Bafou-Nord | 34 | 17 | // | // | 34 | 17 |
| Total | 135 | 67.5 | 1 | 0.5 | 136 | 68 |

Table 10: Percentage of farmers' surveys by locality according to the mode of acquisition of a television set.

This table shows that almost all the owners of television sets in our agricultural production basins obtained them through. Only 1 farmer survey in Bansoa-Ville said he received his own from a gift. Our results show that the African way of life, better known as Bantu, which is dominated by sharing, is in full perdition. Some of its characteristics are: mutual aid, support from members of the family or society, burden-sharing between members of society and interpersonal relationships.

Origin of the television set: The proportions of farmers' surveys regarding the origin of television sets are diverse and varied. Table 11 shows the status of suppliers of television sets to their users.

| Status of suppliers | Workforce | Pourcentages |
|----------------------------|------------|--------------|
| The owner | 60 | 30 |
| The offspring | 42 | 21 |
| Head of household: husband | 23 | 11.5 |
| The wife | 00 | 00 |
| Family member | 11 | 5.5 |
| An acquaintance | 00 | 00 |
| Total | 136 | 68 |

Table 11: Status of providers of television sets to their users.

This table shows that 30% of farmers' surveys obtained a television set by their personal efforts. 21% received theirs from their children. A family member bought one for 5.5% of farmers' surveys without it being a gift. Only 0.5%, or 1 farmer survey, received a gift from a family member, specifically from the younger sister. Of the farmers' surveys who did not personally obtain a television set, 35% said they had not made a request.

Access to television viewing: 139 out of 200, or 69.5% of farmers' surveys watch television. These viewers watch television in 2 ways: often (36.5%) and regularly (33%). 30.5% do not watch television at all. Table 12 presents the percentage of farmers' surveys by locality according to their access to television viewing.

| Production basins | Access to viewing | | No access to viewing | | Total | |
|-------------------|-------------------|-------------|----------------------|-------------|------------|------------|
| | Work-force | Percentage | Work-force | Percentage | Work-force | % |
| Santchou | 40 | 20 | 10 | 5 | 50 | 25 |
| Balessing | 30 | 15 | 20 | 10 | 50 | 25 |
| Bansoa-Ville | 34 | 17 | 16 | 8 | 50 | 25 |
| Bafou-Nord | 35 | 17.5 | 15 | 7.5 | 50 | 25 |
| Total | 139 | 69.5 | 61 | 30.5 | 200 | 100 |

Table 12: Farmers' surveys by accessibility to television viewing.

This table shows that farmers' surveys in Santchou (20%) have the most access to television viewing. Balessing has the highest proportion of farmers' surveys who do not watch television at all (10%). The percentage of farmers' surveys who watch television (69.5%) shows the tendency for farmers to want to watch rather than just listen. In Santchou, it should be added that television is a means of overcoming the thorny problem of difficulty in receiving the radio signal.

The frequency of television viewers varies from one agricultural production basin to another. In Santchou, 31 out of 40 viewers regularly watch television, compared to 15 out of 30 in Balessing, 11 out of 35 in Bafou-Nord and 9 out of 34 in Bansoa-Ville. The distribution by basin of farmers who often watch television is as follows: 25 out of 34 in Bansoa-Ville, 24 out of 35 in Bafou-Nord, 15 out of 30 in Balessing and 9 out of 40 in Santchou.

Location of television viewing: Farmers' surveys watch television in three different places: at home, in the bar and at a neighbor's house. Table 13 shows the percentage of respondents by locality according to where they watch television.

| Production areas | At home | | At the bar | | At the neighbor's | | Total | |
|------------------|------------|-----------|------------|-----------|-------------------|------------|------------|-------------|
| | Work-force | % | Work-force | % | Work-force | % | Work-force | % |
| Santchou | 39 | 19.5 | // | // | 1 | 0.5 | 40 | 20 |
| Balessing | 23 | 11.5 | 7 | 3.5 | // | // | 30 | 15 |
| Bansoa-Ville | 24 | 12 | 10 | 5 | // | // | 34 | 17 |
| Bafou-Nord | 32 | 16 | 3 | 1.5 | // | // | 35 | 17.5 |
| Total | 118 | 59 | 20 | 10 | 1 | 0.5 | 139 | 69.5 |

Table 13: Farmers' surveys by TV viewing location

This table shows that 59% of farmers' surveys, i.e. 118 out of 139, watch television at home: 39 out of 40 farmers' surveys in Santchou, 32 out of 35 farmers' surveys in Bafou-Nord, 24 out of 34 surveys in Bansoa-Ville and 23 out of 30 in Balessing. As observed with the radio, many farmers prefer to stay in their homes at the end of the day. The basic reason given by the farmers' surveys is that they need to rest in order to return to work on the next day, since in addition to farming, they also carry out secondary activities such as trading, motorbike transport and loading. This is in line with authors who listed a whole range of activities available to young Cameroonians around the Bamboutos Mountains, in addition to farming [13].

10%, or 20 out of 139 farmers' surveys, watch television in the bar: 10 out of 34 in Bansoa-Ville and 7 out of 30 in Balessing, 2 out of 35 in Bafou-Nord and 1 out of 40 in Santchou. It is clear that the farmers' surveys are more concerned with a well-organized family

life than with frequenting beer bars. They said that they were more concerned about the education and training of their offspring with the aim of seeing them exercise professions different from their own.

0.5% or 1 out of 139 farmers' surveys watch television at their neighbors' homes in Balessing. Unlike the single farmer survey in Santchou who listened to the radio at his neighbors', a survey who watches at his neighbors' has been married for years and has several children to support.

Access to agricultural information through television: Among the farmers' surveys who watch television, 94 out of 139, or 47%, receive agricultural information on television. However, 45 out of 139, or 22.5% of farmers' surveys said that television does not provide them with information on agriculture. It is important to consider the types of television programs that farmers' surveys are interested in. Table 14 shows the percentage of farmers' surveys who have access to agricultural information through television by locality.

| Production basins | Workforce | Percentage |
|-------------------|-----------|------------|
| Santchou | 32 | 16 |
| Balessing | 21 | 10,5 |
| Bansoa-Ville | 17 | 8,5 |
| Bafou-Nord | 24 | 12 |
| Total | 94 | 47 |

Table 14: Farmers' surveys with access to agricultural information on the television.

This table shows that farmers' surveys in Santchou (16%) receive most agricultural information through television, while those in Bansoa-Ville (8.5%) receive the least. Farmers who receive agricultural information on television are those who watch specialized television programs. Some of them sometimes give importance to subjects related to agriculture.

Our findings align with those of certain authors who consider television to be a highly significant channel for agricultural information among farmers. 43.3% of farmers in Nigeria said that television provides them with agricultural information [4]. It is noted that in Algeria, this medium is much in demand for accompanying farmers during agricultural campaigns throughout the year [2]. This medium allows farmers to improve their perception and knowledge and enables them to boost the productivity of their crops [10]. However, our results differ from those of other authors. Differences are observed on the proportions. Television informs only 5.6% of melon farmers [8].

Television channels providing agricultural information: The distribution of farmers' surveys who receive agricultural information through television can be made from Table 15 which presents both the numbers and percentages by television channel.

| Television channels | Workforce | Percentage |
|-----------------------|-----------|------------|
| Equinoxe Television | 66 | 33 |
| STV | 1 | 0,5 |
| Canal 2 International | 11 | 5,5 |
| CRTV | 14 | 7 |
| Others | 2 | 1 |
| Total | 94 | 47 |

Table 15: Distribution of farmers' surveys according to TV channels providing agricultural news.

Table 15 shows that 33% of our farmers' surveys receive their agricultural information from Equinoxe television. 2 of the farmers' surveys in Santchou and Balessing added the National Geographic television channel to this list of 4. Equinoxe Television and Canal 2 International provide interesting agricultural information to farmers. They provide theoretical and practical programs at the national and international level. The proximity and nature of these agricultural television programs militate in favor of these 2 television channels. The 2 local channels, Dschang Television in Dschang and NG Television in Bafoussam, were not chosen by the respondents. In addition to the main failure to provide most agricultural information in the background, the farmers' surveys also noted: the poor quality of the images, the precariousness of the viewing, and the mismatch between the images and the comments. Some respondents mentioned two reasons why they would have preferred to watch local private television channels: the value attributed to these channels and the expectation that they would cover agricultural topics relevant to their localities. The proportion of farmers' surveys who watch CRTV (7%) is probably proof that farmers' surveys who watch TV have the least need for agricultural information on agricultural policies in Cameroon.

Opportunities to access agricultural information provided by television: In Menoua Division, 47 out of 94 farmers' surveys, or 23.5%, receive agricultural information on television thanks to programs specializing in agriculture: Santchou and Bansoa-Ville have 17 and 13 farmers' surveys respectively, while Balessing and Bafou-Nord have 10 and 8 farmers' surveys. This means that the farmers' surveys have a good knowledge of television programs that deal specifically with agricultural information on television channels. They said that these programs often satisfy their needs. In addition, they are satisfied with the information they receive, since they logically need agricultural information that has certain reliability.

26 out of 94 farmers' surveys receive agricultural news on television from the news releases: 14 in Bafou-Nord, 6 in Santchou, 4 in Balessing and 2 in Bansoa-Ville. Similar to radio news broadcasts, respondents indicated that the news releases that provide them with agricultural information are predominantly associated with government institutions and primarily focus on events initiated by government members, particularly politicians in Menoua.

16 out of 94 farmers' surveys receive information on agriculture from television advertisements: 7 in Santchou, 5 in Balessing and 2 in each of the other two basins. Unlike radio, where some of the farmers' surveys tended to equate advertising with non-specialized programs, they explained that there is space on television allocated to broadcasting agricultural television spots. Advertising holds significant importance, particularly considering the observation that Algeria attained the highest volume of television advertising programs and spots in 2003, 2004, and 2006. This was followed by the prominence of television program themes and spots [2].

Only 3 out of 94 farmers' surveys learn about agriculture through the production of TV news editions. They were surveyed in Balessing (2) and Santchou (1). Television programs that are not specialized in agriculture recorded only 1 choice from a respondent in Santchou.

Conclusion

In conclusion, this study has identified five radio stations and one television station in Menoua Division, all of which offer programs specifically designed for farmers. Radio and television play an

important role in the dissemination of agricultural information to farmers. In the dissemination of information to farmers in Menoua Division, television is both the most accessible and the most preferred medium. This information channel offers five types of programs to farmers: specialized agricultural programs, reading of press releases, advertisements, news programs, and non-specialized agricultural television programs. Almost three decades ago, radio and television were popular channels of information for farmers, but as time goes by, they are less and less sought after. In comparison to television, which has surpassed it in terms of farmers' demand for and access to information, radio is experiencing a decline in its value. From an extension perspective, both radio and television would benefit from allocating more time to specialized programs, initiating debates with farmers and making mini-reports on farmers' farms in the Menoua Division.

Recommendations

• Local Medias

- To multiply broadcasts and micro-programs from the agropastoral world, making them interactive to capture farmers' interest.
- To include 3 to 4 minutes devoted to agricultural information in newspaper editions.
- To initiate biweekly agro-pastoral advertorials.

• Farmers

To target radio and television broadcasts and take particular interest.

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Conflict of interest

The authors declare that there is no conflict of interest.

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