

Content Analysis of Agricultural News in Botswana Newspapers

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ABSTRACT The research paper analyzed the content of agricultural news coverage in Mmegi The Reporter and The Botswana Daily News newspapers by determining the frequency and space allocation to agricultural education news in the newspapers from January 2006 to June 2008. Stratified random sampling was used to select 2 newspapers from 10 in circulation in the country based on ownership. Data were collected from newspapers issued on Monday, Wednesday and Friday and were analyzed with SPSS version 16 using frequency counts percentages and one-way analysis of variance. The results show that in privately owned newspaper, about 61 percent of agriculture news is in advertisement category and in government owned newspaper it is about 49 percent. The study has also shown that privately owned newspaper has more agriculture news on the front page, 39.1 percent as compared to 6.1 percent in government owned newspaper. In privately owned newspaper, 17.4 percent of agriculture news is in Setswana language and 57.6 percent in English language, whereas in government owned newspaper 6.1 percent of the agriculture news is in Setswana language and 60.2 percent in English. There is a significant difference between spaces allocated to agriculture news in privately owned newspaper. It is recommended that government owned newspaper must increase coverage of agriculture news in Setswana.

INTRODUCTION

Agriculture news refers to information on formal and non-formal training and educational activities related to agriculture, for example, examinations, teacher placements and advertisements. Content analysis as defined by Babbie (2001) as the study of recorded human communications such as books, magazines, web pages, poems, newspapers, songs, paintings, speeches, letters, email messages, bulletin board postings on the internet, laws and constitutions as well as components or collections. In content analysis, researchers examine a class of social artifacts that usually are written documents such as newspaper editorials.

According to Bittner (1983), newspapers are an economic and social phenomenon of our society. They are a major force in informing public opinion the world over and thus mightily affect national and international efforts towards economic progress and global understanding. Newspaper stories have turned ordinary men and women into heroes. Sitton et al. (2006) reporting about agriculture and its related issues could influence the public's understanding of and participation in the agricultural policy process. In addition, public responsiveness to policy is most likely where information is readily available in mass media reporting. Mainstream media print

such as newspapers and magazines have begun to serve agriculture in a more indirect way. They now provide information regarding agricultural issues and events to the non-farming public, which now use this information to gain knowledge about and make decisions regarding agricultural issues facing the agriculture industry.

However, general newspapers do not report in such a way as to increase public understanding of issues facing farmers or farmer understanding of public concerns about agriculture's environmental or social effects. To analyze the reporting of topics such as agricultural issues, researchers use content analysis, which is an observational research method that is used to systematically evaluate the symbolic content of all forms of recorded information (Tucker et al. 2003).

Rogers (2003) stated that most people develop their initial awareness of issues through the mass media and the media are also a primary source of information about technology and science issues. Many individuals receive news from daily newspapers and it is important that the public is presented with objective information so that individuals can form their own opinions about complex or controversial issues, including those related to agricultural industry. According to Emery (1999), in the innovation-decision process, mass media channels are important means to cre-

ate knowledge and spread information rapidly to a large audience and can change some weakly held attitudes. It is evident that when systematically planned and implemented, a media campaign can initiate and help sustain changes in beliefs and practices. Differences in perceptions of an issue can be a source of strain, which drives the public to seek more information from the media and other sources. Mass media have shown to be effective in settings outside the reach of the regular extension service where access to new information is limited.

In Botswana, newspapers have played and continue to play a significant role in disseminating information. Newspapers reach even the most remote areas that cannot be reached through other modes of communication such as television, radio and internet. The first newspaper in Botswana was published in 1964 and it was the Botswana Daily News. Presently, there are about ten newspapers in circulation around the country. Moses (1993) states that content analysis is typically a systematic analysis and description of the content of communication media. Newspapers may be analyzed to study the changing attention given to a certain issue over several years. The content of different newspapers in a country may be studied to bring out their differing attitudes to an issue or their different propaganda technique among others.

In Botswana, content analysis of agricultural news in newspapers is necessary because agriculture plays an important role in the lives of Batswanas. Agricultural education news creates awareness among the educators and the students and therefore the quality of the news must always be reviewed. It is evident from past research that newspapers play an important role in creating awareness about the issues that develop the society, therefore it is important to know how much of agriculture news are covered, how opinions are shaped about agriculture news and what news categories of agriculture news are covered.

Study Objectives

The objective is to content analyze agricultural news coverage in Mmegi/The Reporter and The Botswana Daily News newspapers from January 2006 to June 2008 by determining the frequency and space allocation to agricultural education news in Mmegi and daily news news-

papers from January 2006 to June 2008. Also, significant relationship between ownership space and language were explored.

METHODOLOGY

A descriptive study design was used to determine the frequency of agricultural news in Mmegi and Botswana Daily News from 2006 to 2008. The Botswana Daily News newspaper was established in 1964, with a circulation ranging from 25 000 to 50 000 copies daily. It is published in Setswana and English. It was the country's largest newspaper in 2002. Its head quarters are located in Gaborone and it is owned by the government. Mmegi wa Dikgang-The Reporter newspaper was established in 1984, with a circulation ranging from 10 000 to 25 000 copies daily. It is published in Setswana and English. It is among the largest newspapers in Botswana and it is privately owned. The population for the study is all newspapers in circulation in Botswana. These include: The Botswana Guardian, Botswana Gazette, Botswana Daily News, The Mid Week Sun, Sunday Standard, The Voice, The Echo, Mmegi Wa Dikgang, Mmegi Monitor and Ngami Times. Stratified random sampling technique was used to select two (2) newspapers that are published daily but having different ownership. Out of ten (10) that are published country wide, The Botswana Daily News is government owned and Mmegi is privately owned. Also 3 days of the week (Monday, Wednesday and Friday) were randomly selected. Data were collected from the sampled newspapers issues on the news category, size of space allocated and location of news from each of the newspapers. Location refers to where the article appeared in the newspaper such as front page (f p), inside page (I p), centre page (cp) and back page (b p). Size of space; Space occupied by the article will be measured in centimeters using a ruler and the perimeter was measured using a thread. Data collected were analyzed with Statistical Package for Social Sciences (SPSS) using frequency counts, percentages and Chi-square and one-way analysis of variance.

RESULTS AND DISCUSSION

Table 1 shows categories of agriculture news in daily newspapers. About 50 percent of the agriculture news in government newspaper and

about 61 percent in privately owned newspaper is advertisement. In government owned newspaper, 0.3 percent of the agriculture news is examination articles whereas in privately owned newspaper it is 1.1 percent. This reveals that privately owned newspapers are more commercial than government owned newspapers. This agrees with the findings of Bittner (2003) that readership surveys allow the newspaper to match those readers with an advertiser's target audience; mass production would not be possible without mass consumption. Nel (1994) supports and states that most of a newspaper's revenue is generated by the advertising department.

Table 1: Categories and location of agriculture news in daily newspapers

News categories	Government owned (Botswana Daily News)		Privately owned Mmegi wa Dikganga/ The Reporter	
	Frequency	Percentage	Frequency	Percentage
Training	34	9.5	9	9.8
Advert	179	49.9	56	60.9
Curriculum	145	40.4	26	28.3
Examinations	1	0.3	1	1.1
<i>Location</i>				
Front page	22	6.1	36	39.1
Inside page	273	76.0	45	48.9
Middle page	51	14.2	8	8.7
Back page	13	3.6	3	3.3

According to Table 1, in privately owned newspaper, 39.1 percent of agriculture news is located in the front page as compared to 6.1 percent in government newspaper. Most of the agriculture news in government newspaper are located in the inside pages with a percentage of 76, middle pages with 14.2 percent and the lowest being 3 percent on the back page. In privately owned newspaper, 48.9 percent of agriculture news is located in the inside pages, 8.7 percent in the middle pages and the least being 3.3 percent on the back page. The reason may be due to the role played by privately owned newspaper of criticizing government policies to draw attention of customers and therefore locating more agriculture news on the front page. Ofuoku and Agumagu (2008) stated that the front page is used to present to readers all the important, attract, eye catching and major headlines contained inside the newspaper. This is also supported by Clear and Weideman (1997) that the content of a newspaper is normally organized or structured

according to a standard layout. This means that certain types of news or articles are allocated to certain pages in a newspaper.

Table 2 shows the language of agriculture news in daily newspapers. 17.4 percent of agriculture news in privately owned newspaper is in Setswana language and 57.6 percent is in English language. In government owned newspaper, 6.1 percent of agriculture news is in Setswana language and 60.2 percent is in English language. Government owned newspaper has a higher coverage of agriculture news in both languages at 33.7 percent as compared to 22.8 percent coverage in both languages by privately owned newspaper. This may be because privately owned newspaper aims at reaching more readers through the use of Setswana language. According to Burns (1990), Spanish –language newspapers are being published in many parts of the United States where large Spanish –speaking populations are located. Nel (1994) states that it is important to address readers directly in a language they will understand.

Table 2: Language and space of agriculture news in daily newspapers

News categories	Government owned (Botswana Daily News)		Privately owned Mmegi wa Dikganga/ The Reporter	
	Frequency	Percentage	Frequency	Percentage
Setswana	22	6.1	16	17.4
English	216	60.2	53	57.6
Both	121	33.7	21	22.8
<i>Space in cm²</i>				
< 100	164	45.7	38	41.3
100-150	46	12.8	11	12.0
Above 150	149	41.5	43	46.7
Total	359	100.0	92	100.0

In terms of space of agriculture news in daily newspapers, in privately owned newspaper, agriculture news occupy about 47 percent of space above 150 cm², about 41 percent of space <100cm², and 12 percent 100-150 cm². In government newspaper, agriculture news occupy about 42 percent of space above 150 cm², about 46 percent of space < 100 cm² and about 13 percent of space 100-150cm². This may be because privately owned newspaper fosters the reporting of more than one opinion or approach to a story to uncover certain aspects. This corresponds with the findings of Bittner (2003) that media in competition will sometimes take the

extra initiative to explore an issue in depth rather than be satisfied with superficial information.

Table 3 presents chi-square analysis showing relationship between newspaper ownership and agriculture news category, location and language. There is a significant relationship between ownership and location of agriculture news ($\chi^2=95.42, p<0.05$), ownership and language used in agriculture news ($\chi^2=21.66, p<0.05$). This indicates that the location and language of agriculture news are dependent on the ownership of the newspaper. The significance of the relationship may be due to the ease with which the clients can interpret the language used in the newspaper. The location of the article also determines the level of the attention of clients that can be drawn. There is no significant relationship between newspaper ownership and agriculture news category ($\chi^2=5.631, p>0.05$). This may be because agriculture news is not considered important enough to attract customers. Ifeanyi-Obi and Agumagu (2008) states that agriculture news is not considered important enough by newspaper owners to be published as a lead story. Lead story is assumed to be most important news for the day.

Table 3: Chi-square analysis showing relationship between newspaper ownership and news category, location and language

Variable	χ^2	df	p	Remarks
Category	5.6	3	0.13	Not Significant
Location	95.4	3	0.00	Significant
Language	21.6	3	0.00	Significant

Table 4 shows Chi-square analysis showing relationship between agriculture news, space and language. In government owned newspaper, space occupied by agriculture news ($\chi^2=8.66, p>0.05$) and ($\chi^2=8.66, p>0.05$) in privately owned newspaper. From the data presented in Table 6, there is no significant difference between space allocated to agriculture news and ownership of newspapers. This may be because agriculture news competes for space with news from different categories such as advertisements, political news. The relationship between government owned newspaper and language used in agriculture news is significant ($\chi^2=48.45, p<0.05$). This may be because there is no balance of languages used to cover agriculture news. There is no significant relationship between privately owned newspaper and language

used in agriculture news ($\chi^2=15.08, P>0.05$). This may be because there is a balance of languages in presenting agriculture news.

Table 4: Chi-square analysis showing relationship between newspaper ownership, space and language

Variable	Government owned (Botswana Daily News)			Privately owned Mmegi wa Dikgang/ The Reporter		
	χ^2	df	p	χ^2	df	P
Space	3.75	6	0.71	8.66 ^b	6	0.19
Language	48.45	9	0.00	15.08	9	0.089

Table 5 presents the chi-square analysis showing relationship between agriculture news location, category and language. In government owned newspaper, there is a significant relationship between ownership and agriculture news category ($\chi^2=48.45, p=0.00$). This may be because government newspaper has more news in the inside pages for fear of criticism. In privately owned newspaper, there is no significance ($\chi^2=15.08, p<0.05$), this may be because privately owned newspaper focuses on lead stories. The results indicate that there is a significant relationship between newspaper ownership and agriculture news category ($\chi^2=48.45, p<0.05$) and language ($\chi^2=1.108, p<0.05$ and $\chi^2=22.73, P<0.05$) in both newspapers. This is due to coverage of news at different periods, for example when there is a disease outbreak, introduction of government policies, the frequency of news coverage in that category will increase.

Table 5: Chi-square analysis showing relationship between newspaper ownership, category and language

Variable	Government owned (Botswana Daily News)			Privately owned Mmegi wa Dikgang/ The Reporter		
	χ^2	df	p	χ^2	df	P
Category	48.45	9	0.00	15.08	9	0.089
Language	1.108	6	0.00	22.73	9	0.007

Table 6 presents one way of analysis of variance showing differences in space allocated to agriculture news per allocation in government and private newspapers. According to the results, there is no significant relationship between government owned newspaper and space allocated to agriculture news. ($p<0.05$) and in privately owned newspaper, there is a significant relationship between ownership and space allocated to

Table 6: One way analysis of variance showing differences in space allocated to agriculture news per location in government and private newspapers

Ownership	Sum of squares	df	Mean square	F	p	Location	N	Means
Govt. between group	51699.37	3	17233.124	0.49	0.686	Inside	273	168.96
Within groups	1.237E7	355	34843.619			Middle	51	184.94
Total	1.242E7	358				Back	13	186.23
						Front	22	214.95
Private between group	366110.16	3	122036.720	4.81	0.004	Inside	3	111.10 ^a
Within groups	2232878.74	88	25373.622			Middle	36	156.56 ^a
Total	2598988	91				Back	45	168.43 ^a
						Front	8	381.88 ^b

agriculture news($p>0.05$). This may be because privately owned newspaper do not have restrictions of the contents of the newspaper. Taylor (1987) supports with findings that, "Government controls the information content of the media; somebody else selects what events to report. The news director chooses where to send reporters and camera crews".

CONCLUSION

The result of this study showed that agriculture news was given little coverage by the daily newspapers in Botswana. This was shown by the dominance of advertisements on both newspapers. The reportage of agricultural news in Setswana is more in privately owned newspapers than in Government owned newspaper. There is a significant difference between spaces allocated to agriculture news in privately owned newspaper and there is no significant relationship between spaces allocated to agriculture news in government owned newspaper.

RECOMMENDATIONS

From the findings of this paper it is recommended that government owned newspaper must increase coverage of agriculture news in Setswana in order to reach more readers since it is distributed free to readers and that newspaper

journalists should also cover more agriculture issues.

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