



# Radio and Mobile Telephony

## The Gender Factor

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The BoldSteps Foundation team<sup>23</sup> conducted a 12-month research project in Northern Ghana to tackle a number of key questions relating to the convergence of radio and mobile telephony and its potential impact on rural access, trends and development. Key thoughts and questions guiding the research included:

- Which of the newer information and communications technologies (ICTs) (mobile phones and Internet in this case) are more popular with various categories of radio listeners and radio content producers?
- What are the patterns of use among men and women?

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- What are the factors that influence people's ability/willingness to contribute to radio content?
- What proportion of radio listeners, by age, sex, profession, place of residence and education, attempt to contribute to radio content?
- What channels are listeners most likely to use in contributing to radio content?

The research found that Northern Ghanaians are generally willing to contribute to radio content but are limited in doing so due to a number of factors, which will be explored below.

### **Introduction and Background**

Members of the BoldSteps research team have been working since 2008 in the field of ICTs for development, examining the impact of the use of newer ICTs in conjunction with traditional radio, with a focus on building the capacity of rural women to use ICTs, including radio. For example, in conjunction with the Association for Progressive Communication, the team created a 36-week platform for rural women entrepreneurs to share knowledge on best practices and critique some cultural practices on radio. Results affirmed that women were willing and able to contribute to radio when given the chance.

Jones and Siemering (2012) suggest the combination of the use of newer ICTs, such as the mobile phone and traditional radio, does have a positive impact for content producers and communities. But for the most part, the research does not originate from environments like the study area of this study, making it difficult to know if the findings would be applicable to this case. It is the hope of this author that the BoldSteps research will shed more light on developments around the convergence of mobile telephony and radio.

### **Literature Review**

This section attempts to review current thinking on the three-pronged issue of development, radio and mobile telephony. For the BoldSteps team, it was a welcome challenge to research this area in which very little literature exists that relates directly to our unit of analysis. One of the strongest indications of the impact of radio on development is the belief that the liberalization of the airwaves in Ghana amplified pro-democracy voices and sped up the return to constitutional rule in 1992 after almost 18 years of military rule (Center for Democracy and Development, 2000).

After the liberalization of the airwaves, some contend that differences in development in two otherwise similar and traditional areas in Ghana – Tamale and Bawku – could be attributed to the presence, or lack thereof, of radio. By most accounts, Tamale has enjoyed more economic progress and the conflict there seldom turns violent. Some social thinkers, like George Sidney Abugri (2010), attribute this to the huge presence of radio in Tamale and the virtual non-existence of radio in Bawku.

Taking as a given the acknowledged ability of radio to influence development, what is the likely impact when newer technology (such as mobile telephony) is introduced? In “Impact of New Information and Communication Technologies (ICTs) on Socio-economic and Educational Development of Africa and the Asia-Pacific,” Obijiofor and Inayatullah (2005) provide readers with a glimpse of the general idea of introducing new ICTs into traditional ways of doing things when they note that ICTs are “generally seen as the basic tool for survival in the 21<sup>st</sup> Century” (p. 3).

In recent years, the use of the phone to complement the work of radio has become common practice in Ghana and has enabled a two-way dissemination of content in a process that allows listeners (content recipients) to contribute to content via SMS and phone-ins. This research considers this trend as the listening public takes advantage of the new phenomenon, and wishes to analyze usage dif-

ferences between men and women. The study will reveal whether or not the use of mobile telephony encourages contribution from listeners.

## **Methodology**

Given that the research had a particular interest in the perceptions and habits of rural women and girls, focus group discussions were planned during the research planning phase. However, focus groups proved unsuitable for work with peri-urban and urban dwellers. We therefore deployed questionnaires and conducted interviews with selected individuals to broaden the unit of analysis.

### *Focus group discussions*

Rural women entrepreneurs in Northern Ghana often form and join (development) associations with the primary aim of accessing funds, markets and best practices, information and knowledge. Due to these associations' previous engagements with community radio and technology, the research team sought to gain their input. Five women's groups in Pungu-Telania, Kasalingo, Navio, Gia and Biu, all located in the two districts of Kassena Nankana West and Kassena Nankana East, were purposively chosen for discussions. These discussions were conducted in Kassem and Nankani as most participants were better able to communicate and much more comfortable with the vernacular instead of the official language, English.

Because rural women entrepreneurs are often overlooked in questionnaires, focus group discussions were found to be ideal for collecting views and data from this segment of the population. In meeting with five of these women's groups, enumerators were able to collate the views of 76 women.

### *Questionnaire*

An English-language questionnaire was used to reach out to as many respondents as possible. Questionnaires were administered in and around Binaba, Bolgatanga, Bongo, Navrongo, Nyankpala, Paga, Sandema, Savelugu, Tamale and Zebilla in the two administrative Upper East and Northern regions. In all, 610 questionnaires were returned out of which 554 were valid for analysis. SPSS was then used to analyze the questionnaire results.

Enumerators chose to issue the questionnaires on normal working days to people they met on the streets who were willing to participate. These participants included shop owners, users of the nearest local Community Information Centre and, in the case of district capitals, local government workers. Respondents had the liberty to take the questionnaire to answer at their own pace and later contact enumerator via SMS upon completion of the questionnaire for pick-up. This method was especially utilized when enumerators handed out the questionnaires in office premises.

Respondents were chosen at random, although particular targets per location with regards to sex, age group and level of education were guiding factors. Enumerators talked to office holders, market women, way-side shop owners and people on the street. Of the 554 valid responses, 222 (or about 40 percent of respondents) were urban dwellers, the rest being rural dwellers. This distribution does not reflect the true population but was chosen to reflect our emphasis on input from rural dwellers, which would then be compared to that of the urban dwellers.

About 60 percent, or 331 of the valid questionnaires, were completed by male respondents. This was despite efforts by enumerators to obtain a 49:51 percentage ratio of males and females, respectively. The research team would later attempt to compensate for this gender imbalance through focus group discussions with women's groups within the catchment area of the research project.

### *Interviews*

Seven interviews were conducted, four of them with studio managers from the Nabiina Community Radio, Filla FM, Simli Radio and Bishara FM, and three with disc jockeys from five radio stations including the above-mentioned and A1 radio in Bolgatanga. The interviews were conducted in English and included sharing the results of the focus group discussions and partial results from the analysis of the questionnaires. The disc jockeys from Nabiina FM, Filla FM and Bishara FM were all female; the final interviewee was male. The selection of female DJs was deliberate as the research team sought to gain input from the content production side of the equation. The initial results of the interviews indicated a slight disconnect between the expectations of listeners and the work of radio content producers.

### **Results of Focus Group Discussions**

Enumerators met with five women's groups representing over 200 women. In total, 76 women were present at the focus group discussions, and most of them contributed to discussions. The investigating team was already familiar with these groups, as they had previously cooperated in projects, thus facilitating relaxed and informal conditions. Enumerators proposed a question or issue to the group for deliberations and opinions. When members had diverse views, a simple hand counting was carried out after facilitators and members had categorized these views. Counting was done for quantitative reasons but each 'opinion group' was asked to explain its stance.

Membership in these organized women's groups meant that the focus group participants resided in the location in question and were willing to pay dues to their organization. Most of these women were between 25 and 45 years old and the large majority (86 percent) was not formally employed. Only 11 of the participants, all of whom were teachers, had an education above secondary school. These 'educated' women were usually the secretaries of their respective groups.

Of the 76 women present during the five meetings only 19 (25 percent) owned a mobile phone. However, virtually all of the women had access to a mobile phone and could be easily reached on the mobile phone of a close relative or associate. Only two of the women said they had never used a mobile phone. The majority of the women, 58 percent, owned radio sets, and all said they had access to and were familiar with radio sets.

### *Discussions*

The key questions discussed bordered around:

- Does the use of telephony in conjunction with traditional radio encourage you to participate in radio discussion or content?
- Have you ever contributed content to any radio station? What kind of content did you contribute? By what means did you contribute?
- Do you believe your suggestions will be heard by the appropriate authorities if you make them via a radio station?

Portions of the focus meetings were recorded for transcription purposes. Participants of the discussions would usually refer to their personal experience in answering the questions. The research group observed that although virtually all the women in the meetings had access to mobile telephones, there was no correlation between this access and the use of the device to contribute to radio content. For example, of the 19 women who claimed to own at least one active mobile device, only two (11 percent) had contributed to radio discussions using the device. In contrast, 57.9 percent of respondents to the questionnaire claimed to have called into a radio station at least once. When the focus group discussants were asked why they were reluctant to call into radio stations, responses included:

“It’s too expensive even to make a call;”

“You have to wait in the queue for some time even after your call has been picked;”

"They are always talking politics or arguing about something irrelevant;" and

"I am not interested at all."

Most other responses touched on the issue of cost. One woman, however, recounted that she was finally able to get the Ghana Water and Sewerage Company to repair a broken pipeline in her area by calling in to complain during a radio breakfast show.

Generally, however, it was clear that participants were keen followers of radio discussions and would welcome the opportunity to participate in a discussion in the studio but for the issue of cost. Indeed, although women in the areas surveyed have been contributing to radio content, it is mostly done in person, when the opportunity to walk into radio stations arises.

*Do you believe the things you say on radio can influence policy?*

This topic generated debate in all situations. Some participants changed views as the debate went on but this report focuses on the number of votes before the debate took place. 43 women (57 per cent) said they believed in the ability of radio to influence policy.

Responses included:

... they know it is the messages they gave us on radio that made us vote for them so they cannot turn around and ignore what we say on radio;

"I don't believe the suggestions on radio are ever taken seriously by policymakers, otherwise we would have been far better off than we are now;"

"If we can occasionally collate views from listeners and studio panelists and give these views to the policy makers, radio will play an even more crucial role in our lives."

Enumerators could sense a general feeling amongst the discussants about the ability of radio to change policy, although the women themselves emphasized that currently this ability is not being taken advantage of.

*Context*

The focus group discussions were included because we envisaged the questionnaire would most likely leave out rural women entrepreneurs in the research area since they spend most of their productive time in crowded markets, on the farm or in their homes – locations that might compromise the quality of responses. Views and trends showed marked differences between the demographic groups captured by the two tools.

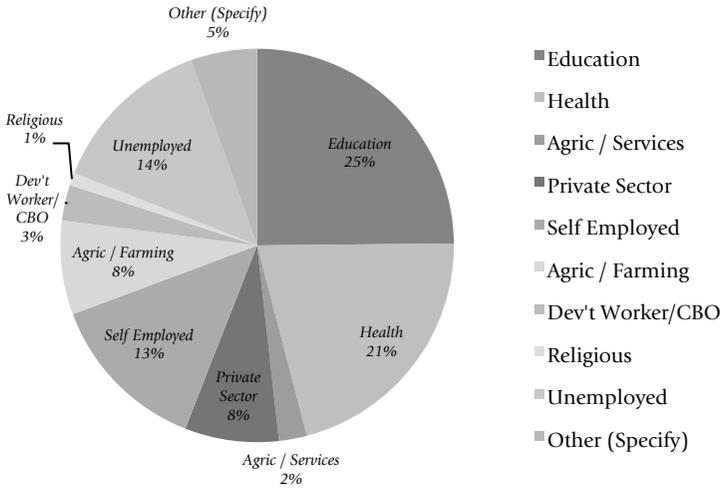
## **Results of the Questionnaire**

*Profile of respondents*

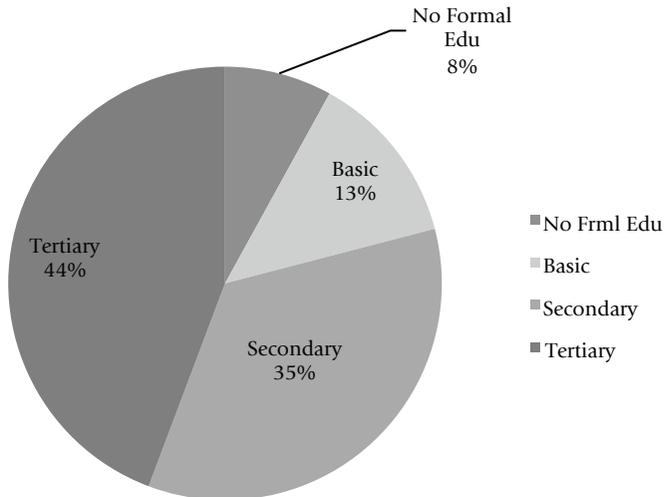
Of 554 individuals sampled, 221 were female, representing 40 percent. 331 male respondents represented the remaining 60 percent. Economic activities at the time of research, in addition to the specific need to administer questionnaires to individuals who owned mobile phones, contributed largely to this tilt. 119 respondents (24.8 percent of the sample) worked in the education sector, 101 (21.1 percent) in the health sector, 7.7 percent in the private sector and 13.4 percent responded that they were self-employed. Finally, 65 respondents, 11.7 percent, said they were unemployed. Some 5.4 percent of respondents were not classified by work.

The vast majority of respondents (92 percent) had at least some formal education, and respondents with some form of tertiary education accounted for the largest group, 44 percent of the sample. This distribution is likely influenced by the methodology used in capturing data. Using printed questionnaires to gather data meant that enumerators were more likely to get valid responses from people who could read and write. The majority of respondents to the questionnaire fell within the age group of 19-25.

**Figure 1: Distribution of respondents by occupation**



**Figure 2: Highest level of education**



*Using the mobile phone to contribute to radio content*

To explore respondents' habits in mobile phone usage, we specifically zeroed in on our interest area of radio content. The question "Have you ever called into a radio station?" was put to respondents. In response, 59.6 percent of male respondents and 53.8 percent of female respondents claimed to have called into a radio station at least once. And 15 percent of all respondents claimed to have called in several times.

The analysis by cross tabulation between the sexes and ability/willingness to contribute to radio content hints at a positive, though weak, relationship between the level of education of a woman and her ability/willingness to contribute to radio content by means of voice call or SMS. The tables and figures below illustrate the relationship between level of education and willingness/ability to call into a radio station to contribute to content.

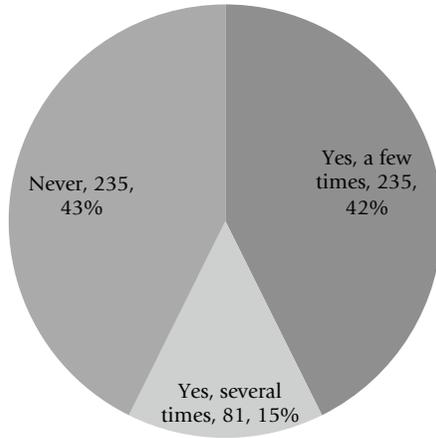
The percentage of people who have never called into a radio station to contribute to content is lower among respondents with higher levels of education: 35.6 percent and 40.2 percent of respondents with minimum secondary and tertiary education, respectively. The figures for those who have never called a radio station are higher for those with basic or no formal education: 58.6 percent and 57.1 percent, respectively. Correlation tests performed by the research team confirmed a positive relationship between a respondent's level of education and his/her willingness/ability to contribute to radio content by way of calling into a radio station. The relationship is, however, weak.

**Table 1: Content contribution habits and relationship to education***Have you ever called into a radio station?*

		Yes, sever- al times	Yes, a few times	Never	Total
<b>No Formal Education</b>	Count	8	10	25	43
	<i>% within No Formal Education</i>	18.6%	23.3%	58.1%	100.0%
<b>Basic</b>	Count	6	24	41	71
	<i>% within Basic Education</i>	8.5%	33.8%	57.7%	100.0%
<b>Secondary</b>	Count	31	92	68	191
	<i>% within Secondary Education</i>	16.2%	48.2%	35.6%	100.0%
<b>Tertiary</b>	Count	36	108	97	241
	<i>% within Tertiary Education</i>	14.9%	44.8%	40.2%	100.0%
<b>Total</b>	<b>Count</b>	<b>231</b>	<b>234</b>	<b>234</b>	<b>546</b>

**Figure 3: Chart of respondents' previous efforts at contributing to radio content**

*Have you ever called in to a radio station?*



**Table 2: A cross tabulation of gender and content contribution**

		Yes, several times	Yes, a few times	Never	Total
<b>Male</b>	Count	52	145	133	330
	% within Male/Female	15.8%	43.9%	40.3%	100.0%
<b>Female</b>	Count	29	89	101	219
	% within Male/Female	13.2%	40.6%	46.1%	100.0%
<b>Total</b>	Count	81	234	234	549
	% within Male/Female	14.8%	42.6%	42.6%	100.0%

Marginal differences between men and women appear when it comes to attempts at contributing to radio content. Table 2, for example, shows that 46.1 percent of females have never contributed to radio content by way of calling in to a radio station; the percentage is lower (at 40.3 percent) among males.

To determine whether any gender differences existed, the team cross-tabulated the factors. The results are listed in Table 3. While Table 1 indicates that those with a higher education tend to contribute more to radio content, the more focused investigation of possible gender disparities (Table 3) illustrates the habits of both men and women separately as they progress up the educational ladder.

**Table 3: The influence of formal education on the individual's efforts to contribute to radio content**

*Level of Education, Gender and Contribution to Radio Content*

Highest Level Of Education			Have you ever called a radio station			
			Yes (several times)	Yes (few times)	Never	Total
<b>No Formal Education</b>	Male	Count % within Male/Female	2 11.1%	5 27.8%	11 61.1%	18 100.0%
	Female	Count % within Male/Female	6 25.0%	5 20.8%	13 54.2%	24 100.0%
	Total	Count % within Male/Female	8 19.0%	10 23.8%	24 57.1%	42 100.0%
<b>Basic</b>	Male	Count % within Male/Female	2 4.7%	16 37.2%	25 58.1%	43 100.0%
	Female	Count % within Male/Female	4 14.8%	7 25.9%	16 59.3%	27 100.0%
	Total	Count % within Male/Female	6 8.6%	23 32.9%	41 58.6%	70 100.0%
<b>Secondary</b>	Male	Count % within Male/Female	17 16.8%	50 49.5%	34 33.7%	101 100.0%
	Female	Count % within Male/Female	14 15.6%	42 46.7%	34 37.8%	90 100.0%
	Total	Count % within Male/Female	31 16.2%	92 48.2%	68 35.6%	191 100.0%
<b>Tertiary</b>	Male	Count % within Male/Female	31 18.7%	74 44.6%	61 36.7%	166 100.0%
	Female	Count % within Male/Female	5 6.7%	34 45.3%	36 48.0%	75 100.0%
	Total	Count % within Male/Female	36 14.9%	108 44.8%	97 40.2%	241 100.0%

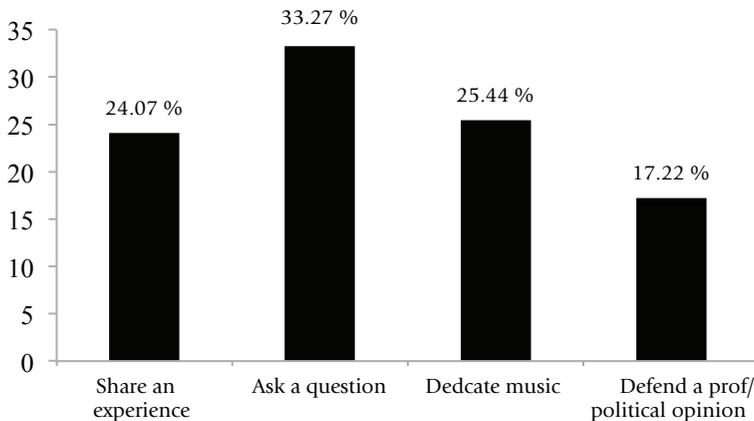
Noticeable in the cross tabulation of Table 3 is that as a man gains higher education, he becomes more likely to want to contribute to radio content. However, this rule does not apply to female respondents, as there is no significant relationship between their level of education and content contribution habits. We can thus conclude that women are more willing to share knowledge via radio, and in their case formal education is not a barrier to this activity. The real barrier for women is therefore most likely an issue of cultural practice/position, or, relatedly, confidence.

*What motivates people to call into radio stations?*

Before distributing questionnaires, the team, based on observation of the airwaves, categorized thematic areas for respondents in an attempt to obtain a verifiable answer to the above question. Figure 4 illustrates the responses from respondents.

**Figure 4: The influence of formal education on the individual's efforts to contribute to radio content**

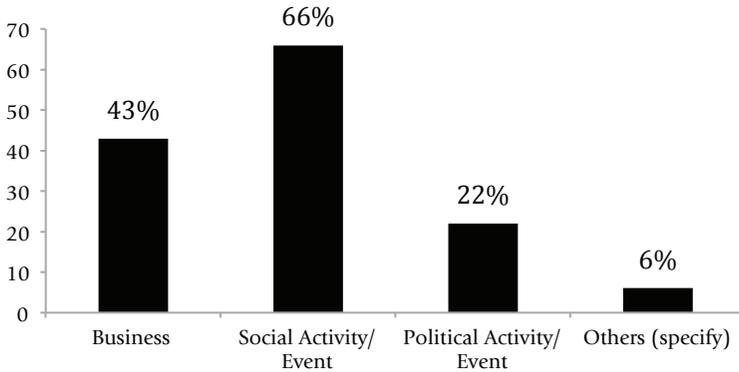
*Which of these would most encourage you to call into a radio station?*



Over a third (33.27 percent) of the persons who claimed to have called into a radio station at least once said their primary reason for calling was to ask a question on specific topics, while 17.22 percent of respondents stated that they did so to defend a political or professional position. However, observation of the air waves showed in general a 2:1 ratio of the number of calls received during radio programmes to the number of calls received during a particular question and answer program on market access. This is notwithstanding the fact that the observation was done in Navrongo, a largely agricultural community. If fewer people called in during political discussions yet more calls came in during such programmes, it is probable that it is the same people expressing interest in such political discussions. The suggestion to radio station owners and workers would be to diversify the topics discussed on air. Observation reveals that virtually all radio stations, including those not covered in this document, include a heavy dose of political content. Yet the revelation is that these programmes serve a few over-zealous listeners.

*Using radio to promote activities and interests*

Just about a quarter (24.2 percent) of respondents reported that they have used radio to promote their business through advertisements. Two out of every three (66 percent) had done so to promote a social event or activity.

**Figure 5: Activities mostly promoted via radio***Do you believe radio can influence policy in Ghana?*

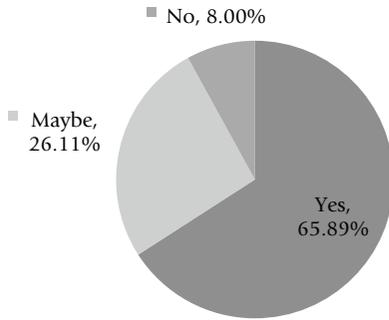
A key question investigated perceptions about whether or not radio can influence policy.

An overwhelming 66 percent of the respondents indicated a belief in the power of radio to influence policy with only 8 percent of respondents indicating they did not believe radio had any power to influence public policy. This is not significantly different from the responses to the same question during the focus group discussions wherein more than half (57 percent) of respondents shared firm belief in the power of radio to influence policy.

The team of researchers hypothesized that the level of education of an individual had a bearing on his/her belief in the power of radio to influence policy. A cross tabulation of educational level against this belief produced the table below.

**Table 6: Public perception of the power of radio to influence policy**

*Can radio influence public policy?*



**Table 4: Perception of power of amongst people of different education backgrounds**

*Do you believe radio can influence policy change in Ghana?*

Highest Level of Education		Yes, very well	Maybe	No	Total
<b>No Formal Education</b>	Count	30	6	3	44
	% within No Formal Education	68.2%	13.6%	6.8%	100.0%
<b>Basic</b>	Count	30	21	10	71
	% within Basic Education	42.3%	29.6%	14.1%	100.0%
<b>Secondary</b>	Count	103	39	13	191
	% with Secondary Education	53.9%	20.4%	6.8%	100.0%
<b>Tertiary</b>	Count	149	55	11	243
	% within Tertiary Education	61.3%	22.6%	4.5%	100.0%
<b>Total</b>	Count	312	121	37	549
	%	56.8%	22.0%	6.7%	100.0%

A closer look at Table 4 shows for example that only 6.8 percent of respondents without any formal education thought radio had no possible influence on policy, lower than that for respondents with basic education. The trend, however, showed a positive decline among those with formal education as the percentage of respondents answering in the negative to the question was 14.1 percent, 6.8 percent and 4.5 percent among respondents with basic, secondary and tertiary education, respectively, perhaps suggesting that the more educated a person is, the more likely he is to believe in the power of radio to influence policy.

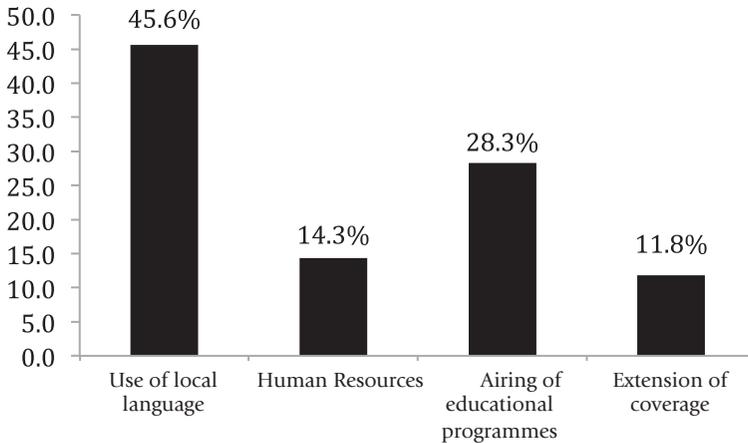
*What should be done to improve the quality of radio content?*

Clearly dominant in the views of respondents was the issue of local content and local language usage. Nearly every other respondent (45.6 percent) suggested an increased use of the local language of the immediate catchment of the radio station. In Ghana, 46 languages are spoken nationwide with some four – Twi, Ga, Ewe and Dagbani – dominating in overlapping parts of the country. As a result, there is a tendency for radio stations to concentrate on the ‘dominant languages’ in place of the actual local language of the area.

Other issues raised by respondents touched on human resources, particularly DJs at the various radio stations, airing of educational programmes and extension of radio coverage (technology), among other issues. Figure 7 groups the responses into four areas of concern and indicates the percentage of respondents who highlighted such issues.

**Figure 7: Areas of operation most in need of attention at local FM stations**

*What should be improved to improve overall quality of radio programmes?*



### **Summary of Findings**

- Rural women entrepreneurs have almost equal access<sup>24</sup> to radio and mobile telephony as any other demographic group.
- Rural women tend to receive information only from radio and for the most part do not contribute to radio content (11 percent compared to 57.9 percent of other respondents).
- Rural respondents tend to depend more on radio for news and education (85 percent) than female urban dwellers (55 percent).
- The main cause of this observed difference in interaction with radio stations is attributable to prohibitive mobile phone talk costs and, to some degree, lack of education.

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<sup>24</sup> Access being defined as the ability to make use of the device at negligible inconvenience.

- Women in surveyed rural communities are very much convinced they have the opportunity to influence policy by contributing to radio content.
- The higher the educational level of a girl/woman, the more likely she is to contribute to radio content. This trend, however, is not displayed among men and boys, whose level of education shows no correlation with their willingness/ability to contribute to radio content.
- Other ways of contributing to radio content, such as advertisements, are clearly dominated by men.
- One in three young people who call into radio stations in these sample areas in Northern Ghana do so to ask a question.

### **Implications of Findings**

As noted throughout the study, rural women have almost equal access to radio as urban dwellers but contribute less content to radio. On the receiving end, urban dwellers depend less on radio for education and news. The implication is that, with radio's power to influence policy, urban dwellers are much more likely to impact the political sphere and, indeed, radio content. This is subtly relegating rural dwellers to the position of second hand users of information.

The observation that boys and men call radio stations irrespective of their level of education, whereas more educated women and girls are more likely to contribute to radio content, may reflect a cultural tendency to diminish the voices of women.

About a third of the population that has called into a radio station claims to have done so to ask a question or seek new knowledge. This indicates the power of radio when it comes to knowledge-sharing and public education. Northern Ghanaians look to radio as a source of knowledge and information, especially in rural areas. Unfortunately, most of the radio stations examined in the rural areas act as 'sister stations' to radio stations located in urban

areas. The practice is for rural radio stations to broadcast news items carried by bigger FM stations located in urban areas at prime time and then broadcast actual local content at other times.

### **Conclusions and Recommendations**

Considering the above observations regarding the flow of radio content, the BoldSteps team has suggested to local policy makers and advocates that they consider engaging the nearest offices of mobile telecom providers to urge them to supply toll free lines to community FM stations. Radio stations are also encouraged to air more discussion programmes aimed at educating the public. As noted above, although beyond the scope of the research, the organization of more programmes and projects which aim at boosting the willingness/ability of women to contribute to radio media is highly recommended.

Considering the size of the population that has called into a radio program to ask a question, the author recommends that radio stations be encouraged to build the capacity of presenters or employ better skilled personnel in a bid to facilitate more productive discussions and programming over the airwaves.

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