

**A COMPARATIVE CONTENT ANALYSIS OF AGRICULTURAL
INFORMATION COVERAGE BY THE STANDARD AND DAILY NATION
KENYAN NEWSPAPERS (SEPTEMBER 2011-AUGUST 2012)**

By

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**A Research Report Submitted in Partial Fulfillment of the Requirements for the
Postgraduate Diploma in Agricultural Information and Communication Management,
University of Nairobi**

2012

DECLARATION

This research report is my original work and has not been submitted for examination in any
other university

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Signature: _____ Date _____

This report has been submitted for examination with my approval as university
supervisor.

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ACKNOWLEDGEMENTS

I pay my heartfelt and warm tribute to Dr Joseph Othieno of the Department of Agricultural Economics, who was my supervisor for his continuous encouragement to me. Also for the time and effort he took to read through this work, correct it and give very important advice to me on how to improve each manuscript of the proposal and this project report. He is an example of what a lecturer should be. I also thank my sister, Eunice Wanjiru Kamau for her help during the typing of this work and during data collection. I am also very grateful to all the officials of the College of Agriculture and Veterinary Sciences library. Special tribute to Harun Mugo (Chief Librarian) and Mark Osundwa (Librarian) for providing library space (Carrel) for working during the data collection period.

Special thanks go to the following people: Dr. Fred I. Mugivane for reading through this work and offering his advice. The Lisa Mukina SPSS data analysis group for their good work of analyzing data and script proof reading. Sylvia Mugure Macharia and Catherine Nyambura Muchira (1st year students at CAVS) for reading through the Daily Nations and The Standards respectively. By partnering with me in extracting the relevant data from those newspapers, they became my able research assistants. May the almighty God bless everybody else who had an input to my work in one way or the other.

DEDICATION

I dedicate this work to my entire extended family, particularly my parents, Mr. Joseph and Mrs. Hannah Kamau for being my greatest source of inspiration. My father provided his copies of all the Daily Nations used in this research and my mother offered prayers for me. May they be blessed by the almighty God.

ABBREVIATIONS AND ACRONYMS

ASK	Agricultural Society of Kenya
CAVS	College of Agriculture and Veterinary Services
FAO	Food and Agriculture Organization of the United Nations
GDP	Gross Domestic Product
GM	Genetically Modified
GMO	Genetically Modified Organisms
IFIC	International Food Information Center
KARI	Kenya Agricultural Research Institute
NGO's	Non-Governmental Organizations
SPSS	Statistical Package for Social Sciences
UNICEF	United Nations International Children Education Fund
UoN	University of Nairobi
USA	United States of America

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ABSTRACT

The research work analyzed the content of agricultural news coverage in the Standard and the Daily Nation Newspapers from September 2011 to August 2012. This was done by categorizing the articles covered during the study period and identifying their page locations (which were either from the cover, middle or last pages), determining their frequency and space allocation to agricultural information. Stratified random and purposive sampling was used to select 15 newspapers in every month of the study period for both papers. Data were collected from the total of 360 sampled newspapers and were analyzed with SPSS version 16 using frequency counts and percentages. That data were collected from the sampled newspaper issues on the new category, size of space allocated and location of news from each of the newspapers. Location refers to where the articles appeared in the newspaper such as cover (front) pages, middle pages and last pages. Space occupied by the articles were measured in centimeters using a ruler.

The results show that there were seven different categories of articles published by the two dailies during that study period. They are advertisements, features, editorials, letters to the editor, hard news, opinions and photographs and virtually all of the identified and categorized articles were located in the middle pages (95%). Photographs were the most frequently published categories of agricultural information (35.1 per cent) during the study period in both dailies and opinions were the least (0.9%). Daily Nation devoted only 7 per cent to all its published categories of agricultural information and the Standard allocated only 2 per cent of its total available space during the one year study period. The Standard published more agricultural articles than the Daily Nation in the Features (39.7 against 16.5 per cents), and Letters to the editor (4.4 against 2.8 per cents) categories but the Daily Nation published about 4 more times advertisements (17.7 per cent) compared to the Standard (4.4 per cent). Unlike the Daily Nation, The Standard did not publish any editorials, opinions and black and white agricultural photos.

It was recommended that these two Kenyan dailies should publish more agricultural information and on the front pages of their respective publications. It was also recommended that the Standard Group management should engage the services of more agricultural-oriented opinion column writers. Other recommendations were that the total space allocated to agricultural information by the two dailies need to be increased considerably so as to

enhance effective communication and that the Standard should endeavor to increase advertisements for commercial purposes without compromising reporting of hard news. Media executives are advised to employ agricultural graduates as the line reporters for agro-based sensitive news. Capacity building workshops should be organized for agricultural columnists in Kenyan newspapers on reporting of agro-information.

CHAPTER ONE: INTRODUCTION

1.1 Background

The mass media is a very important communication outlet that plays a greater role in the process of positive change. Van den Ban and Hawkins (1996) reported that the mass media does this in a variety of ways including setting agenda for important discussion, topics, transferring knowledge, forming and changing opinions and behavior. The media is also believed to create awareness and diffuse a personal value system favorable to innovations, mobility, achievement and consumption (Mc quail, 1987). Lenner (1958), Wesseler and Brinkman (2002) asserted that mass media helps to clear the mist of traditionalism of the media. Consequent to the pervasive role of the mass media and several appeals of print media over electronic based media, it becomes pertinent to focus on the print media as an important source of agro-information to farmers (Padre and Tripp, 2003). Newspapers are enduring and very popular print media organ. This is because it can be read and re-read at convenience, thus, allowing for a fuller and better understanding of mass media contents. Newspapers also help the process of information exchange between those searching for information and also support new behaviors (Albrecht et al., 1989; Lightfoot, 2003). In essence, the newspapers are potent and fundamental tools for technology transfer in the aid of agricultural and rural development. Thus, Aina (1990) with reference to USA and Canada and Fett (1972) with reference to Brazil attributed successes recorded in agricultural production in these nations, to farmers' ready access to agro-information contained in newspapers. This is however not the case in Kenya where recent research findings revealed that the media coverage of GMOs by three dailies was poor, and that there is need for a general improvement on this coverage (Lore, 2010). This will enable the general public to benefit from well- researched, balanced and analytical reporting of GMOs to fully participate in discussion and debate about GMOs and, consequently, make informed decisions on whether on not to adopt GMOs in their crop production system (Lore, 2010). GMOs articles is part of agricultural information which Lore's study found was poorly covered by three Kenyan dailies and hence this study sought to find comparatively how agriculture in general was covered by two of those three dailies.

Agriculture is becoming increasingly information sensitive (Padre et al., 2003) hence access to information has become a pre-requisite and a valuable resource for agricultural development. In this context, information is needed to exploit opportunities in time, raise awareness about the potential positive impacts of current choices and to get to know about opportunities of other farmers, in order to search for better opportunities and sustainable solutions (LEISA, 2002). Success in enhancing food production, providing income and job opportunities and ensuring that the agricultural sub-sector performs its manifest functions in furtherance of rural and overall national development, depend largely on the communication system adopted to implement various agricultural programs. Newspapers tend to reach more educated, elitist audiences in many countries. This may not seem the quickest way, compared with radio or TV, to reach a mass audience. But newspapers and magazines do have the advantages of being more permanent, carrying more information and often being more authoritative than other media. Writing and issuing a straightforward press release remains the most effective — and economic — tool for mass communication. And the other branches of the mass media tend to feed on what they have read in the press. Newspapers and magazines can also be used to reach key groups — for example, by carrying materials which teachers can use in their classrooms or suggestions for discussions by development workers in the field. (International Mine Action Standard, 2005).

Newspapers provide up-to-date information on local, state provincial, national, and world issues. They are among the most widely-read periodicals that are available and accessible to the vast majority of people of all ages and walks of life in any community. Every category of reader can find some important, current, and interesting information in newspapers. Today's newspapers use design elements that make information easily accessible to the reader. For example, important stories have large bold headlines, while Graphics' appear next to related stories. The most current analysis and criticism of politics, economics, health, sports, psychological and emotional issues, music, theatre, television, the fine arts, and even comics are covered by newspapers. Ola and Ojo (2007) reiterate that, "newspapers are important because they carry current information and they keep the readers informed of events and happenings within and outside their immediate environments. They are useful for education, recreation, entertainment and relaxation. News is written as a way of disseminating information to a large group of people. Reporters and editors are usually conscious of the

language they use in news reportage to attract popular readership. In positioning newspapers within the news environment and establishing their academic and research viability, Cheney et al. (2006) insist that despite the growing presence of news on the Internet, radio, television, and so on, a library's current newspaper collection can continue to play a vital role in the academic community. Despite the pervasive role of the electronic media in agricultural communication and based on the necessity for a rethink of the ways in which advice and information are made available to farmers, it becomes pertinent to focus on the print media as an important source of agro-information to farmers (Padre et al, 2003).

1.2 Statement of the Problem

With the need for increased agricultural production comes the need for more agricultural information dissemination (Blackburn, 1999). It is necessary for individual agricultural stakeholders to acquire this knowledge in order to increase agricultural production. Trends of agricultural information coverage studies across the world reveal that daily newspapers of more developed countries generally disseminate more such information than those published in less developed ones, including Kenya .Examples abound to prove this point as given below.

Americans gain most of this agricultural information through the print media. According to Kaitlyn (2012), a cross-national survey using the "community structure approach" examined the relationship between national characteristics and national newspaper coverage of favourable versus unfavorable towards genetically modified foods. The News Bank database was searched for articles of 250 words or more in a cross-national sample of 13 newspapers over an eight- year time period, from July 1, 2003, to July 31, 2011, yielding 282 articles. Articles were coded for "prominence" and "direction" (favorable, unfavorable, or balanced/neutral), which when combined produced a single "media vector" score for each newspaper. Eight of the 13 nations demonstrated favorable coverage of genetically modified food. The other five displayed unfavorable coverage of the issue. Lichter et al (2007) concluded from another study on food and fitness related news coverage in major media outlets of America that newspapers were leading in covering food and fitness related issues

compared to news magazines and evening newscasts. More focus of majority of the news stories was on physical activity, calorie consumption and weight loss or gain.

Mishra and Verma (1998) conducted a study on coverage of agricultural information in eight Indian dailies. The findings showed that the percent space allocated to agricultural news per issue as a whole was very low. On the whole, the agricultural news was poorly attended practically by all the categories of Indian news papers. Sharma et al (2003) also carried out a related study on content analysis of agricultural coverage in eleven Indian national dailies. The results revealed that coverage of environment and ecology related issues were minimum (in contrast to the American scenario who gains most of the agricultural information through the print media). Sharma indicated that there is need for more coverage of agricultural based news articles in national dailies.

This is the same recommendation that was made by Lore (2010), in her study about analysis of coverage of genetically modified crops by the mainstream Kenyan print media. Drawing on the agenda setting and framing theories, a comprehensive analysis was carried out on a total of 95 articles together published in the Daily Nation, The Standard and Taifa Leo during the period to assess the frequency, type, tone, length, authorship and scientific accuracy of the articles as well as the main stakeholders quoted and the frames used to request GMOs in the articles. Her study established that the coverage of GMOs, by the Kiswahili language newspaper, Taifa Leo was generally low compared to the coverage by the English language newspaper, Daily Nation and the Standard. Despite the two English dailies higher rating than Taifa Leo, they still had low coverage of agricultural information. Therefore, this study seeks to do a direct comparative content analysis of agricultural information coverage by The Standard and Daily Nation (which Lore's study did not do, hence this study sought to fill that knowledge gap). Kenyans need to be sensitized more about agricultural issues by these two main local dailies than is the case today. Hence, this study sought to establish the agricultural content coverage by the two newspapers.

1.3 Justification of the Study

The study period (September- August 2012) was chosen because of three agricultural-related events that happened around the start and during this period.

This was expected to trigger a lot of related agricultural, information communication through the print media and especially, so by the mainstream daily newspapers which include the Standard and Daily Nation.

Firstly there was the “Kenyans for Kenya” initiative which was a major fundraiser that was started in July 2011 by corporate leaders and the Red Cross in response to media reports of famine and deaths from starvation in Turkana District. (www.Kenyan4kenya.co.ke, accessed on October, 4th 2012). The campaign used the M-PESA safaricom money transfer service to receive donations as low as 10 Kenyan shillings with an aim to raise 500 Kenyan million shillings. Secondly, a strange maize disease emerged in South Rift Kenyan region and destroyed thousands of acres of maize. It was later identified by KARI researchers and scientists as Maize Lethal Necrotic Disease. It was viral and new in Kenya but had been reported in other parts of the world. Maize is the staple food for most Kenyans and South Rift is the bread basket region in Kenya and hence this disease was a serious threat to Kenya’s food security. The problem was so serious such that the bi-monthly Kenya Farmer Magazine (the official journal of the ASK) had its July 2012 edition issue under the banner headline, “Maize disease identified”. Thirdly, the period between June 2007 and February 2009 saw Kenya’s national Bio-safety legislation, the Bio-safety bill go through the parliamentary process culminating in its being passed into law. It is during this time that Lore (2010), found out in her research study that, overall , despite proliferation of GMO coverage by the broadcast media due to the countrywide GMO debate sparked by the bill, The Standard and Daily Nation newspapers lacked in depth, objectivity and analytical competence in GMO coverage. The GMO articles were short to medium in length with letters to the editor forming the majority of the published articles. Majority of the articles contained biases either for or against GMOs and only about 10% contained accurate basic information about GMOs or GM technology. Most of the articles were written by non- specialist authors (general journalists and editors) with science journalist and specialists in agricultural biotechnology responsible for authoring a small proportion of articles. Today, both dailies do not have science editors

under whose docket agricultural information would be edited and published. This could be probably the single most important reason why the two national daily newspapers with good (highest) daily circulation (see table 1.1), covered GMO information poorly. Therefore, this study seeks to do a comparative content analysis of general agricultural information coverage by The Standard and Daily Nation because it has not been done before, hence creating an information/knowledge gap whose findings of this study hopefully filled. Improved agricultural information coverage by the dailies would help stakeholders like farmers to readily access information that they would use to increase agricultural productivity.

1.4 Objectives of the Study

General objective: To examine the contents and trends of coverage of agricultural information by The Standard and Daily Nation newspapers between September 2011 and August 2012. That is, to describe quantitatively (using figures) the coverage of agricultural information by the two Kenyan leading dailies.

Specific objectives

Specifically the study aims at:-

- a) Categorizing the types of articles written about agriculture by The Standard and Daily Nation and identifying their page locations (for purposes of this study, the categories that will be identified include hard news, features, letters to the editor, editorials, photographs, advertisements, book review, cartoons and opinion items).
- b) Establishing the frequency of appearance of agricultural information under different categories of articles during the period of study.
- c) Determining the volume of agricultural stories carried by The Standard and Daily Nation newspapers.

- d) Comparing the findings of both newspapers against each other.

1.5 Research Questions

From the foregoing objectives, this research sought to answer the following questions;

1. How many different categories of agricultural information were covered by The Standard and Daily Nation between September 2011 and August 2012 and where were the articles located in these papers?
2. What was the frequency of agricultural information coverage by the two dailies during the same period?
3. How much space was allocated to agricultural information by the two dailies during the study period?
4. Which newspaper comparatively covered more agricultural information during the study period?

1.6 Scope of the Study

This study was based on secondary data gathered from The Standard and the Daily Nation newspapers for the period September 2011 to August 2012. That is, the study aimed at evaluating (content analysis) how the two selected publications covered Agricultural issues during the given period. The preference of the two publications was based on the fact that both have consistently been in circulation for a long time as opposed to other Kenyan daily publications that were more recently launched. Given the reach effectiveness of the two dailies due to their wider circulation, was considered that the audiences they serve was bigger. This was so because every sold copy of either publication is usually read by more than one person, meaning that readership was higher than circulation figures.

Table 1.1: Publisher estimates of newspaper circulation in Kenya

Publisher	Publication	Publisher estimates
Nation Media Group	Daily Nation	180,000
	Sunday Nation	280,000
The Standard Group Limited	The Standard	110,000
	Sunday Standard	150,000

Source: The status of the media in Kenya: A report of the media council of Kenya, 2008

It should be noted that the most current circulation figures were not readily available because both publisher groups treat such information with utmost confidentiality. The circulation figures varied depending on whom you are speaking to from the groups. For example, it was estimated that the 2012 Daily Nation circulation figures are 205,000 copies per day with those of The Standard being slightly lower but above what it was in 2008.

1.7 Organization of the Research Report

Chapter One: Background of the study, Statement of the Problem, Objectives, Justification, Research questions, Scope of the study, Organization of the research report and definition of key terms.

Chapter Two: Literature review

Chapter Three: Research Methodology

Chapter Four: Results and Discussion of Findings

Chapter Five: Summary of the study, Conclusion and Recommendations.

1.8 Definition of Key Terms

The key terms were operationalised as follows:

Articles

Refers to the various published items like photos (pictures/cartoons), hard news, features and letters to the editor.

Book Review

Book review is a critical evaluation of an agricultural book by an expert or a common reader.

Caption

Caption is a headline under a photograph or picture.

Column

The division of space on a newspaper page such as single column, one column wide, double column, two columns wide and so on.

Content Analysis

Content analysis or textual analysis is a research methodology (qualitative research technique) used to determine the meaning, purpose or effect of any type of communication, such as literature in newspapers, magazines or television programs and music.

Editorial

Editorial is an expression of opinion by the newspaper editors, reflecting the opinion of the publisher or owner of the newspaper under the heading “Editorial”.

Feature Article

Feature Article deals with a selected agricultural topic and occupies a defined space and position and is prominently displayed with or without pictures.

Frequency

Frequency is defined as the total number of articles published by the newspapers within the duration under study.

Headline

Headlines are word(s) in large type found at the top of the story, summarizing the story for readers; also called a head.

Letters to the Editor

Letters to the Editor are the letters from readers expressing the reader's personal views on an issue(s).

Newspaper

Newspaper is a periodical publication containing news regarding current events, informative articles, diverse features, editorials and advertising.

News Items

News items are timely report of events, facts or opinions that interest a significant number of readers (Khan, 2002).

Print Media

Print Media are lightweight, portable, disposable publications printed on paper and circulated as physical copies.

Prominence

Prominence refers to the features which lend visibility to the articles. These include edition lead, page lead, boxed use of bold type and use of pictures.

Story source

Story source are operationally taken to be those people and or institutions generating the information contained in the articles. These may be the government and its agents, NGOs, research institutions and private individuals or any other social groups.

Volume of coverage

Refers to the total space allocated to Agricultural issues in square centimeters (calculated by multiplying the length/column by the width of each story after measuring them).

CHAPTER TWO: LITERATURE REVIEW

2.1 Introduction

Agricultural information communication is a field of study and work that focuses on communication about agricultural related information among agricultural stakeholders and between agricultural and non- agricultural stakeholders (Treise et al, 2002). Areas of print media coverage of agriculture and agricultural issues include topics like crop/livestock diseases, food safety, agricultural biotechnology, genetically modified organisms, general animal/crop husbandry practices, crop/livestock nutrition, pricing of agricultural commodities and inputs, agricultural machinery, soil fertility, organic farming among other agriculture sub-sectors which also include but not limited to value addition, product processing and marketing in the agricultural production value chain.

Agricultural communication also addresses all subject areas related to the complex enterprises of food, feed, fiber, renewable energy, natural resource management, rural development and others locally to globally (Boone et al, 2000). Furthermore, it spans all participants of those enterprises, from agricultural research and production to processing, marketing, consumption, nutrition and health.

Tucker et al (2006) alluded that a growing market for agricultural journalists and broadcasters led to the establishment of agricultural communication academic disciplines. Evans (2008), concurs with him and adds that agricultural journalists are trained like traditional journalists, but bring with them an understanding of agricultural systems and science either through experience and/or academic training. The academic field originated from communication courses that taught students in the agricultural science how to communicate. Originally, agricultural journalists were needed to report farm news for a much larger agricultural and rural audience. As people moved from the farm to cities and suburbs, a much greater proportion of the population had less direct knowledge and experience regarding agriculture. While a need still exists for agricultural journalists, an equal if not greater need exists for agricultural communicators who can act as liaisons between an industry with deeply rooted traditions and values and a public with little or no understanding of how agriculture operates and why it is the way it is.

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 (Rogers, 2003). Many individuals receive agricultural news from daily newspapers and it is important that the public is presented with objective information so that individuals can form their opinions about complex or controversial issues. In the innovation–decision process, mass media channels are important means to create knowledge and spread information rapidly to a large audience and can change some weakly held attitudes (Emery, 1999). 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.

The print media refers to all that is printed or written down and published, be it a leaflet, a note, a booklet, a book, newspapers, magazine or journals. It is based on an assumption that for the effective use of the print media, both the sender and receiver have writing and reading skills. In addition, both must have a common language to enable them understand the text (Kiruthi, 2004). A newspaper is a common printed media. It is an unbound publication produced at regular intervals and devoted primarily to current events and advertisements. Most newspapers are printed on rough-grain, lightweight paper called news-print. Newspapers are published with varying frequency and differ in focus. For example, the Standard and Nation newspapers in Kenya which are the subjects of research by this study are published daily in Nairobi.

2.2 Development of Newspapers Worldwide

Kiruthi (2004) further asserts that the development of the newspaper as we know it today was a gradual process. Before printing was invented, the oldest newspaper, The *Siloam Inscription*, was in circulation among the people of Mesopotamia at around 700 BC. This was a stone on which news were recorded. The Chinese too had a newspaper known as *Tsing Pao*, which was published as a court journal in Peking in AD 500. The Romans were known to send handwritten notices throughout their empire. From 60 BC, Emperor Julius Caesar

used to send government announcements through daily postings at public places in Rome contained in a bulletin called *Acta Diurna*. In Venice, by 1506, written notices on commercial issues were published. With the invention of paper and printing, newspaper production improved. Printing was invented by a German, Johannes Gutenberg, in the 15th century and this enabled the Germans to lead in the production of newspapers. Their first publication, *Strasbourg Relations*, was published in 1609. The French published their first newspaper in 1631 while Britain published her first newspaper in 1702. By mid 18th century, the outstanding daily newspaper in Britain was the *Public Advertiser*, also known as London Daily Post, published by Henry Woodfall and his son Henry Sampson Woodfall. In 1785, John Walter started a newspaper, *the Daily Universal Register*, but later changed its name to The Times in 1788. In 1900, the *Daily Express* was founded by C. Arthur (Kiruthi,2004).

2.3 Newspapers abroad and in Kenya

Britain has a number of newspapers such as the London evening papers, such as *Evening Standard*; provincial papers, such as *The Manchester Guardian*, started in 1821; and Sunday newspapers, such as *The Sunday Times*, started in 1922(Kiruthi et al,2004). The United States developed a variety of newspaper productions. Some of her newspapers included the *Pennsylvania Packet* and the *Daily Advertiser* of 1784, the New York Daily of 1785, the *Christian Science Monitor* set up by Mrs. Mary Baker in 1908, and the American Newspaper Guild of 1933. By mid 20th century, about 7,000 daily newspapers were published in the world, a quarter of them in the United States of America. In Africa, newspapers were already known by the 18th century. Egypt had its first newspaper, *Le Courier de L'Egypte*, issued by Napoleon's forces at Cairo in 1798. By mid-twentieth century, Egypt had more than 50 dailies. Mozambique had three dailies at Lourenco Marques by 1940. Kenya has had many newspapers during and after colonial rule. The first newspaper was the *African Standard* founded by an Indian, Alibhai Mulla Jeevanjee, in Mombasa in 1902. Jeevanjee employed journalist Witt Tiller from Britain to manage the newspaper. He later sold the firm to Messrs Anderson and Mayer who changed its name to the *East African Standard*. The operations of the firm moved from Mombasa to Nairobi in 1910, although a small plant remained at Mombasa to publish the Mombasa Times. The *East African Standard* is today a daily publication with offices in the three East African countries. The *Tanganyika Standard* was

published in January 1930, whereas the *Uganda Argus* was set up in 1953. The *East African Standard* changed its name to the *Standard* on July 1974. A further change of name occurred in February 1995 when *The Standard* reverted to its old name, *East African Standard* while her sister publication, *Standard on Sunday*, also reverted to her old title of *Sunday Standard*. In 1928, Jomo Kenyatta, Kenya's first president, published a local newspaper in Kikuyu. The paper, *Muigwithania* (the one who reconciles), aimed at spreading the views of the Kikuyu Central Association and to reconcile the Agikuyu back to their culture. The *Daily Nation* was established by the Aga Khan in Kenya in 1960. Initially, 15,000 dailies were circulated. By 1995, there were 170,000 copies in circulation every day (Kiruthi et al, 2004).

The Nation Media group has other newspapers that include the *Sunday Nation*, *Taifa Leo*, *Taifa Jumapili*, *The Monitor* and the *East African*; a weekly publication circulated in East Africa. In 1983, the *Kenya Times* was founded by Hilary Ng'weno and later bought by KANU who jointly owned it with a Briton called Robert Maxwell. Today other newspapers such as *Citizen*, *Independent*, *The Patriot* and *The Dispatch* which publish mainly shocking stories exist in Kenya. Newspapers are printed daily, weekly and monthly, depending on whether they have broad audience or a special interest group. They may be categorized as daily, weekly and special interest newspapers. Daily newspapers print at least one edition every weekday. Morning editions, printed in the pre-dawn hours, cover newsworthy events of the previous day. Evening editions are printed in the afternoon and include information about events that happened earlier in the day. Examples of daily newspapers include the *Los Angeles Times* in USA, *Toronto Star* in Canada and the *Daily Nation* in Kenya. Weekly newspapers are published once a week. General circulation weekly papers often contain news of interest to people in a smaller area than that of a daily paper. The area would be a particular city, town or neighbourhood. Thus, they focus on local happenings as opposed to national or international news. Examples of weekly newspapers include the *East African* in Kenya and the *Weekly Telegraph* in Britain. Special interest newspapers concentrate on news of interest to a particular group. An ethnic community, for example, may have a newspaper to inform readers of news and events in that community. Some corporations or trade organizations have their own newspapers which are targeted at their members, e.g. airlines pilots, doctors and those in the fashion industry. Other special interest newspapers feature news about a specific

issue, e.g. sports or music. Special interest newspapers may be published daily, weekly, monthly or even less frequently. Daily special interest newspapers cover daily events from particular perspectives. Art newspapers, such as those devoted to theatre or music are published daily. Newspapers are important because they circulate in large numbers and therefore most people are able to get information quickly. In general, however, in developing countries such as Kenya, newspapers have low readership. Figures 1 and 2 below show copies of the Daily Nation newspaper in Kenya reporting agricultural (related) information.



Figure 1: Front page of a Daily Nation with a headline indicating price hike in agricultural products with a caption indicating the old and new prices.



Figure 2: Back page of a Daily Nation speculating food price increase.

2.4 Newspapers’ reportage of Agricultural issues in Western countries

The agenda setting theory postulates that what is reported in the media sets the agenda for what the public consider to be important (McCombs & Shaw, 1972). Empirical evidence has shown that agenda setting effects of media are minimal for obtrusive issues with which individuals have direct experience. However, agenda setting effects of the media are strong for unobtrusive, indirectly experienced issues because the public has a need for orientation to those issues, particularly when an issue is perceived as personally relevant to the reader. For most Americans, genetic modification through agricultural biotechnology was unfamiliar and abstract concept, lacking any real context. Studies of agenda setting have shown that media presentations affect public perceptions not only regarding what issues are important, but also what aspects of those issues are important. Both what and how the media report on a topic is reflected in public understanding and opinion about that issue. Space in the dailies is often event driven; that is, reporters will cover what is news today, increasing awareness of, in contrast to educating or informing the public on an issue. Becoming aware of an issue is necessary, yet not sufficient, to become informed or take action on the topic. To do so also requires that an issue becomes salient. Media effects research shows that for an issue to become salient it must be covered with high frequency over a period of time. Coverage of

peak events, that is, greater coverage of a topic over a period of time, increases the likelihood that the critical event that is covered will capture the public attention, providing an opportunity for the issue to become salient.

Furthermore, peak events may provide an opportunity for information from a diversity of source to reach decision makers and the public (Abbott & Lucht, 2000). Controversy carries news value and often creates media hoopla, or a peak in coverage where journalists covers a topic with vigor. When an issue is seen as more controversial, journalists, guided by the norm of objectivity, may attempt to present opposing viewpoints. Because most newspaper stories are based on information provided by sources, Gandy (1982) and Soloski (1989) point out that media sources for information on agricultural biotechnology have the potential to strongly influence what the public reads about this technology. It is therefore essential that those sources effectively frame information for the publics understanding so that information is what will be remembered.

Based on the knowledge of how media can influence public opinion plus the American public limited knowledge regarding biotechnology and GM foods, mass media coverage of agricultural biotechnology has the potential to strongly influence public opinion, particularly through critical event peak coverage (Editor and Publisher, 2000). The analysis of news copy showed not only what topic garner coverage and who provides the relevant information but also the extent to which a topic is covered and how. The newspapers selected for the study, the *New York Times*, the *Washington Post* and the *Wall Street Journal*, had a combined national readership of 3.6 million (Editor and Publisher, 2000). Media studies have asserted that articles in the national newspapers tend to spread vertically through the news hierarchy, setting the national news agenda (Gitlin, 1980). These national papers touted as “Breakfast reading for congress,” the “Unofficial newspaper of record” (Ulrich, 2002), and “the publication of choice for capitalism’s brightest stars” respectively command attentions. In fact, according to Herman and McChesney (1997) ,the 3 (above named) national newspapers in the United States, along with the news agencies, set the agenda for the rest of the press and for broadcasters too. The analysis of US print media coverage of agricultural biotechnology in 2001 and 2002 indicated that the national coverage of agricultural biotechnology is quite

limited. A comprehensive key word search of articles published in the *New York Times*, *Washington Post*, and *Wall Street Journal* found just 210 articles were published in 2001 and 173 in 2002.

The Americans awareness of agricultural biotechnology has not changed substantially over time (IFIC, 2001). Both the public's lack of familiarity with agricultural biotechnology and their limited perception of its relevance in daily living influence their perspectives towards the technology. This overall lack of public understanding creates an environment in which any information communicated to the people becomes what they believe. In a national survey by Hallman et al (2004), respondents were asked if they recalled several agricultural biotechnology news stories. Almost one quarter (24%) indicated that they remembered the world hunger peak event, the African refusal of GM grain food aid, even though this peak only occurred over two months in 2002. In contrast, only 7% remembered any Bt Pollen/ Monarch stories, categorized as a GMO release, that surfaced through a much longer peak in coverage, from June to December in 1999. Given the large media hoopla generated by this story, one might expect a much higher story recall. World hunger a theme that emerged in 2002, is representative of peak coverage and is remembered. Although, the monarch peak occurred three years prior to the world hunger critical event, time may not be the only explanation for this difference in story recall.

Cate (1994) states that Adamson, founder and author of UNICEF's annual state of the world's children report, argues that the public has "an impression that the developing world is a theater of tragedy in which poverty and human misery figure prominently in almost every scene". In addition, media often portray the west as a Samaritan figure providing aid in a time of need to countries in Africa. Accounts of suffering and relief fall, almost without exception into "a pre-set narrative" that portrays helpless victims and "heroic saviors". When agricultural biotechnology is linked to this narrative it is not only more likely to be remembered, but it is also more likely to be perceived as less risky because it is paired with a more familiar concept, feed the world's hungry. Consumers often voice concerns about agricultural biotechnology, viewing it as a risky technology. Risk assessment can also be influenced by framing a decision in terms of losses and gains (Tversky & Kahneman, 1986).

Framing a decision in terms of loss is more salient to the decision maker. If a risk is framed in term of loss, then the risk is seen as opportunity to avoid loss and an individual will take more risk to avoid loss than to chance again (Highhouse & Yuce, 1996). In fact, when discussing the differences, in consumer perceptions between medical and agricultural biotechnology, Wansink and Kim (2001) assert that medical biotechnology is often framed as avoiding a loss and agricultural biotechnology is framed as an improvement on a product that is already perceived to be sufficient by American consumers. Effective framing uses imagery to package the message in a form that is easily understood, minimizing issue complexity. Emotional imagery such as starving children portrays agricultural biotechnology as a beneficial solution to world hunger (Wansink & Kim, 2001). Furthermore, emotion increases arousal, enhancing the chances of effective storage in memory. When the media is essentially the sole provider of information on a topic, the public is opt to understand the issue in the same manner as the media portrayed it.

2.5 Newspapers' reportage of agricultural issues in Africa

A research conducted in Africa analyzed the content of agricultural news coverage in Mmegi, Botswana. 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 those in circulation in the country based on their ownership. Data were collected from newspapers issued on Monday, Wednesday and Friday and analyzed with SPSS version 16 using frequency Counts, percentages and one-way analysis of variance. The results showed 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 also showed that privately owned newspaper s 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 agricultural news was in Setswana language and 57.6 percent in English language, whereas in government owned newspaper, 6.1 percent of the agricultural 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 recommended that government owned newspaper must increase coverage of agriculture news in Setswsna.

A study used two widely read Nigerian Newspapers (Punch and Guardian) to assess the extent of daily newspapers involvement in disseminating agricultural information. Samples of the newspapers between 2007 and 2010 were analyzed for daily reportage, space allocation and types of stories published. All data collected were analyzed using simple descriptive statistics and results showed that 70%, 78.8%, 66.3% and 60% of the newspapers evaluated did not report any agricultural issues in 2007, 2008, 2009 and 2010 respectively. Among those that reported agricultural issues, majority reported 1-2 stories per day representing 21.3%, 28.8%, 25% and 36% of total sample size in 2007, 2008, 2009 and 2010 respectively. Mean column inch allocation were 27.43, 10.77, 35.89 and 27.52 for 2007, 2008, 2009 and 2010 respectively. Total column inch allocation to the publication of agricultural issues in 2007, 2008, 2009 and 2010 were 2194.29, 861.54, 2870.94 and 2201.52 respectively for all eight (80) newspapers sampled in each year. Finally, except in 2008, the subject that attracted the highest reportage was health implication of the consumption of agricultural commodities. Judging by previous and current trends, the authors concluded that newspapers are not likely to make significant contribution to the dissemination of agricultural information for enhanced agricultural production. That research work therefore examined the role of two Nigerian newspapers in the dissemination of agricultural information. The foci of the research work are the amount of space allocated to the dissemination of agricultural information and the types of information published.

CHAPTER THREE: RESEARCH METHODOLOGY

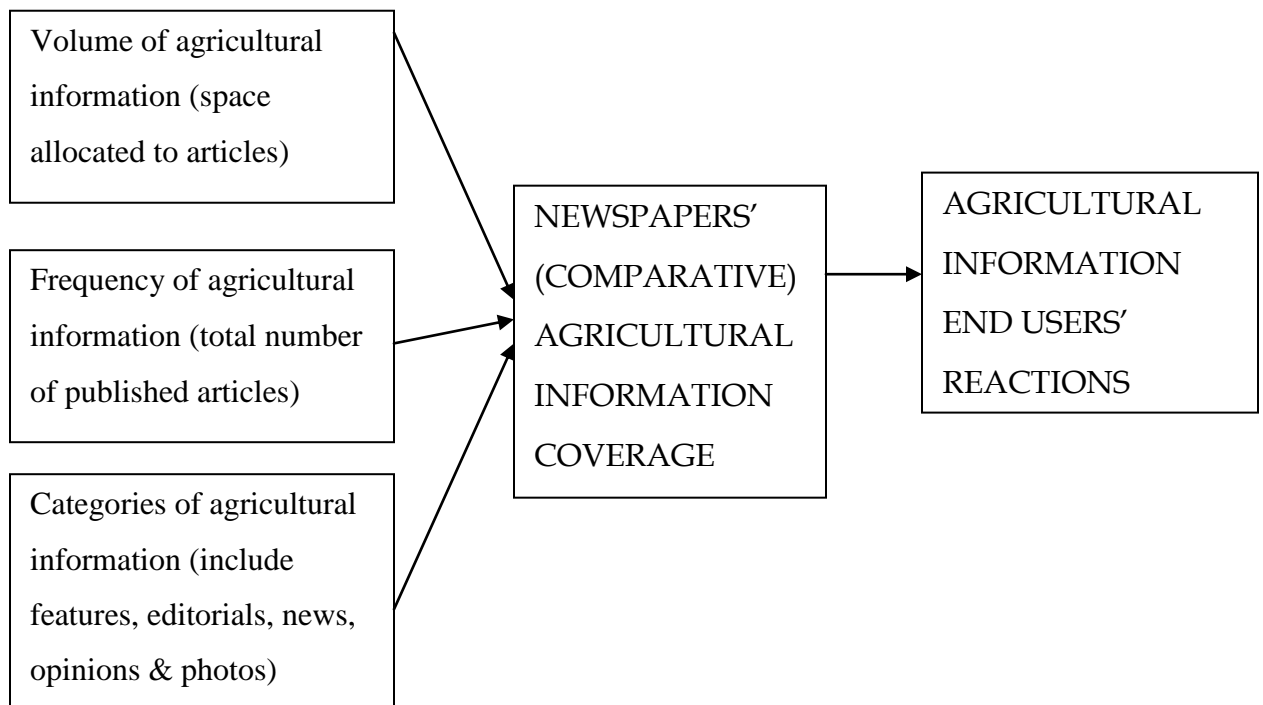
3.1 Introduction

This chapter presents the conceptual framework, theoretical framework, data collection methods and the sampling procedure used in the study.

3.2 Conceptual Framework

Figure 3 shows how the independent variables interact to bring about the comparison of agricultural information coverage by the Standard and Daily Nation newspapers during the study period. The independent variables are the volume and page location of agricultural articles, frequency of coverage and categories of identified agricultural stories.

Figure 3: Conceptual Framework showing relationship of study variables



3.3 Theoretical framework

According to Babbie Earl (1989), a theory is a systematic explanation for observed facts and laws that relate to a particular aspect of life. This study will be premised on the agenda setting theory. The agenda setting theorists posit that the media have the ability to structure

and transfer the silence of issues in the minds of public. Simon Raymonds (1983) defines agenda setting as “the ability of the media to influence public’s perception of the important topics and issues of the day”. Bittner (1983) argues that the media through agenda setting can influence public opinion. To him, agenda setting is the ability of the media to influence the salience of events in the public mind.

This study was based mainly on the Agenda setting theory. This theory proposes that mass media have the ability to transfer salient items on the news agenda to public agenda (Griffins, 1991; Mcquail, 1987; and Magayv, 1992). The mass media therefore has the ability to influence the public perception of important issues of the day. The press forms pictures in our heads from our unseen surroundings. Mc Combs and Shaw (1972) found the media to have a potentially cognitive impact by placing emphasis on an agenda. People not what to think, but what to think about. In order to lend emphasis, attention and importance, the media needs to cover them regularly, adequately and conspicuously. This is in forms of the frequency, space allocation and placement respectively. Opponents of this theory say by the media giving attention to some issues and ignoring or down playing others deliberately sets priorities within certain areas of public life. But to set an agenda several other factors may influence the mass media.

Content analysis technique was used in this study to examine the contents and trends of coverage of agricultural information by The Standard and Daily Nation newspapers between September 2011 and August 2012. Many different scholars have defined content analysis in different ways. Frankfort Nachmias and Nachmias (1996) define content analysis as “... any technique for making inferences by systematically and objectively identifying specified characteristics of messages”. Babbie (1998) highlights the advantages of content analysis as being economical with time and money especially if the material to be coded is easily accessible. It also allows the researcher to cover processes occurring over long period of time. 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 newspapers editorials.

According to Bittner (1983), newspapers are an economic and social phenomenon of our society. They are 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 more indirect way. They now provide information regarding agricultural issues and event 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). Krippendorff (1980) defined content analysis (almost similarly) as research technique for making replicable and valid inferences from data to their context.

3.4 Data types and sources

The Standard include its sister publications, The Standard on Saturday and The Standard on Sunday. Daily Nation includes its sister publications, Saturday Nation and the Sunday Nation. A total of 360 copies of both editions were analyzed. That is, 180 copies of The Standard and 180 copies of Daily Nation were studied. Agricultural articles were the units of analysis. Identified agricultural stories/articles like hard news, features, letters to the editor, editorials, pictures and opinion items were measured to determine the area/space they occupy (volume). They were also categorized and their frequency determined for the purposes of comparison and analysis.

3.5 Sampling procedure

In sampling the 360 newspaper copies were used for this study. Both purposive sampling and stratified random sampling were used. According to Sinch. J (1994), sampling is a process of selecting few cases in order to provide information that can be used to make judgments about a much larger number of cases. The “few cases” are referred to as a sample while the “larger number of cases” are referred to as a population or universe. If the sample is to provide adequate information to make judgments, it should be a good representative of the population characteristics on which the judgment is to be based. One way to obtain a representative sample is through random sampling. A random sample is often called probability sampling. In random sampling every member of the population has an equal chance of being included in the sample. A random sample is an unbiased sample and those individuals included in the sample vary only as they would due to random fluctuation. There is no systematic variation in- the sample that would make one sample different from other samples. Consequently, a random sample is representative of the population from which it was selected. Simple random sampling is a sampling procedure which gives each unit in the population an equal opportunity to be included.

The procedure involved assigning a number or any other identifying symbol and then using the number or the symbol to select the sample size or percentage required. The most usual method is to use random numbers. Stratified random sampling creates subpopulation (levels or strata) in the population. All strata were represented in the sample and the sample units were selected from each stratum at random. Proportionate allocation of sampling fraction or percentage was used to determine the number of units to be drawn from each stratum. In stratified random sampling, simple random sampling was exercised within the population stratum. The sampling unit in the stratified random sampling is the individual element within the stratum.

In this case, all The Standard and Daily Nation copies for each of the twelve months under survey were divided into three strata;

- i) from 1st to 10th of every month,
- ii) from 11th to 20th of every month,
- iii) from 21st to the end of every month.

And from each stratum, five copies were selected purposively making a total of fifteen copies per month for each publication. It should be noted that dates sampled for each month for both publications were deliberately made similar so as to enable effective comparative content analysis. All the sampled 360 (selected) editions of the two publications for the period under study were examined. These formed the sample. The year under study was a leap year whereby February had 29 days instead of 28 days. Therefore the circulation for the Daily Nation for the year under the study was 366 papers that is one paper per day. The same applied to the Standard Newspaper. The population of papers in circulation was (366+366) 732. From this population a sample size was arrived at through the three strata whereby from each strata 5 copies were purposively selected, thus 15 copies for each month for each of the paper. In a month therefore, 30 samples were obtained from the two papers and in a year (12 x 30) 360 samples were obtained. The sample size for the study was therefore 360.

3.6 Data Collection

Secondary data was collected through analysis of agricultural stories from both The Standard and Daily Nation and analyzed using SPSS.

3.7 Data Analysis

Basically, a descriptive study design was used to determine the frequency of agricultural information in The Standard and Daily Nation newspapers from September 2011 to August 2012. All the research questions were answered and findings presented. The method used was quantitative analysis of the amount of space allocated for every story on agriculture. By measuring the length and width (breadth) and then getting the area, the amount of space allocated for each story on agriculture was determined. The analysis was done using SPSS (version 16) against the following independent variables. The volume and page location of agricultural articles (the space they occupy was gotten by measuring the lengths of their columns and their widths in centimeters and multiplying them to get the area in square centimeters), frequency of coverage and categories of identified agricultural stories.

CHAPTER FOUR: RESULTS AND DISCUSSION

4.1 Introduction

This chapter presents a discussion of the findings of the study.

4.2 Categorization and page location of the published types of articles

Results of this study revealed that there were seven different agricultural categories of articles that were published during the study period. They were identified and classified (categorized) as follows:- advertisements, features, editorials, letters to the editor(s), hard news, opinions and photographs which were both coloured and black and white (table 4.1).

Page location of the agricultural stories showed that the two dailies did not prioritize agricultural news. What is covered on the front page is what editors consider relatively important to their readers and in this case it is non-agricultural information that dominated front pages for both papers during the study period. This low agricultural information reportage on the Kenyan dailies is contrast to what Ofuoku and Agumagu (2008) reported that the front page is used to present to readers all the important, attractive, eye-catching and major headlines contained inside the newspaper. This view 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 4.1 shows those categories and their actual number (counts) for both newspapers. (The Total Count column of Table 4.1 represented the frequencies).

Table 4.1: Categories of agricultural stories identified

Category	The Standard count	Daily Nation count	Total count
Adverts	18	270	288
Features	162	52	414
Editorials	0	42	42
Letters to editors	18	42	60
Hard news	84	348	432
Opinions	0	18	18
Photos (B/W)	0	12	12
Photos (Coloured)	126	540	666
Total	408	1524	1932

It is evident from table 4.1 that most agricultural information was communicated through coloured photographs that accounted for 34.5% of all information covered by both papers during the study period. During the study period both had 666 coloured photos though the Daily Nation Published 81.1% (540) of the 666 and The Standard only 18.9% (126) of them.

Paired Samples Statistics

		Mean	N	Std. Deviation	Std. Error Mean
Pair	Standard	51.00	8	64.383	22.763
	Nation	165.50	8	197.550	69.844

The mean count for Standard newspaper was 51 with standard deviation of 64.4 among its categories while that for Nation was 165.5 with a standard deviation of 197.6 among its categories.

Paired Samples Correlations

		N	Correlation	Sig.

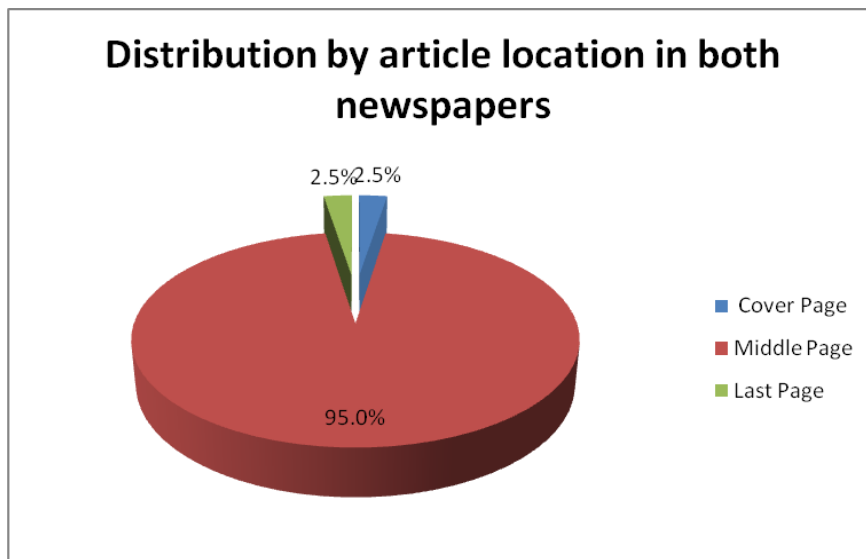
Paired Samples Test

		Paired Differences				Sig. (2-tailed)
		Mean	Std. Deviation	t	df	
Pair	Standard - Nation	-114.500	175.101	-1.850	7	.107
Pair	Standard & Nation	8	.492	.216		

The counts for the categories between the two newspapers had a moderate correlation of 0.5 but not so much significant (P=0.216). That means only 21% of the categories between the newspapers are related.

The overall mean difference was -114.5 with a standard deviation of 175.1. This shows that there is a low significance difference between the two news paper (P=0.107) at 95% confidence interval.

Figure 4: Distribution by article location in both newspapers



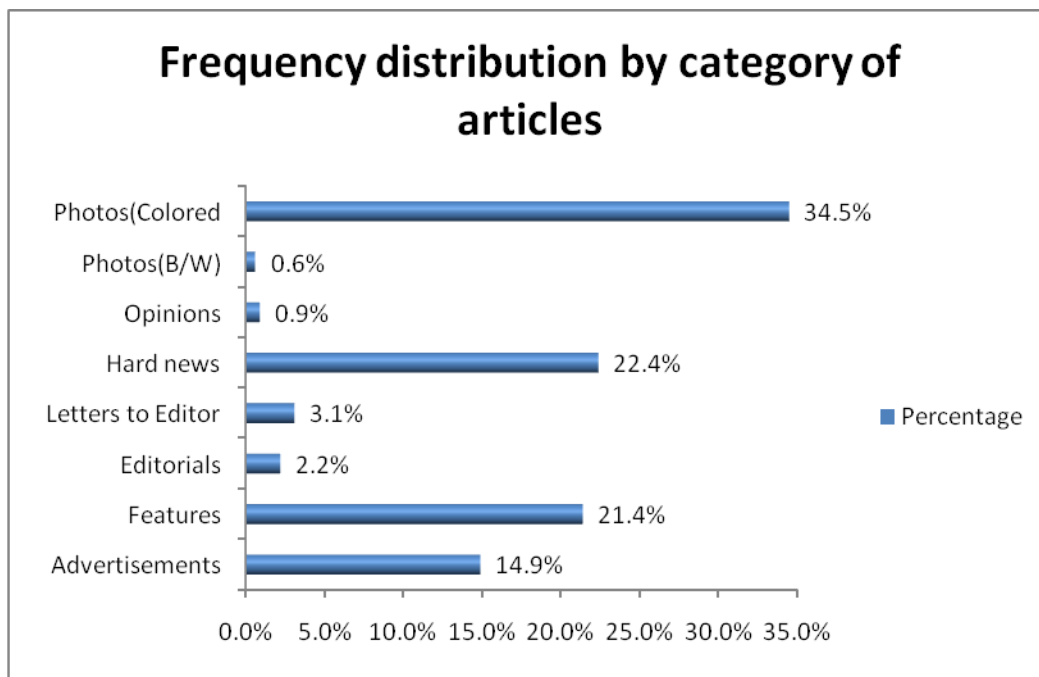
Almost all of the identified and categorized articles in table 4.1, were located in the middle pages (95%) as figure 4 shows. Only 2.5% was located in the front page and a similar amount on the back page. But the back page of The Standard is reserved for sports news only meaning that the 2.5% agricultural information published of the back pages were for the Daily Nation.

4.3 Frequency of appearance of agricultural information per year (study period)

Figure 5 shows the frequencies during the year of the articles identified and categorized. Both coloured and black and white (B/W) photographs were the most frequently published categories of agricultural information during the one year study period. Both types of photos amounted to 678 (666+12) which is 35.1 per cent (34.5+0.6). Newspapers have limited space to publish information and because photos capture a lot of information in less space that is

probably why editors used them more than in any other category to communicate agricultural information effectively. Opinions from agriculture experts and other writers were very few (0.9%). Pages reserved for such opinions were occupied by non-agriculture stories despite agriculture being the most important contributor to the Kenyan national economy. Opinion writers demonstrated how they regard other sector news more than agricultural news.

Figure 5: Frequency distribution by category of articles



4.4 Amount of space occupied by agricultural information

Figure 6 shows that out of the total available space during the entire study period, the Daily Nation devoted about 7 per cent to all its published categories of agricultural information as opposed to 93 per cent space which was used to publish non agricultural information. This proved that despite agriculture’s importance to the economy of Kenya, its information dissemination to the public by the mainstream daily newspapers remained wanting. The method used was quantitative analysis of the amount of space allocated for every story on agriculture. By measuring the length and width (breadth) and then getting the area, the amount of space allocated for each story on agriculture was determined.

Figure 6: Distribution of size of agricultural information in entire sampled Daily Nation newspapers

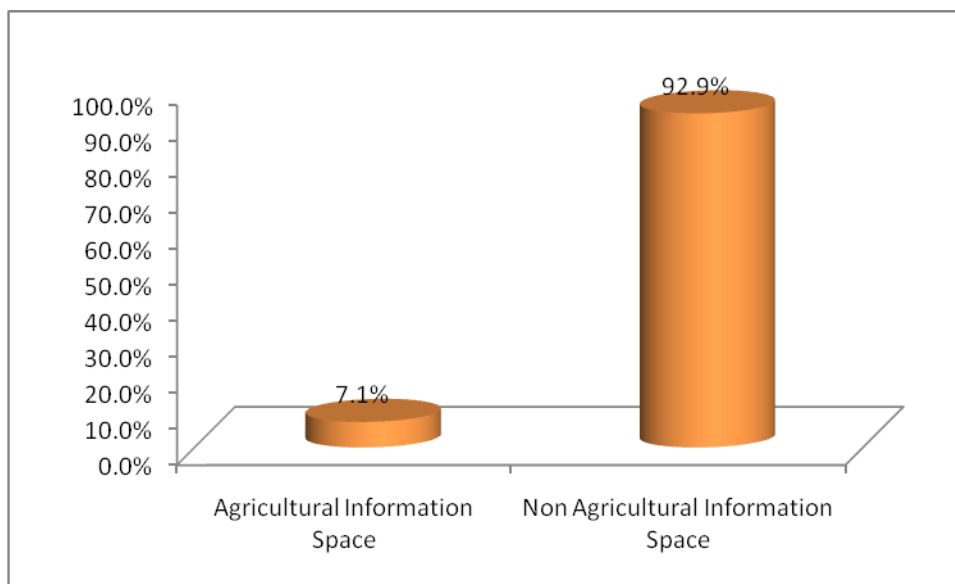
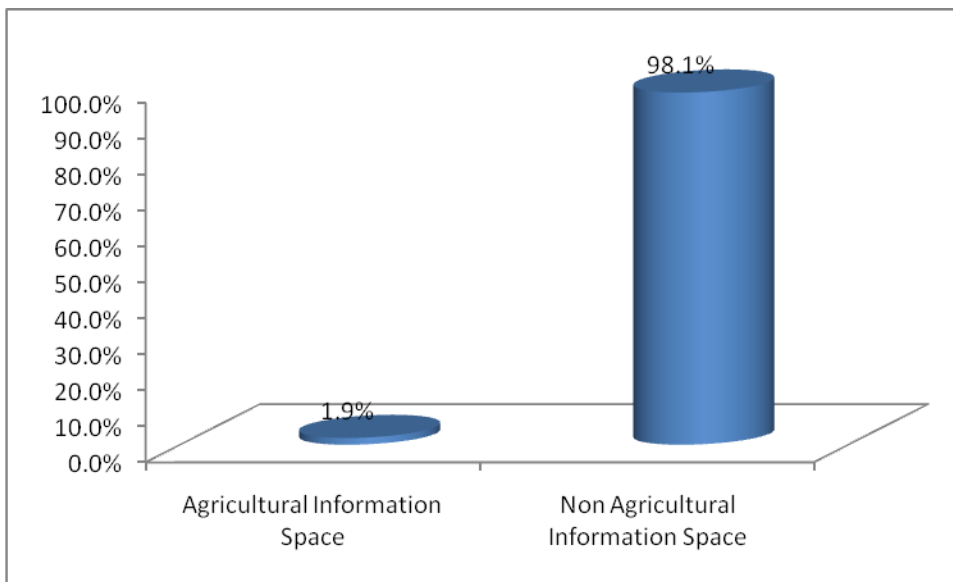


Figure 7 reveals that The Standard fared worse than the Daily Nation because it allocated agricultural news 2 per cent of its total available space during the one year study period. Hence, comparatively, the Daily Nation published and thus disseminated more agricultural stories than The Standard during that period. In Nigeria, there is a concurrence with these research results (Agumagu, 1988; Olowu, 1990; Mundy and Sultan, 1999) on the very poor level of reportage of agro and rural developments news by the newspapers, despite the importance of agriculture to the Nigerian economy. Reasons adduced for the poor performance of the print media in this regard include; space constraints, illiteracy, poor

revenue generating potential, personal values and the belief of the editor, advertisers and media owners (Ozowa, 1995; Van den Ban and Hawkins, 1996; Mundy and Sultan, 1999; Nwachukwu, 2005). In spite of these enormous challenges, print media especially, newspapers in Nigeria still devote spaces for reportage of rural and agricultural based news.

But according to table 4.3, The Standard published more agricultural articles than the Daily Nation in the following categories. Features (39.7 against 16.5 per cents), Letters to the editor (4.4 against 2.8 per cents). Thus, in these two particular categories, The Standard definitely used more space than the Daily Nation.

Figure 7: Distribution of size of agricultural information in entire sampled Standard newspapers



4.5 Comparison between findings of both newspapers

According to table 4.3, The Standard published more agricultural articles than the Daily Nation in the following categories. Features (39.7 against 16.5 per cents), Letters to the editor (4.4 against 2.8 per cents). Hard news coverage was almost equal between the two dailies though comparatively, the Daily Nation covered more (22.8 against 20.6 per cent). Coloured photo coverage was almost equal with the Daily Nation having an upper hand (35.4 against 30.9). The Daily Nation had published about 4 more times advertisements (17.7 per cent)

compared to The Standard (4.4 per cent). The features could be more because usually The Standard newspapers foster 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. This shows that the Daily Nation is more popular with agricultural advertisers. Probably that's why its circulation is higher than those of its competitor because it is more commercial. 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 4.2: Percentage coverage of the categories within the individual newspapers

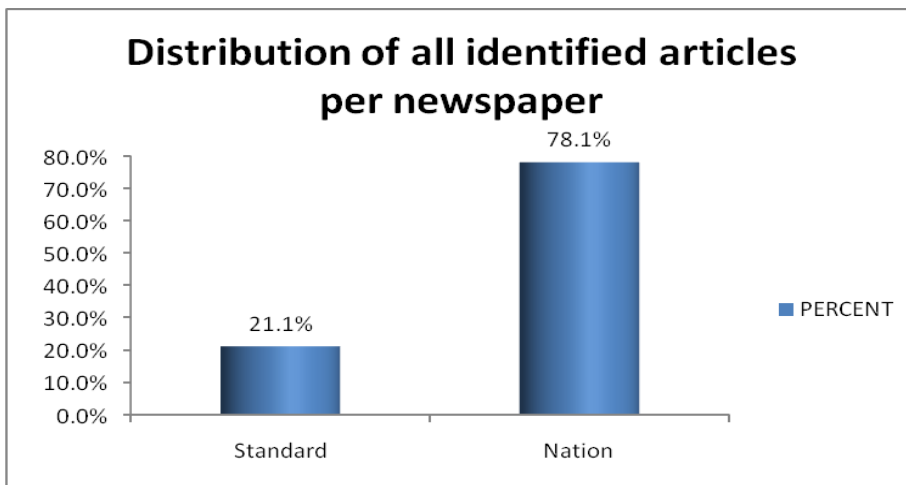
Category	The Standard	Daily Nation
Adverts	4.4	17.7
Features	39.7	16.5
Editorials	0	2.8
Letters to editors	4.4	2.8
Hard news	20.6	22.8
Opinions	0	1.2
Photos (B/W)	0	0.8
Photos (Coloured)	30.9	35.4
Total	100%	100%

Lack of editorials in The Standard could be due the editorial team's perception about agriculture and lack of editorial policy for agriculture.

May be they don't regard it with high esteem hence it does not rank top of the agenda of their editorial information. Probably they substituted black and white photos with more coloured ones which is good because the latter are not only attractive but they contain more agricultural information and communicate more news to the readers.

As figure 8 shows, the Daily Nation published more than three times (78.1 per cent) of the total agricultural articles published by both papers during the entire study period while The Standard covered 21.1 per cent. This means that the Daily Nation published more agricultural information.

Figure 8: Distribution of all identified articles per newspaper



CHAPTER FIVE: SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1 Introduction

This chapter summarizes the findings of the study and presents conclusion, recommendations and suggestions for further research work. The following specific objectives of the study were formulated to guide the study. The first one was to categorize the types of articles written about agriculture by The Standard and Daily Nation and identifying their page locations. The second one was to establish the frequency of appearance of agricultural information under different categories of articles during the period of study. The third objective was to determine the volume of agricultural stories carried by The Standard and Daily Nation newspapers. And the fourth specific objective was to compare the findings of both newspapers. A descriptive study design was used to determine the frequency of agricultural information in The Standard and Daily Nation newspapers from September 2011 to August 2012.

5.2 Summary

The purpose of this study was to examine the contents and trends of coverage of agricultural information by The Standard and Daily Nation newspapers between September 2011 and August 2012. This was done by describing quantitatively (using figures) the coverage of agricultural information by the two Kenyan leading dailies.

Four research questions were formulated to guide the study. The major findings based on each research question are summarized below. Research question one; sought to establish the different categories of agricultural information covered by The Standard and Daily Nation between September 2011 and August 2012 and their page locations. There were seven different categories of articles that were published by the two dailies during that study period. They are advertisements, features, editorials, letters to the editor, hard news, opinions and photographs. It was found that almost all of the identified and categorized articles were located in the middle pages (95%) and only 2.5% was located in the cover page and a similar amount on the last page..

Research question two aimed at establishing the frequency of agricultural information coverage by the two dailies during the same period. Both coloured and black and white (B/W) photographs were the most frequently published categories of agricultural information during the one year study period. Both types of photos amounted to a combined total of 678 articles (35.1 per cent) during the study period in both dailies and opinions from agriculture experts and other writers were very few, because they were only a combined total of 18 articles (0.9%) and hence the least.

Question three aimed at finding out how much space was allocated to agricultural information by the two dailies during the study period. The Daily Nation had about 7 per cent to all its published categories of agricultural information and The Standard allocated much lesser space than the Daily Nation because it allocated agricultural news 2 per cent of its total available space during the one year study period.

And the fourth question sought to establish which newspaper comparatively covered more agricultural information during the study period. The Standard published more agricultural articles than the Daily Nation in the Features (39.7 against 16.5 per cents), and Letters to the editor (4.4 against 2.8 per cents) categories. But is worthwhile to note that unlike Daily Nation, The Standard did not publish any editorials, opinions and black and white agricultural photos.

Hard news coverage was almost equal between the two dailies though comparatively, the Daily Nation covered more (22.8 against 20.6 per cent). Coloured photo coverage was almost equal with the Daily Nation having an upper hand (35.4 against 30.9). The Daily Nation had published about 4 more times advertisements (17.7 per cent) compared to The Standard (4.4 per cent).

5.3 Conclusions

Based on the findings, it was concluded that:

1) The seven identified different categories of articles that were published by the two dailies during that study period (advertisements, features, editorials, letters to the editor, hard news,

opinions and photograph), represented diversification/variety which is good to avoid monotony to readers. But almost all of them were located in the middle pages and very little was located in the cover page and the last page.

2) The use of more coloured photographs frequently was a good way to communicate agricultural information but opinions from agriculture experts and other writers were very few.

3) The total space allocated to agricultural information by the two dailies was too little to communicate adequately to various agricultural stakeholders because agricultural as a discipline is so wide.

4) Though hard news coverage was almost equal between the two dailies, the Daily Nation was more commercial than The Standard because it published agricultural advertisements four times more than its competitor.

5.4 Recommendations

Based on the findings of this study, the researcher recommended that:

1) The managing editors of this two Kenyan dailies should publish more agricultural information and on the front pages of their respective publications.

2) The Standard Group management should engage agricultural-oriented opinion column writers so as bring about more interactivity with their readers as they share opinions on agricultural issues.

3) The total space allocated to agricultural information by the two dailies need to be increased considerably so as to enhance effective communication with the various agricultural stakeholders.

4) The Standard should emulate Daily Nation in increasing adverts for commercial purposes without compromising (hard) news reportage. This may be a delicate balancing act but

improved financial activity may help the paper to communicate agricultural information to more readers through increased circulation.

5) The civil society groups with mandates for agriculture should mount advocacy, mobilization and sensitization for media executives on the importance of reporting agricultural news.

6) The media executives should also be mobilized to employ agricultural graduates as the line reporters for agro-based sensitive news.

7) Capacity building workshops should be organized for agricultural columnists in Kenyan newspapers on reporting of agro-information.

5.5 Suggestions for further research

The following areas were suggested for further study. A similar study should be carried out using the electronic editions of these dailies during the same study period. A similar study should be carried out using other Kenyan daily newspapers during the same study period. A comparative study on coverage of agricultural information with other topics in national dailies should be investigated. Reading habits of agricultural articles in newspapers among the rural and urban dwellers should also be investigated.

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APPENDICES

APPENDIX I-Tables showing all the sampled newspapers

Table A: Sampled newspapers for September 2011

NEWSPAPER DATES		DAY OF THE WEEK
THE STANDARD	DAILY NATION	
1	1	Thursday
2	2	Friday
6	6	Tuesday
8	8	Thursday
10	10	Saturday
12	12	Monday
14	14	Wednesday
16	16	Friday
17	17	Saturday
20	20	Tuesday
21	21	Wednesday
24	24	Saturday
25	25	Sunday
27	27	Tuesday
30	30	Friday

Table B: Sampled newspapers for October 2011

NEWSPAPER DATES		DAY OF THE WEEK
THE STANDARD	DAILY NATION	
1	1	Saturday
3	3	Monday
4	4	Tuesday
8	8	Saturday
9	9	Sunday
11	11	Tuesday
12	12	Wednesday
14	14	Friday
15	15	Saturday
19	19	Wednesday
21	21	Friday
24	24	Monday
27	27	Thursday
28	28	Friday
30	30	Sunday

Table C: Sampled newspapers for November 2011

NEWSPAPER DATES		DAY OF THE WEEK
THE STANDARD	DAILY NATION	
2	2	Wednesday
3	3	Thursday
6	6	Sunday
7	7	Monday
8	8	Tuesday
11	11	Friday
12	12	Saturday
16	16	Wednesday
17	17	Thursday
18	18	Friday
21	21	Monday
22	22	Tuesday
25	25	Friday
26	26	Saturday
29	29	Tuesday

Table D: Sampled newspapers for December 2011

NEWSPAPER DATES		DAY OF THE WEEK
THE STANDARD	DAILY NATION	
1	1	Thursday
4	4	Sunday
6	6	Tuesday
7	7	Wednesday
9	9	Friday
11	11	Sunday
12	12	Monday
16	16	Friday
18	18	Sunday
20	20	Tuesday
23	23	Friday
24	24	Saturday
27	27	Tuesday
29	29	Thursday
31	31	Saturday

Table E: Sampled newspapers for January 2012

NEWSPAPER DATES		DAY OF THE WEEK
THE STANDARD	DAILY NATION	
3	3	Tuesday
5	5	Thursday
6	6	Friday
9	9	Sunday
10	10	Tuesday
13	13	Friday
14	14	Saturday
16	16	Monday
19	19	Thursday
20	20	Friday
22	22	Sunday
25	25	Wednesday
26	26	Thursday
29	29	Sunday
31	31	Tuesday

Table F: Sampled newspapers for February 2012

NEWSPAPER DATES		DAY OF THE WEEK
THE STANDARD	DAILY NATION	
1	1	Wednesday
3	3	Friday
7	7	Tuesday
8	8	Wednesday
10	10	Friday
11	11	Saturday
13	13	Monday
15	15	Wednesday
17	17	Friday
18	18	Saturday
21	21	Tuesday
23	23	Thursday
24	24	Friday
26	26	Sunday
27	27	Monday

Table G: Sampled newspapers for March 2012

NEWSPAPER DATES		DAY OF THE WEEK
THE STANDARD	DAILY NATION	
4	4	Sunday
7	7	Wednesday
8	8	Thursday
9	9	Friday
10	10	Saturday
12	12	Monday
13	13	Tuesday
16	16	Friday
17	17	Saturday
19	19	Monday
21	21	Wednesday
24	24	Saturday
27	27	Tuesday
29	29	Thursday
30	30	Friday

Table H: Sampled newspapers for April 2012

NEWSPAPER DATES		DAY OF THE WEEK
THE STANDARD	DAILY NATION	
1	1	Sunday
3	3	Tuesday
5	5	Thursday
6	6	Friday
10	10	Tuesday
11	11	Wednesday
14	14	Saturday
15	15	Sunday
18	18	Wednesday
20	20	Friday
23	23	Monday
25	25	Wednesday
27	27	Friday
28	28	Saturday
30	30	Monday

Table I: Sampled newspapers for May 2012

NEWSPAPER DATES		DAY OF THE WEEK
THE STANDARD	DAILY NATION	
2	2	Wednesday
4	4	Friday
6	6	Sunday
9	9	Wednesday
10	10	Thursday
11	11	Friday
14	14	Monday
17	17	Thursday
18	18	Friday
20	20	Sunday
21	21	Monday
22	22	Tuesday
26	26	Saturday
29	29	Tuesday
31	31	Thursday

Table J: Sampled newspapers for June 2012

NEWSPAPER DATES		DAY OF THE WEEK
THE STANDARD	DAILY NATION	
1	1	Friday
2	2	Saturday
4	4	Monday
5	5	Tuesday
7	7	Thursday
14	14	Thursday
15	15	Friday
16	16	Saturday
19	19	Tuesday
20	20	Wednesday
24	24	Sunday
26	26	Tuesday
27	27	Wednesday
28	28	Thursday
29	29	Friday

Table K: Sampled newspapers for July 2012

NEWSPAPER DATES		DAY OF THE WEEK
THE STANDARD	DAILY NATION	
3	3	Tuesday
5	5	Thursday
6	6	Friday
7	7	Saturday
10	10	Tuesday
11	11	Wednesday
13	13	Friday
16	16	Monday
17	17	Tuesday
18	18	Wednesday
21	21	Saturday
22	22	Sunday
26	26	Thursday
29	29	Sunday
31	31	Tuesday

Table L: Sampled newspapers for August 2012

NEWSPAPER DATES		DAY OF THE WEEK
THE STANDARD	DAILY NATION	
1	1	Wednesday
2	2	Thursday
4	4	Saturday
7	7	Tuesday
10	10	Friday
14	14	Tuesday
16	16	Thursday
18	18	Saturday
19	19	Sunday
20	20	Monday
21	21	Tuesday
24	24	Friday
29	29	Wednesday
30	30	Thursday
31	31	Friday

APPENDIX II –Agricultural information coverage related to this report

Photo A-Daily Nation headline reporting about the strange maize disease.



Photo B-The Standard business page reporting about the maize disease.



Photo C-Sunday Nation middle page reporting about the Kenyan government's reaction to the maize disease.



APPENDIX III –Popularity of The Standard and Daily Nation

Photo D-Young Farmers Club members at CAVS-Kabete (UoN) reading copies of the two dailies showing that they are popular in urban areas.



Photo E-Shows two elderly farmers reading copies of the two dailies in Njabini, Nyandarua County, showing that the two dailies are also popular in rural areas.



APPENDIX IV –Photos showing faces of the two dailies and their sister publications

Photo F- A copy of Daily Nation, Saturday Nation, and Sunday Nation.



Photo G- A copy of the Standard, and its sister papers, The Standard on Saturday and the Standard on Sunday

