

**COMMUNITY MEDIA NARROWCASTING IN UGANDA:  
AN ASSESSMENT OF COMMUNITY AUDIO TOWERS**

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DEGREE OF DOCTOR OF PHILOSOPHY**

**2016**

**DECLARATION  
COLLEGE OF HUMANITIES**

**DECLARATION - PLAGIARISM**

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## **DEDICATION**

This thesis is dedicated to my grandmother.

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## ACRONYMS

AIDS	Acquired Immunodeficiency Syndrome
AMARC	The World Association of Community Radio Broadcasters
BBC	British Broadcasting Corporation
CAT	Community Audio Towers
CCMS	Centre for Communication, Media and Society
CDO	Community Development Officer
DDP	District Development Plan
FAO	Food and Agricultural Organisation
HIV	Human Immunodeficiency Virus
ICT	Information and Communication Technology
GDP	Gross Domestic Product
KKCR	Kagadi-Kibaale Community Radio
MDG	Millennium Development Goal
MDPP	Masaka District Development Plan
MSD	Media System Dependency
NGO	Non-Governmental Organisation
NRMO	National Resistance Movement Organisation (Uganda)
PCAARRD	Philippine Council for Agriculture, Aquatic and Natural Resources Research and Development
SPSS	Statistical Package for Social Science (software programme)
UBC	Uganda Broadcasting Corporation
UBOS	Uganda Bureau of Statistics
UCC	Uganda Communications Commission
UKZN	University of KwaZulu-Natal
UNDP	United Nations Development Programme
UNESCO	United Nations Educational, Scientific and Cultural Organisation
WMD	Weapons of Mass Destruction

## **ABSTRACT**

This thesis is about Community Audio Towers (CATs). CATs are small media platforms that use horn speakers hoisted on a long dry pole, an amplifier and a microphone to communicate daily village events. This study shows that individuals depend more on CATs than other available mainstream channels. The thesis interrogates the level of individual (i.e. villager) dependency on CATs in Ugandan rural and semi-urban communities alongside the other three available platforms in Uganda: radio, television and newspapers. There is a gap in existing literature to explain dependencies in small (alternative) media like CATs. Therefore, the study uses the Media System Dependency (MSD) theory (Ball-Rokeach and DeFleur, 1976), a relevant media theory that explains dependencies on a communication platform similar to this case study. However, since CATs are a community media, they are also theorised in this study within the framework of development communication, which helps the study to argue that CATs are small media platforms that provide local information. However, due to the need to investigate dependencies in CATs, the study's main research questions are raised using the MSD theory. The study employs both quantitative and qualitative methods. To investigate the level of individual dependency on CATs, a survey was done among 100 respondents from two districts in Uganda (50 respondents from each district). Data was collected in the rural Masaka district and in the semi-urban Mukono district. Additionally, to understand how CATs are sustained, how they attract the community members, and their position in the national communication infrastructure, ten key informant interviews were conducted with various CATs stakeholders like: the State Minister for ICT, technical experts at Uganda Communications Commission, District information and Development officers, local council chairmen and CATs announcers. The study found that the level of individual dependency on CATs is higher than the individual dependency on any other mass communication platform accessed by the sample communities. CATs appear to attract the audience through localising the processes of information gathering, processing and dissemination. These processes are affordable and done by the locals themselves, something that increases attention whenever the community requires a channel to communicate an issue. The challenges include noise, lack of a licence or regulation, and weather variations that disturb sound waves. The thesis concludes by introducing Small Media System Dependency (SMSD) relations to explain dependency relations in small/alternative media platforms.

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## CHAPTER ONE

### BACKGROUND OF THE STUDY

#### **Introduction**

This chapter provides a description of the research setting. But before the background, the objectives of the study are introduced, and the research questions that guided the data collection and analysis given. This is followed by the rationale for the study. The structure of the thesis follows the rationale, followed by the background of the areas under study. Generally, the background given in this chapter helps the study to avoid presenting the subject of CATs in a vacuum. Information on Uganda's demographics, economy, politics, and its current media status are given in order to acquaint the reader with the context in which the research is set. With the geographical and demographic background given, the chapter proceeds to give a history of media in Uganda, explaining how print and broadcasting started and the conditions that preceded their arrival. It is hoped that such a media background helps the reader to see patterns of how Community Audio Towers (CATs) started, how the towers survive, and possibly how the towers will progress in the future, as well as the reasons as to why the CATs function as they do (explained later in Chapter 5). Following the history of media in Uganda, the chapter presents the districts in which the research was carried out for the reader to understand how media and communication resources are managed at national and district level and the differences thereof. How such differences affect the daily work of CATs is also explored. The areas are further broken down to the smallest village units (Nassuuti and Nyendo) from where the data was collected. This study investigated CATs in Uganda and how individuals depend on them. The study further tried to find out how the CATs themselves survive on individual resources, as explained by the MSD theory. The data that helps the investigation was collected through survey research, key informant interviews, and observation methods (see Chapter 4). However, a more detailed discussion of the objectives of the study is given below alongside the research questions which help to guide the thesis in fulfilling the purpose that it set out to establish.

#### **Research Objectives**

*Objective One: to examine the level of individual dependency on CATs*

Understanding the level of individual dependency is helpful in showing how much the individual (audience) listens to the CATs. Since the MSD theory notes that "audience dependency can

explain why and when change (alteration of beliefs, feelings or behaviour) occurs” (Ball-Rokeach and DeFleur, 1976), the audience needs are also explored in this study. This objective is motivated by the suggestion of the MSD theory that where other sources of information (for example, church, interpersonal communication, family friends, radio) exist, channel dependency will decrease. Despite the existence of all those other sources of information, the data presented in Chapter 5 suggests that communities depend highly on CATs for local events.

*Objective Two: to understand how CATs depend on the individual resources in order for them to keep narrowcasting*

This study first explores the nature of resources the individuals provide for CATs. The MSD theory suggests that the micro MSD relations are asymmetrical, and that the survival of a media system depends on how the media satisfy the individual needs of orientation, understanding and play (explained in Chapter 3). Therefore, the communication channel (CATs) must have well-articulated goals and values which in turn attract the audience. This is how a channel (CATs) depends on the audience to survive. The values and the technology of the two selected CATs are probed as a result. For example, the study aims to establish the goals of CATs and the technology the towers use to achieve these values and goals. As Ball-Rokeach *et al.* (1990) argue, attainment of those goals means survival or continuity of a communication channel. This study explores whether or not this was the case in the Mukono and Masaka districts in order to draw conclusions for other CATs in the rest of Uganda.

*Objective Three: to find out the opportunities created and challenges faced by the individual CAT-relations.*

The last objective is to investigate whether by using CATs, communities, presenters and other stakeholders obtain some opportunities compared to when using other available channels of information in the area. In addition to the opportunities, the challenges faced by several stakeholders due to the existence of CATs are also investigated.

The above objectives were rephrased into the following questions that guided data collection, the thesis structure and presentation of findings:

1. What is the level of individual dependency on CATs?
2. Since MSD theory assumes a dependent relationship, how do CATs depend on the individual resources?
3. What are the opportunities created and challenges faced by the individual-CAT relations?

### **Rationale for the Study**

One-way communication that used state-owned radio stations and CATs (especially in South East Asia) in the 1950s, through to most of the 1970s, later changed to a two-way approach by engaging participatory communication using community media, most prominently from the 1980s when UNESCO started promoting community radio (Fraser and Restrepo-Estrada, 2001). In Uganda, while community radio started in the 1990s, communities today have arguably adopted CATs which narrowcast both government and community information. The current study, by way of setting the scene for future research, investigated the level of individual dependency (explained in Chapter 5) on CATs. For lack of a media theory that explains dependency relations in small media (interpretive) systems, a one-way theory, the Media System Dependency (MSD) theory (Ball-Rokeach and DeFleur, 1976; Ball-Rokeach *et al.*, 1990; see also Westgate, 2008; Cheng and Lo, 2012; Li, 2013) (described in Chapter 3), was used to guide the research process and analysis.

Exploring communication phenomena using the MSD theory is not new. Sandra Ball-Rokeach *et al.* (1990) explored the media-organisational relationship during a contested issue like abortion and found that change in the coverage of such a contested issue and public debate may be understood as a change in conflicting MSD relations between the media and the promoter (rights movements) of the issue. Christopher Westgate (2008) on the other hand investigated media individual dependency during everyday life and concluded that media depend more on the individual.

Although the theory was articulated in the 1970s, its relevance today has been demonstrated by studies that have progressed from old media to new media. For example, Chei Sian Lee (2012:

457) established that “users can depend on content provided by new media (You Tube) to meet their emotional needs” after the death of a beloved super star like Michael Jackson. In the same new media direction, Xigen Li (2013) found that contrary to MSD assumptions, availability of alternative sources of information does not lessen audience-dependency on internet news. Ball-Rokeach herself, not so long ago, although outside the scope of this study, noted that interpersonal networks like groups of people have MSD relations too (Ball-Rokeach and Jung, 2009). While MSD research has paid attention to old media (Ball-Rokeach *et al.*, 1990; Hindman, 2004; Westgate, 2008) and new media (Lee, 2012; Li, 2013), the effort to explain the “media”/individual MSD relations in CATs (and indeed other small media), to understand the level of individual dependency, is missing. This study fills that gap by investigating the level of individual dependency on CATs. The analysis of the CAT dependency relations as a result, informed the conclusions about communication and development from a CAT perspective, made in the coming chapters. Since CATs are a community media, the theories of participatory communication are explored in Chapter 3 to locate the towers in participatory communication.

### **Thesis Structure**

In practice, some researchers tend to use both deductive and inductive analyses (Thomas, 2006). This study used both approaches. The study used a deductive approach by raising questions about CATs basing on the MSD theory as a starting point. Methods were then articulated and used, guided by the above theory to answer the questions set by the study from the research objectives. The questions raised were based on the tenets of the MSD theory too. The deductive strategy “sets out to test whether data is consistent with prior assumptions, theories, or hypotheses identified or constructed by an investigator” (Thomas, 2006: 238). By grounding research questions in theoretical assumptions (Thompson and Borrello, 1992), the study sought answers based on theoretical explanations of the MSD theory. Trying to answer research questions based on strict theory assumptions does not mean that this study did not look out for any new developments that were apparent after or before data analysis, even though such developments were not situated in the set research questions. Some conclusions were indeed made purely on the basis of interpretation of data (free from theoretical assumptions) and this introduced the study to the inductive approach.

The inductive approach does not set out limited perimeters to the process of research. Instead, it waits to arrive at conclusions based on the collected data (Morse and Mitcham, 2002). This was important for this study because there is not a lot of formal research on CATs. In fact, even the theory used to generate the study's objectives (research questions) was not articulated to answer questions about CATs (or small media). Therefore, the researcher kept an open mind for any patterns that came from the data collected about CATs. Some of the assumptions, as the data shows in Chapter 5, were raised out of the observed behaviour of CAT activities and not based on any theoretical tenets raised at the inception of the study. Above all, the inductive approach contributed to the structure of the study since it "establishes clear links between the evaluation or research objectives and the summary findings derived from the raw data" (Thomas, 2006: 237).

Following this background chapter that describes Uganda's media landscape and introduces the research sites, the second chapter reviews the literature by examining the main concepts that characterise the study. These concepts include community, community media, community radio, narrowcasting and CATs. Chapter 3 explains the theoretical framework used to guide the study including the MSD theory (Ball-Rokeach and DeFleur, 1976; Lee, 2012; Li, 2013) which guides the thesis structure and the participatory communication theory (Wilkins, 2003; Bessette, 2004; Quarry and Ramirez, 2009; Servaes, 2008), used here in the thesis to explain the participatory nature of CATs. Chapter 4 explains the methods that were used to collect data, including: survey and key informant interviews. The Chapter also describes the data analysis method used in the study which is thematic analysis (Braun and Clarke, 2006). Chapter 5 presents the findings while Chapter 6 analyses the findings. In Chapter 7, the thesis presents the implications of the findings, including articulating new directions for CATs while Chapter 8, summarises and concludes the thesis. After the following background of the areas where data was collected, Chapter 2 follows with a review of the existing literature on the major concepts that make up the study.

## Location of the Study

### *Geography, economy and demographics*

Uganda is a landlocked block (no access to a coastline) that sits among South Sudan (north), Kenya (east), Tanzania (south), Rwanda (south west) and Democratic Republic of Congo (west) as her neighbours. The country has a total area of 230,000 kilometres squared (Gakwandi, 1999), on which most of its inhabitants practice and survive via farming. Of this total area, 41,743.2 square kilometers are covered with water or wetlands, while farming and other businesses in the country, including habitation, occurs on the remaining 199,807.4 square kilometers (UBOS, 2015). Uganda is located in East Africa and one of the main items that contribute to the country's tourism sector is that the country sits on the Equator, separating the Northern from the Southern Hemisphere.



*Photo 1.1: The line of the Equator in the picture above crosses a highway. The Equator sits between the Capital City and one of the study's sample districts (Masaka). (Photo by Brian Semujju, July 2014).*



Figure 1.1: The map above shows the districts within Uganda and Uganda's neighbouring countries. Masaka district (where left arrow sits) and Mukono district (where right arrow sits) are the districts where the research sites are located (Map by Arthur Gakwandi, 1999).

Uganda is described as a low income country because of its low Gross Domestic Product (GDP) per capita, which stands currently at US\$675 (World Bank, 2016). The country ranks 21st on the International Monetary Fund’s World poorest nations rank (Global Finance, 2015). This position has a bearing on several characteristics of the country’s population and determines how people live their lives. Of the total population of 35 million people, 7.5 million fall under the category of very poor (UBOS, 2015). Data from the Uganda Bureau of Statistics (UBOS) also indicates that while 13 percent of the population lives in urban centres, 87 percent of Ugandans live in rural areas, most of them in poor conditions, with no access to some basic needs. For example, most people in the rural areas fail to buy batteries for radio sets regularly, since all their income is geared towards achieving basic needs like food, clothes, and shelter. Community Audio Towers (CATs) as communication platforms give such people a fighting chance to keep abreast with community issues, news and events, without having to stretch their already vulnerable economic state to buy batteries.

### Population

<b>Year of census</b>	<b>Total population</b>
1969	9 million
1980	12 million
1991	16 million
2002	24 million
2014	35 million

*Table 1.1: Summary of Uganda’s figures from all censuses (adapted from the 2014 UBOS Census)*

Although six million people live in urban areas, the number of people living in the capital city (the only city in the country) is 1.5 million. The average growth rate of Uganda’s population is 3.03 percent, taken from the fact that the population has grown from 24.2 million people in 2002 to 34.9 million people in 2014. UBOS (2015) therefore predicts that in 2025, Uganda will have 47.4 million people. The above population statistics have been supported by other relevant

bodies in the country, for example the Population Secretariat, through its annual State of Uganda Population Report (2015). Other population indicators identified in the government statistics include the fact that 49 percent of the total population is of young people below the age of 14 (UBOS, 2015), a factor that creates a huge economic burden on the few working Ugandans who sustain the dependents.

### Education

In terms of education, by 2011, 81.1 percent (8 million) of the country's children had enrolled in primary school and the literacy level of the youths between 15 – 24 years of age was 76.7 percent (UBOS, 2015). This enrollment falls short of the Millennium Development Goal (MDG) target of 100 percent. In addition, 33.6 percent of that enrollment did not have adequate sitting space, among other things. At the higher level of education, UBOS (2015) notes that Uganda has 32 universities and 133 tertiary institutions.

In general, Uganda's literacy level, among persons aged 10 years and above, is 73 percent. This has a bearing on the information and communication sector in a way that different literacy exposure creates different interpretation of the information communicated (Croucher *et al.*, 2009). Understanding the information, especially the information that discusses development, can help a person to engage in information processes which can improve his/her standard of living. The low education factor rules out the possibility that all media can serve all Ugandan communities. Newspapers for example can serve very literate and economically stable capital city dwellers. Television may serve even the economically unstable but saving money to buy a TV set may be difficult for rural community members who are defined by the government as very poor. Radio, which was identified in the 2014 census as the main source of information for more than half (55 percent) of the households in Uganda (UBOS, 2015) also has its constant demands like batteries and signal strength. In relation to literacy, Uganda does not make radio sets and so the imported radio sets come with instructions in foreign languages (Semujju, 2012). CATs in this case become a formidable source of local information since the information, which is given in local languages on the towers, does not demand that someone learns a foreign language to either listen or operate the technology. However, as a general footnote on education, the 2014 census indicates that seven million Ugandans have never been to school (UBOS, 2015).

## Health

With Uganda's fertility rate at 6.2 children per woman, as the most recent census revealed, the population increase has failed to match with efforts to deter population growth. For example, cultural beliefs and misinformation about the use of contraceptives (Lwelamira *et al.*, 2012) among various communities lead to an increase in the population, which puts pressure on the limited health facilities available. Apart from low use of contraceptives, other studies have suggested that there is lack of reproductive health information among adolescents and as a result, Uganda experiences a lot of premarital sexual behaviour since adolescents start experiencing sex at an early age (Neema and Bataringaya, 2000; Stephenson *et al.*, 2014). The government has been active in using mainstream media to disseminate health information because these media, especially radio, are believed to be depended on by most Ugandans. This is based on the premise that the best way to intervene is by equipping the adolescents with knowledge on the dangers of premarital sex (Mulugeta and Barhane, 2014).

Mainstream media carry information about health (in relation to population growth) from different stakeholders, including the President, who has always encouraged Ugandans to produce more children so that the country increases its internal purchasing power while at the same time, he cautions families against having many children (Ayebazibwe, 2014). Whether or not all people access and listen to the platforms used is not an issue on which communicators put a lot of emphasis. Additionally, such communication efforts fail to recognise, at national level, the role of smaller communication platforms. The level of individual dependency on small alternative communication platforms like CATs was not known, which has motivated this study to investigate CATs and contribute to the growth of media and communication literature in Uganda. The impact of the growing unchecked population has been felt in the health sector. An efficient way to increase community access to reproductive health information is by using CATs. The explosion of new media technologies, supported by the internet, mobile phone telephony and other new media innovations, which have been identified to be changing media "institutional cultures and audience engagement" (Chiumbu, 2012: 242) can be used to avail social change and reproductive health information to CAT operators so that this information may in return be disseminated to adolescents, in order for them to be empowered for a better future.

As stated above, the efforts made to sensitise the population on family planning and other health issues mainly use mainstream media as a major communication and information stakeholder to change behaviour (Kigozi *et al.*, 2010). The major finding by this study is that smaller communication platforms (like CATs) are more used and trusted than mainstream media at grassroot level, as chapter 5 shows later. CATs would be used to improve maternal mortality rates, which currently stand at 438, per 100, 000 live births (UBOS, 2014). This national figure differs from individual district figures, especially among the ten districts with the highest maternal mortality deaths. The highest district in Uganda has registered 850 deaths per 100,000 live births (Ministry of Health Maternal and Perinatal Death Review Uganda, 2013). In all the districts where such deaths occur, the report shows that 9 percent of the pregnant women had been to the health facility for only two hours before they died, while 53 percent died 24 hours after reaching the health facility (Ministry of Health Maternal and Perinatal Death Review Uganda, 2013).

Two major reasons for death cited in the report are: families delaying in finding help for pregnant mothers, and distance between home and health facilities which is made worse by ineffective transport facilities. Since one of the districts where data was collected, Masaka, is among the ten districts with the worst maternal mortality records, CATs can help to solve some of the problems, especially as the problems are informational. Families need to understand the importance of being prepared for child birth. This information should include encouraging the families to take expectant mothers to health facilities on time to reduce on the rate of women dying in child labour. Other health problems that Uganda is grappling with include HIV/AIDS, with a prevalence rate of 7.3 percent (UBOS, 2014), and malaria, which kills 11,000 people a year (Talisuna *et al.*, 2011) and wastes 1.3 percent of Uganda's GDP (Malaney *et al.*, 2004), among others.

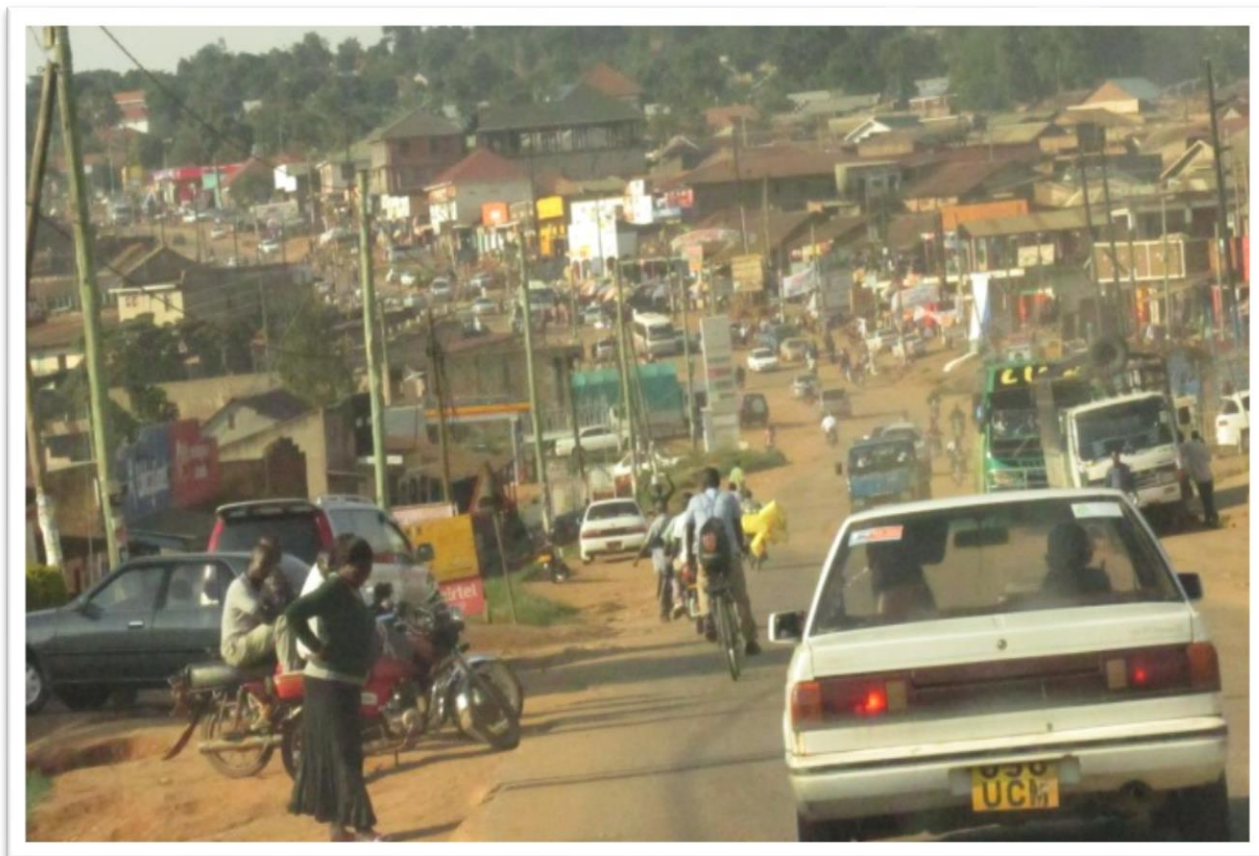
### Economy

Uganda has 202 urban centres, one city, 22 municipalities and 174 towns (UBOS, 2015). The above areas are the economic centres of the country since trade and industry take place there. However, the distribution of the population suggests that these centres only manage to sustain a small fraction of Ugandans. For example, the last census results indicate that 28 million people (of the total 35 million Ugandans) live in rural areas, six million live in towns, while the capital

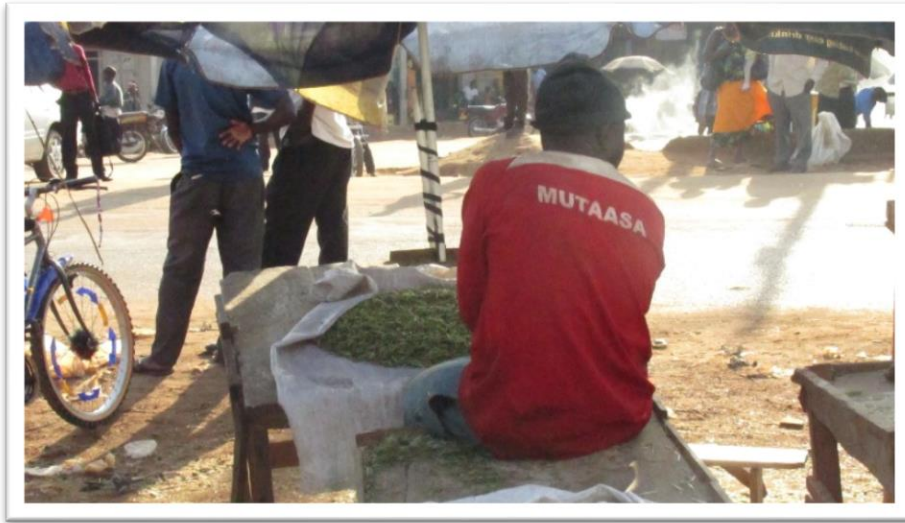
city hosts 1.5 million people (UBOS, 2015). For the 28 million Ugandans, the economic activity is agriculture, done mostly at a subsistence level. It is mostly the people in the rural areas that make up a big percentage of the proportion of the poor in the country. In addition to surviving on crops like coffee, cotton and tobacco as cash crops, and food crops like maize, beans, potato, cassava, groundnuts and fruits, Ugandans supplement their income with animal husbandry and the latter is mostly for commercial purposes. Uganda's location in the Great Lakes region also accords its people fishing as another economic activity. Uganda has access to Lake Victoria, Lake Albert, Lake George, Lake Edward, River Nile and other minor water bodies. Additionally, the source of River Nile, the Equator, several game parks, Mountain Rwenzori and Mountain Elgon, among other sites, are a great source of income to the nation as tourism sites. Regardless of the above sources of national income, 45 percent of Ugandans just earn a minimum income to spend on food (World Bank, 2016). In such a way, the ways of life of the people referred to as poor differ from those of other Ugandans as the two groups access goods and services differently.



*Photo 1.2: Citizens buying clothes and other goods from a market staged in the middle of the road in Masaka Town. Compared to the shopping habits of Kampala City dwellers, which is done in malls, the above market sells second-hand items. (Photo by Brian Semujju, July 2014).*



*Photo 1.3: The highway from the capital, above which Nyendo town sits. Community members take advantage of the highway to sell different goods to the passersby. (Photo by Brian Semujju, July 2014).*



*Photo 1.4: A man waiting for customers at his grasshopper stall. Grasshoppers, apart from being a source of income, are a local delicacy enjoyed by several people who pass through Nyendo Town. (Photo by Brian Semujju, July 2014).*



*Photo 1.5: Such a busy town as Nyendo with people selling goods by the roadside cannot facilitate easy and calm listening to the radio since everyone is running up and down to earn a living, a reason why CATs may be ideal for the community. (Photo by Brian Semujju, July 2014).*

Apart from resonating with the community's buying power and standard of living, the low income among the areas where data was collected also resonates with what communication platforms the people decide to access. CATs do not create any economic demands from the community members. That way, people can use their little resources to educate their children and feed their families. This hand-to-mouth condition also means that people in rural areas hardly save any money, something that keeps them in a cycle of poverty.

### Politics

Uganda was under British colonial rule from 1894 to 1962 when she got her independence (Gakwandi, 1999). Since 1962, the country has had eight presidents. The main approach of taking power is through rebel activities, *coup d'état*, and of recent, elections (even the current president came through a *coup d'état*). This spirit of violence has forced Uganda to experience its longest war in the northern part of the country, under rebel leader Joseph Kony, in which many lives have been lost (Gatten, 2015). Nevertheless, Uganda is a one party democracy with miscellaneous parties fighting to take power from the ruling party. However, parties other than the ruling party are not allowed to hold political campaigns anywhere in the country and currently, several opposition politicians who defied this unwritten rule still go to court to answer charges of unlawful assembly, whenever such assemblies have not been disbanded by the use of teargas and violence (Siddique, 2011). The President's political party, National Resistance Movement Organisation (NRMO), has the most seats in parliament, while the retirement of Justice George Kanyehamba, who was a Supreme Court justice and an ardent critic of President Museveni, has given the President total influence over the judiciary as well, as no other justice of the Supreme Court has taken on the critical attitude to the President that Kanyehamba had. The country's existing party politics has led to several media houses being shut-down for criticising the ruling party ideology. In response, CATs have been established and they instead capitalise on news that is happening within the village (Henry Lwanga, Nassuuti FM presenter, interview, 21 July 2014).

### Information and communication: Radio and CATs

In 1938 the British colonialists set up a committee to study the idea of starting up a radio station in Uganda. However, due to the criticism received from the local newspapers, the colonial government was skeptical of the idea and radio did not start until 1953 (Gariyo, 1993). When radio finally started, it aired translated British Broadcasting Corporation (BBC) material and “up to 1955, radio transmission in towns other than Kampala (now capital city), was however relayed on tapes through a public address system by officials of the department of information in the local language of the area” (Gariyo, 1993: 89). This might have been the first attempt, although not formally, to use CATs in Uganda. While the year of initiation is contested among different scholars, some, for example Monica Chibita (2010) cite 1953 while others like George Lugalambi (2010) cite 1954, at least the major reasons for starting up broadcasting have no contest: for entertainment of the colonial masters, propagating colonial policies, and as a link between the colonialists and their home countries (Armour, 1984; Tayeebwa, 2012).

The remarkable resemblance of the broadcasting done then with the CATs narrowcasting today deserves a mention. Dissemination of information to other areas where the transmitters could not broadcast information was done using public address systems or horn speakers. This is the kind of arrangement that CATs have today. The difference between horn speakers then and CATs now is that the areas that use CATs now receive signals of several radio stations, something that inspired this study. CATs today fill the gap left by the commercial broadcasters by giving local people local information.

Additionally, the beginning of localising radio content started with programmes being translated into several local languages spoken in different areas where the radio frequency reached (Gariyo (1993) so that colonial policies could well be understood by the natives. Such local programmes were broadcast for one hour a day from 3pm in the afternoon. CATs today narrowcast for about 30 to 45 minutes a day mostly in the morning and in the evening. Therefore, apart from just showing where Uganda’s media industry emanated, the historical background helps this study to identify some similarities that existed between colonial administered communication systems and the platform under study, in order to demonstrate that the practice of narrowcasting, as evidence of broadcasting inadequacy, is not new. When television was introduced in Uganda in

1963, the post-independence rulers used it to lodge themselves into power by controlling public opinion. The only existing media were run by the government under the Ministry of Information and its workers were civil servants (Lugalambi, 2010).

Radio and television went through several regimes that used draconian laws to control public opinion. All this time, broadcast media in Uganda were state-owned, a practice that continued until 1993 when the first private radio was established. After 2000, the number of private radio stations and TVs had increased and radio stations introduced a phenomenon that took the country by surprise. They introduced a live-talk show programme for the audience members who convened at a venue outside the station. Taking the talk-show out of the station premises was aimed at getting enough space in which all the expected audience members would fit. The debates, dubbed *Ekimeeza*<sup>1</sup> (Nassanga, 2008), discussed politics, economics, and other matters, but above all, they created checks and balances for government performance in different sectors. This also meant that most opinions aired criticised government failures, something that brought radio on a collision course with government. Consequently, the government accused the radio stations of ethical misconduct and in 2009 shut down four of the most critical radio stations. These were: CBS FM, Ssuubi FM, Radio Two, Radio Sapientia (Lumu, 2009). The closure of the four radio stations silenced other stations that had been debating government programmes as a chilling effect over the public sphere was being felt. Along several other reasons like poverty and lack of electricity, the government action changed the radio scene in Uganda as participation started to decline (Nassanga, 2009). Smaller radio platforms like community radios self-censored in order to live within the new unwritten laws that government had set on political issues. The community radios were already facing a problem of lack of special status from government because, of the existing 253 on-air radio stations (UCC, 2015), only one has been granted a community radio licence while other “community media”, including Kagadi-Kibaale Community Radio, which received support from UNESCO as the first community radio in Uganda in the 1990s, have commercial licences (Wegoye, 2011).

Apart from the above political tension between government and radio stations, some weaknesses have been cited in radio content. The UCC’s Electronic Media Survey notes that “there seems to

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<sup>1</sup> Meaning “round table”

be a clear demand for programming in the local languages and for local content” (Chibita and Kibombo, 2013: vi). In order to attract advertisers, radio had engaged in partisan politics, which created a feud between the repressive state apparatuses and whichever radio invited an opposition politician. The decline in community participation, lack of recognition for community radio and demand for information in local languages addressing local community problems, gave a boost to other local non-radio communication efforts like CATs since such local efforts are not political and above all, are cheap to establish and run. The above challenges of radio put the use of CATs into perspective. Community members in different areas were barely satisfied with the services of media outlets that are prone to political pressure and economic influence (Wasswa, 2011; Nassanga *et al.*, 2014). To render themselves useful to communities under such circumstances, CATs narrowcast local content that relates to people’s lives in languages that such people understand (Moses Mulindwa, Nassuuti village Local Council chairman, interview, 22 July 2014).

While Uganda currently has 253 radio stations on air (UCC, 2015), some areas have resorted to CATs for information. There is an undocumented number of CATs in Uganda. The researcher is certain of 30 in the districts of Masaka, Mukono and Kayunga. As Chapter 5 will show, their objective is to provide local information for example on deaths, greetings, theft, broken infrastructure such as wells, and community services (Nyombi Thembo, State Minister for ICT, interview, 24 August 2014). In other words, the CATs serve what this study calls the village person. This differs from the way community radio in Uganda defines its community, which encompasses several districts. The CAT programming differs from that of Uganda’s radio stations. CATs only carry news and information. Two CATs were randomly selected and used in this study. The first one, called *Voice of Nyendo*, is in Masaka District, 120km away from the capital of Uganda while the second one Nassuuti “FM” is 21km away from the capital, in Mukono district as details show in chapter 4.

Access to resources differs in both areas since the first tower is rural and the second is semi-urban. This resource difference assisted the study to assess the level of audience (individual) dependency on CATs and kept variables like education and income in consideration. Also, since CATs in Uganda are in both rural and semi-urban areas, such a selection of towers helped the

study to represent all CATs in the country. The information obtained from the field and from local newspaper articles and brief mentions in health reports, helped to build part of the genesis of CATs, their organisation, regulation and what type of information they deal with. To contextualise the communities that use these two CATs, the districts in which the sampled towers are located are described below.

### **Contextualising the Sample Communities**

#### *Mukono District Community*

Mukono district is located 21 kilometers from the capital city along the Eastern Uganda route, and of the four regions that make up Uganda (East, West, Central and North), Mukono is in the central. The total area of the district is 1,875.1 km<sup>2</sup>. The district is comprised of two counties: Nakifuma and Mukono counties. The district has seven urban areas. These include the Mukono Municipal Council, Nakifuma, Kalagi, Naggalama, Katosi, Kasawo and Namataba Town Councils. Mukono receives annual rainfall with the months of March, May, September and November being the peak rainfall months. Through the year, the temperature could range between 16 degrees centigrade to 28 degrees centigrade. The inhabitants of the district survive mainly on agriculture, fisheries (Mukono hosts part of Lake Victoria), wholesale, retail, tourism, and several other trades. It is worth noting that most of these activities are done on a small scale basis. According to the district website<sup>2</sup>, the district also has 11 banks, a private university (Uganda Christian University) while it is the gateway to the eastern part of Uganda straight through the neighbouring countries like Kenya. The district reports that 49 percent of its people live below the poverty line.

According to the 2014 census, Mukono district has a population of 599, 817, while the population of Mukono Central Division, where data was collected, is 70, 228 (UBOS, 2014). The mean household size is 4.2 persons. Access to clean water is at 73 percent of all the households while electricity access is 10.3 percent. Most importantly, eight percent of the homes in the district have no toilet facilities. When it is time to cook a family meal, 96 percent of the household use either firewood or charcoal. The most common means of transport for the

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<sup>2</sup> <http://mukono.go.ug/>

inhabitants who do not travel great distances regularly is by foot. However, 27 percent of the homes own bicycles.

The district literacy level equals the national literacy level of 79 (Mukono District Development Plan (MDDP), 2010). Mukono has 216 government primary schools, 330 private schools, 29 government secondary schools and 120 private secondary schools. While some of the pupils who leave primary school might go and attend secondary school in other schools outside the district, the existence of a smaller number of secondary schools (compared to the existing primary schools) means that not every child who finishes primary school proceeds to secondary school. Several reasons are cited for this and they are not unique to Mukono district only. They spread to all districts in Uganda. Some of the girls drop out of school because of pregnancy; others drop out due to poverty, while there is a section that drops out because of the cultural beliefs against education by the sponsoring parents (Mukono District Development Plan, 2010).

Although the district has no communication office, the information needs are catered for by the Community Development Officer (CDO). The district has three radio stations, Radio Dunamis, Bob FM and Kyagwe FM, located within its boundaries while stations that are not located within the district also stream their signals for the residents of Mukono district (Henry Lwanga, Nassuuti FM presenter, interview, 21 July 2014).

The district has one health facility that has hospital status and it is run by a non-government organization (NGO). In addition, Mukono has 29 grade two health centres, 16 grade three health centres and four grade four health centres. Since the hospital in the town is the only one in the district raised to full hospital status, patients tend to come from other counties to seek for what they think is better treatment which populates the only district hospital. However, the average distance that one would walk to the nearest health facility (assuming that person did not think of his/her situation as life threatening, is 1.5 kilometres (UBOS, 2009).

<b>Position</b>	<b>Disease</b>	<b>Percentage</b>
1	Malaria	43.2
2	Cough or cold	14.1
3	Pneumonia	10.2
4	Intestinal worms	6.2
5	Skin diseases	3.9

*Table 1. 2: The diseases that are most reported in the health centres (UBOS, 2010).*

Although the district fertility rate is 6 percent, slightly lower than the national average of 6.2 percent, the district notes that it needs more planning to make health facilities better and closer by distributing them evenly following the population distribution. Such facilities can help to disseminate information about health, including contraceptive messages, alongside treatment. This can be one of the ways to improve the contraceptive prevalence rate which currently is at 24 percent (Mukono District Development Plan, 2010).

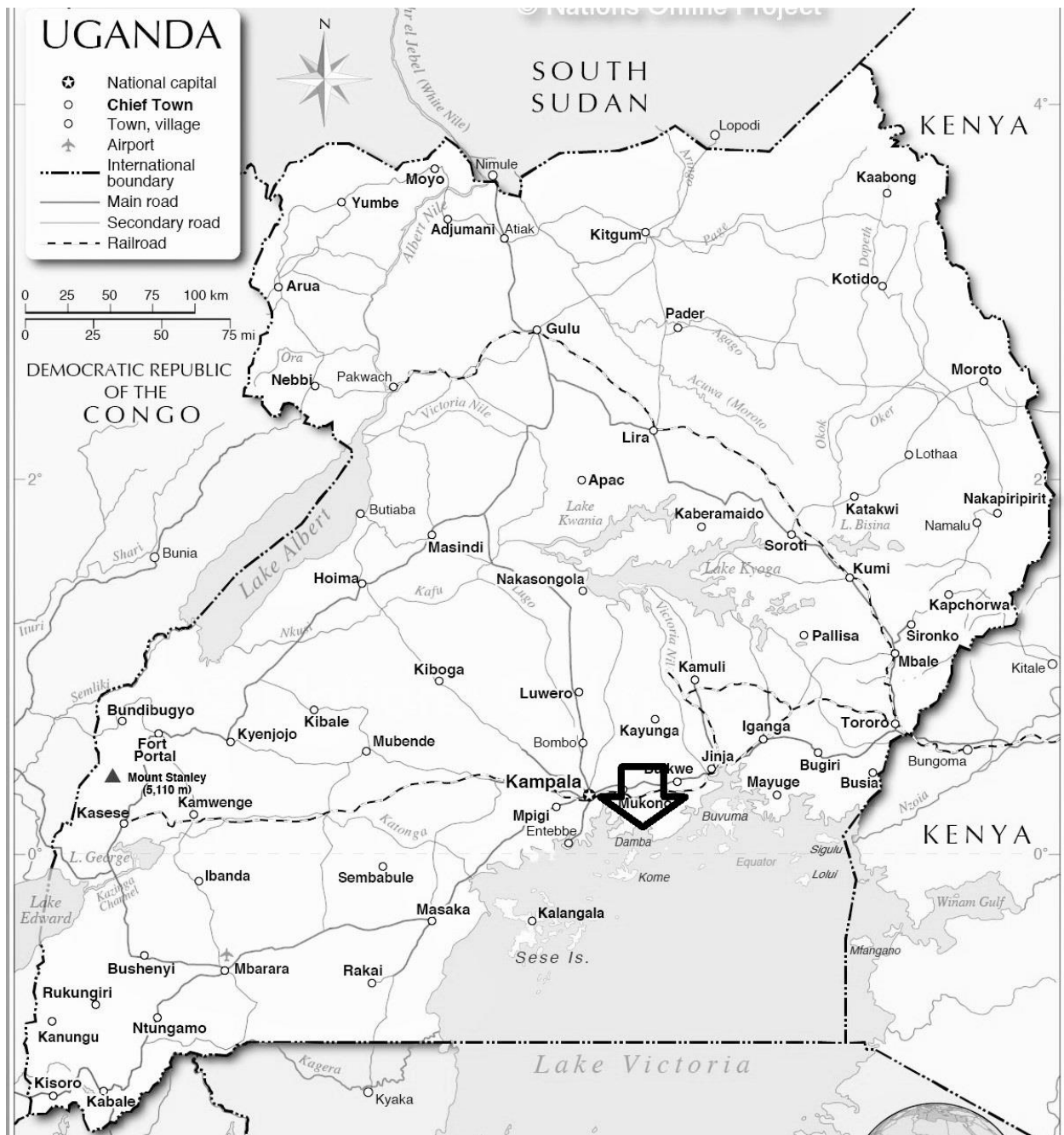
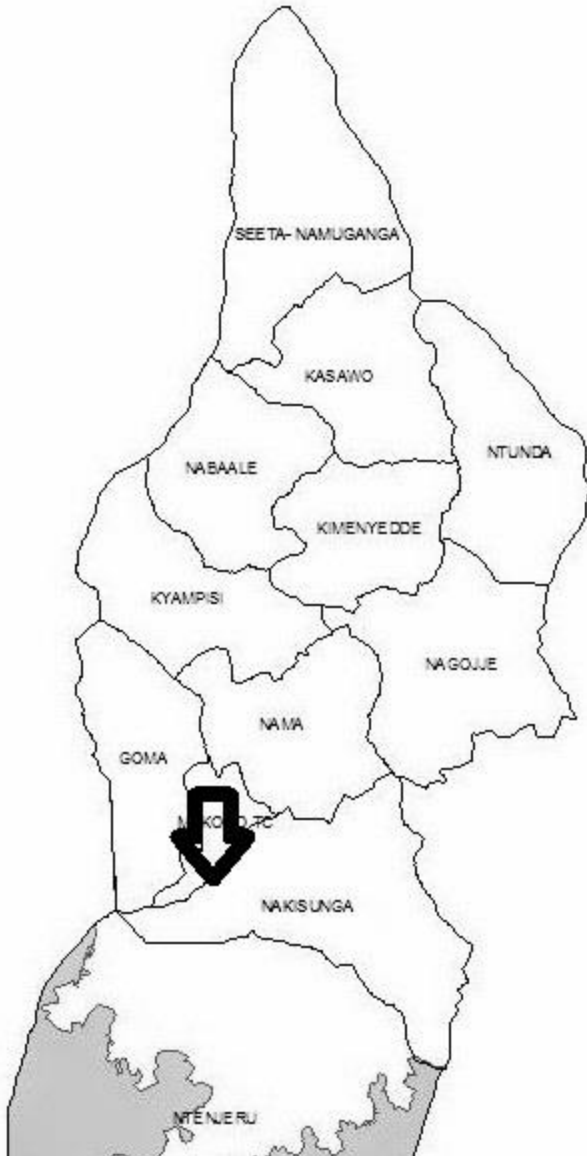


Figure 1.2: Map of Uganda showing (where arrow sits) the location of Mukono District where one research site is located. Source: Google Images (2014).



*Figure 1.3: Map of Mukono district showing the location of the research site (where arrow sits).  
Source: Google Images (2014).*

#### *Masaka District Community*

Masaka district is located 120 kilometers along the western Uganda route from the capital city. Of the four regions that make up Uganda (East, West, Central and North), Masaka is located in the Central region like Mukono (the two districts are 121 kilometers apart). The total area of the district is 1603.3 square kilometers. Masaka shares part of Lake Victoria, which makes fishing one of the economic activities in the district. Masaka has 11 banks, two universities, and it is the

gateway to the Western part of Uganda and to the neighbouring countries of Tanzania, Rwanda and Burundi.

The main economic activity in the district is farming whereby of the 75,306 households in the district, an unspecified majority household survives on farming. Other economic activities in Masaka district include fishing, retail businesses, hotel businesses, and several others. However, as a backbone of the community survival, farming employs 72 percent of the community members and the majority of the farmers engage in subsistence farming. With a tropical climate, the district has a bi-modal rainfall pattern punctuated by dry seasons from July to August and January to March. The average maximum temperature of the district does not exceed 30 degrees centigrade (Masaka District Development Plan (MDDP), 2011).

Masaka district has three counties of Bukomansimbi, Bukoto, Kalungu and the Municipality where the district headquarters are located. There are 19 rural sub-counties in the district, 127 parishes and 1384 villages.

According to the recent census, the population of the district is 296,649 (UBOS, 2014), out of which 58 percent is below 18 years, 36 percent is between 15 – 64, while those above 65 years are 6 percent. Information from the 2014 census also indicates that Nyendo, the area where the study was carried out in the district, has 12,548 households, with a population of 43,883, divided by an average of 3.3 people in a single house unit (UBOS, 2014). There are 75,306 households in Masaka district, with each having an average of 3.8 people (UBOS, 2014). Of the district households above, 5.6 percent have access to electricity, while 83.3 percent still use firewood for cooking family meals. The percentage of people using safe water is 47.9. Another percentage, (4.17), of the houses has no toilet facilities. 61 percent of the households have no family transportation mechanism while 33 percent have a bicycle. The district also notes that three percent of the community lives below the poverty line while rural and urban poverty stands at 30 and 17 percent respectively.

The number of government aided primary schools is 362, while there are 298 private primary schools, on top of the 27 and 116 secondary schools for government and private individuals

respectively. The Masaka District Development Plan (MDDP) notes that more than 88 percent of the government jobs in the district are occupied by men while several women work as support staff. More women occupy the self-employment sector because there are fewer social and cultural barriers than there are in the formal sector, like late working hours for a mother who is expected to cook a family meal (Ssewanyana and Kasirye, 2010).

The district has 85 health facilities. These are distributed as follows: 3 health facilities at hospital level (one owned by government and two by non-government organisations), 9 health centres at the level of grade four (seven are government-owned while 2 are not), 18 facilities at the level of grade three (14 of which are government-owned), and 55 grade two health centres (38 are run by government while 17 are not). In addition to the above health centres, there are seven private pharmacies licenced by the National Drug Authority, 92 licenced drug shops and 41 licenced clinics. Additionally, the district also has between 300-500 traditional healers, licenced by the National Traditional Healers Association (Masaka District Development Plan, 2011). Most of these medical facilities can be accessed by community members within one to five kilometers.

<b>Position</b>	<b>Disease</b>	<b>Percentage</b>
1	Malaria	38.3
2	Respiratory Infections	17.7
3	Intestinal Worms	6.6
4	Skin Diseases	3.7
5	Diarrheal	3.1

*Table 1.3: The percentage distribution of the major five diseases in Masaka district. The above figures show the diseases that are most recorded at the health centres. Source: Masaka District Development Plan (2011).*

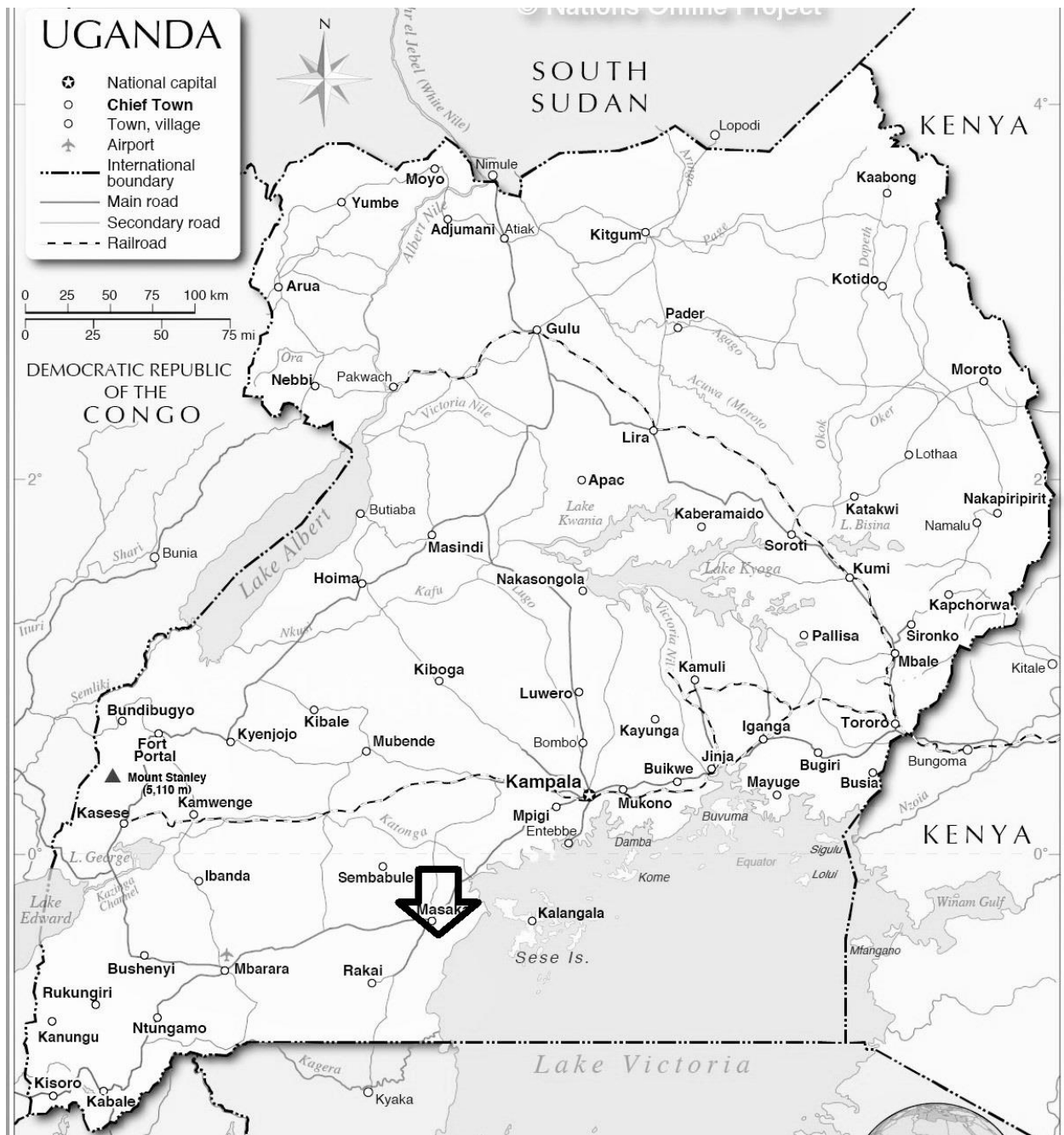


Figure 1.4: Map of Uganda showing the location of Masaka district (where arrow sits). Source: Google Images (2014).

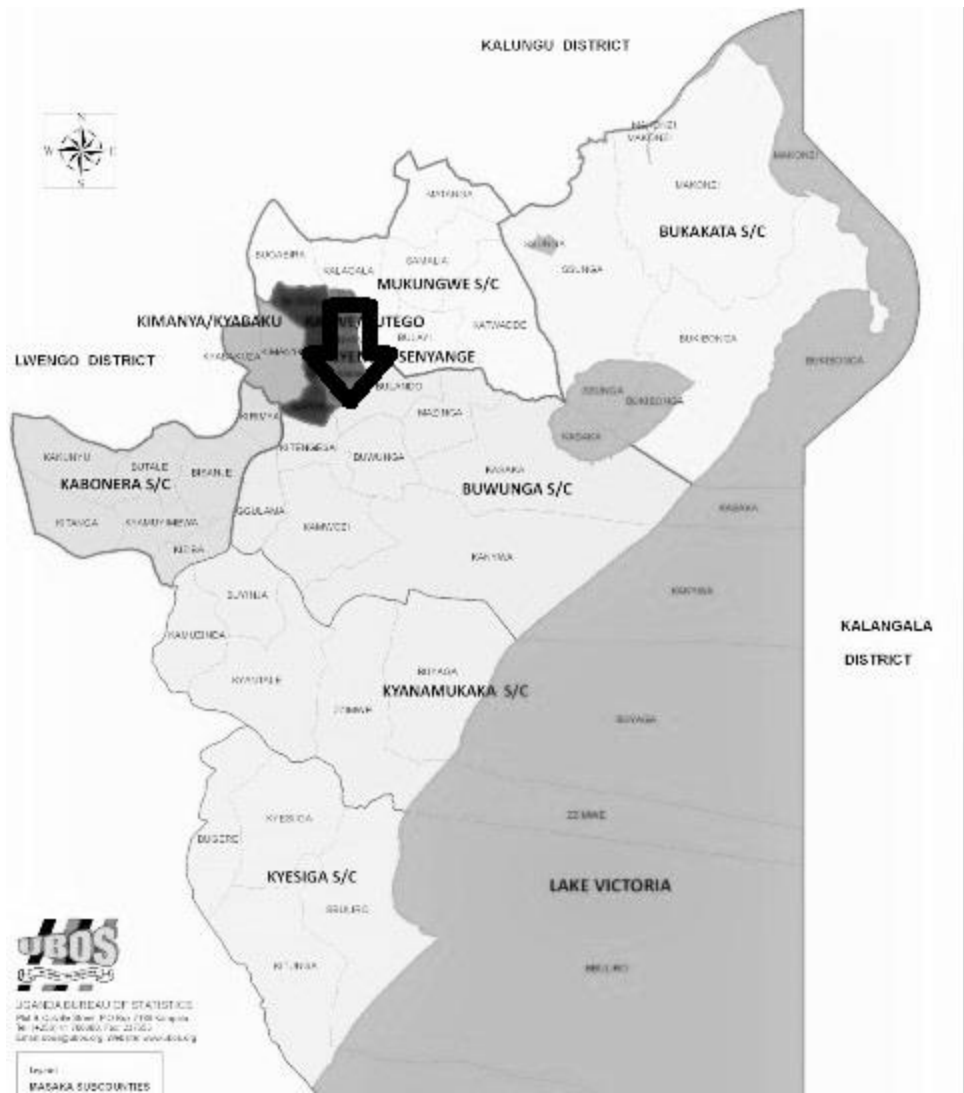


Figure 1.5: Map of Masaka showing the location of Nyendo (where arrow sits), one of the places where data was collected. Source: Google Images (2014).



*Photo 1.6: Nyendo Market which is part of the area that the CAT, Voice of Nyendo, serves (Photo by Brian Semujju, July 2014).*

In comparison to *Voice of Nyendo*, the other CAT under study, *Nassuuti FM*, also serves a congested area. The photo below shows the tower's speaker over community businesses.



*Photo 1.7: The Nassuti CAT seen over community businesses. (Photo by Brian Semuju, July 2015).*

## CHAPTER TWO

### LITERATURE REVIEW

#### **Introduction**

This chapter reviews literature on the concepts that constitute the study. A review of other scholars' work helps to explain the issues with which the study engages and to identify fruitful theories and methods that have previously been used to study these issues (Priest, 2010). The chapter is organised according to larger themes relevant to the study which are: Community, Community media, Community radio, Narrowcasting, and CATs respectively.

The chapter is divided into four main parts addressing the above concepts. The first part presents the history and meaning of the geographical community since the CATs described here serve physical locations instead of non-physical interests. As the second classification of the concept of community, non-physical communities are dealt with in the first part as well in order for the chapter to show how they differ from the geographical communities of Nassuuti and Nyendo. The second part addresses the meaning of community media, and the four theories used currently to explain such media (Carpentier *et al.*, 2001; Bailey *et al.*, 2008; Carpentier, 2016), and briefly describes community radio as the community media with almost the same functions as CATs in Uganda. The third part explains the practice of narrowcasting by making comparisons from other areas that use narrowcasting like commercial broadcasting (Chae and Flores, 1998; Priestman, 2004; Bellas, 2005; Coffey, 2012), marketing (Overby and Birth, 2006), and computing and internet (Young, 2004; Tripathi and Nair, 2007). The chapter argues that while radio and TV might broadcast to specific audiences, their commercial interests inspire a different meaning of service from the one given to the audience by CATs. CATs are explored last with their scholarship identified and meaning articulated because they are the platform under investigation. The Chapter also shows how CATs have been operationalised in the Philippines where scholars (Gaviria, 1996; Tabing, 2000; Dagrón, 2001) note that CATs have succeeded. This is done in order to create ground for a presentation of how much individuals depend on the CATs in Uganda. Since this study explores the relationship between CATs and the audience, the term “community” (as the audience) is first examined. Most notably, a lot of attention is paid to the physical or geographical meaning of the term in order to conceptualise CATs.

## **Community**

The term community has been defined in many ways and has thus been viewed as an elusive term (Poplin, 1972), a vogue word (Plant, 1974), a word with varied etymology (Williams, 1987), pervasive (Hawtin *et al.*, 1999), never a word of lexical precision (Cohen, 2002), and ubiquitous (Chaskin, 2013). Even the approaches to the study of community differ between sociology (Tonnies, 1887), philosophy (Plant, 1974), community psychology (Riger and Lavrakas, 1981; McMillan and Chavis, 1986), and several other disciplines. Specifically, literature from media and communication as well as cultural studies, that all frame this study, describes community as “a fuzzy word” (Downing *et al.*, 2001). To show diversity of the term, George Hillery (1955) studied the number of definitions of community that had been created from several disciplines and discovered 94 definitions.

Community in the English language can be traced to the fourteenth century and it has had mainly five meanings (Williams, 1985: 75):

- the commons or common people, as distinguished from those of rank (fourteenth to seventeenth century);
- a state or organised society, in its later uses relatively small (from fourteenth century);
- the people of a district (eighteenth century onwards);
- the quality of holding something in common, as in community of interests, community of goods (sixteenth century onwards);
- a sense of common identity and characteristics (sixteenth century onwards).

This study is aware of the elusiveness or vagueness alluded to by some of the above scholars and so classifies community into two main types: physical and non-physical community. The first discusses community as a physical (geographical) location and the other as a non-physical location. Of all the definitions of community, the foundation done by Ferdinand Tonnies (similar to the fourteenth and eighteenth century definitions above), is given priority in this study because it explains physical (geographical) communities similar to the communities under study. The differences between the physical (geographical) communities and the non-physical (non-geographical) communities are highlighted by briefly examining four types of non-geographical

communities: sense of community, imagined community, African community (Ubuntu) and virtual community). The reason for this is to illuminate how these ‘non-geographical communities differ from communities that use CATs in Uganda. However, first, the geographical meaning of community is dealt with in order to contextualise the Nassuuti and Nyendo communities.

### *Physical (Geographical) Community*

Within the literature that explores the term “community”, several scholars (Wirth, 1926; Heberle, 1937; Goodwin, 2003; Bond, 2013) have cited German sociologist Ferdinand Tonnies’ (1887) textbook *Gemeinschaft und Gesellschaft*<sup>3</sup> as not only sociology’s ground breaking work on community but an important starting point in the understanding of community in general. Tonnies’ structural definition of community juxtaposes the concept with society in a way of progressive comparison which creates stages in the history of human association. For example, he creates two clusters, one for community (*Gemeinschaft*) and the other for society (*Gesellschaft*), in a way that suggests transition within community which later turns into society. “The *Gemeinschaft* of blood (family), denoting unity of being, is developed and differentiated into *Gemeinschaft* of location (community). A further differentiation leads to *Gemeinschaft* of mind (society), which implies only cooperation and coordination of action for a common goal (Tonnies, 1887: 17a; Poplin, 1972; Bond, 2013).

Tonnies attaches primitivity to the notion of community, arguing that it has strong family ties, and survives on “non-rational will” or “natural will” (Tonnies, 1887: 17a; Bond, 2011; 2013). “In its elementary forms, natural will means nothing more than a direct naïve and therefore emotional volition and action” (Tonnies, 1887: 17a; Palm, 1973, Tilman, 2004; Mastnak, 2015). Physical location and backwardness are the two most important factors that Tonnies attaches to community. Community, therefore, is classified by a common relation to, and share in, human beings themselves (family), collective ownership of land (creating neighbourhoods) and sacred places of worshiped deities (Tonnies, 1887a; Mastnak, 2015). In relation to the communities understudy, 99.8 percent of the country’s population is religious while only 0.2 percent is non-religious (UBOS, 2014).

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<sup>3</sup> Translated by two volumes: Charles P. Loomis (1955) (henceforth also referred to as Tonnies 1887a) as *Community and Society*, and Jose Harris and Margaret Hollis in (2001) (henceforth also referred to as 1887b) as *Community and Civil Society*).

Jose Harris and Margaret Hollis' (2001) translation of Tonnies' work is similar to Loomis' above. They translate Tonnies' (1887b: 27) original work from German into English as such:

Community of blood, indicating primal unity of existence, develops more specifically into community of place, which is expressed first of all as living in close proximity to one another. This in turn becomes community of spirit, working together for the same end and purpose. Community of place is what holds life together on a physical level, just as community of spirit is the binding link on the level of conscious thought.

Tonnies' work established the description of community as a place where someone was born, lived and worshiped in communion with others. While credit is given to Tonnies for his seminal work on community (Heberle, 1937; Edwards and Jones, 1976; Gusfield, 1975; Goodwin, 2003), his definition of community has some challenges. By defining community in the above way, Tonnies assumed the existence of unity and peace among all the people born and living together, and he did not account for the slow progress from pre-modern community to rational community (McKenzie, 1924; Bond, 2013) as Chapter 5 notes the Nassuti and Nyendo communities to be. Nevertheless, Tonnies' work provides a basis for the analysis and adoption of a definition of community for this study because it explains geographically remote communities similar to the Nassuti and Nyendo communities sampled in this study, that are yet to catch up with the modern rational communities in Global North. While Tonnies' work is more than a century old, the physical (geography) location "continues to provide a forum for relationships through which information, aid, services, and connections to broader networks and systems are shared" (Chaskin, 2013: 110).

#### *Non-physical (non-geographical) community*

Several scholarly efforts have been raised describing communities away from geographical interpretations. The study highlights four forms which are: *sense of community*, *imagined community*, *African community (Ubuntu)* and *virtual community*.

### Sense of Community

The Sense of Community considers the associations and experiences of individual members and whether or not those members feel proud of being part of a particular geographical setting. The “experience of Sense of Community is created by several factors including: expected length of community residency, satisfaction with the community, and, the number of neighbours one could identify by first name” (McMillan and Chavis, 1986; Ditchman, *et al.*, 2016). This idea is similar to the community of meaning where, “as structural bases of the boundary become undermined or weakened as a consequence of social change, so people resort increasingly to symbolic behaviour to reconstitute the boundary” (Cohen, 1989: 70; Farahani, 2016). Most recently, people have been found to achieve some sense of community by volunteering to participate in community activities like sports as opposed to “economic benefits and mega-event contexts” (Kerwin *et al.*, 2015:77). The volunteers consider sports as a social space and being part of it helps them to feel that they are making a contribution to a common community interest. To understand the idea of sense of community, communities have to be perceived as “networks of “connection,” with boundaries that delineate “insiders” and “outsiders,” and where members identify with one another” (Meyer *et al.*, 2006: 33; Kirk and Lewis, 2015). In relation to this study, Rachel Davis Mersey (2009: 347) reports studies that investigated a sense of community online with results that refute the suggestion that the geographical community is dead because “respondents are still attached to their geographical communities” and besides, individual experiences as determinants of community still need a physical location, like Nassuuti and Nyendo, to acquire meaning.

### Imagined Community

Another type of non-geographical (non-physical) community is understood as Imagined Communities which denotes “individuals’ imagined affiliations with certain groups” (Anderson, 1991; Carroll *et al.*, 2008: 165). Anderson conceives of community as a nation that is limitless by borders or social inequalities and one that can be psychological “because the members of even the smallest nation will never know most of their fellow-members, meet them, or even hear of them, yet in the minds of each lives the image of their communion” (Anderson, 1991:6; Kanno and Norton, 2003; Njami, 2011). The attachment is so strong that whether a member is within the boundaries or out of that community, such a member would do anything for such an imagined community. Even with imagined communities, the meaning is created in respect to a

physical location from where members and the imagined ideas originate. To relate imagined communities to CATs and their communities, one needs to understand that mainstream media employ several discursive strategies like signs and codes to create imagined communities for readers by emphasising the kind of modern life that readers may idealise (Jenkins, 2016). CATs on the other hand deal with information within the community and daily events in that physical space.

### Virtual community

Scholars now speak of online community to mean communities or individuals that share commonality on the internet. “An online community is a social network that uses computer support as the basis of communication among members” (Andrews *et al.*, 2002; Gibbs *et al.*, 2016; Bury, 2016). The major differences that online communities bring from the ordinary physical community are “lack of real-world physical cues, the ability of members to change their identity, while social order and control, and purpose, raise challenges for online community builders” (Andrews *et al.*, 2002: 10; Stefanidis *et al.*, 2013). A virtual community is “a place where a rich shared repertoire community identity (i.e., common interest, theme, organisation) is developed through social interactions” (Abfalter *et al.*, 2012; Pan *et al.*, 2014: 62), or “places on the web where people can find and then electronically “talk” to others with similar interests” (Gupta and Kim, 2004; Roberts, 2016). Like physical communities, virtual communities are also interest or hobby-based like sports, politics, relationships, literature, except that in virtual communities, the members can decide to be anonymous and they do not share a physical space with each other (Gupta and Kim, 2004; Ho and Lin, 2016). Community media, which are mostly geographically located in Uganda, can use global information systems like satellite or digital incentives to reach to wider communities (Ali and Conrad, 2015) but for communities like Nassuuti and Nyendo to enter the virtual realm, via access to broadband (Walsh and Barnett, 2014), the community members must be economically better than they are now. Studies on wireless communication across United States, Europe and Asia suggest that apart from internet service providers targeting high-end business users in order to make profits (the kind of users that Nassuuti and Nyendo community members are not), states with a minimal land mass and densely populated city areas adopt wireless services quickly (Castells *et al.*, 2004). This description identifies a network gap that exists and affects Africa mostly. Although “the global networks that structure the planet affect everything and everyone” (Castells, 2008: 82), “not

everything or everyone is globalised.” Additionally, in Africa specifically, the virtual reality made possible by ICT suffers from high tariff rates (for mobile phones), lack of connectivity in areas that are marginalised (for internet), and low connectivity for ICT services in several areas that are targeted by especially community media (Chiumbu, 2013).

#### African Community: Ubuntu

Various understandings of community in Africa exist independent of the Western articulations above. One of them is Ubuntu which can be represented by the philosophy in the following statement: “I am because we are, and since we are therefore I am” (Mbiti, 1970). Ubuntu is “a way of life, a universal truth, an expression of human dignity, an underpinning of the concept of an open society, African humanism, trust, helpfulness, respect, sharing, caring, community, unselfishness, etc.” (Cilliers, 2008: 1; see also Lubombo, 2014). Community in such a manner makes or defines who an individual is while at the same time, the individual is a vital component of the community. Community therefore is “a foundation upon which the individual is built and gives the individual a framework, indeed the only framework, in which he/she exists” (Ruzicki, 2010: 48). Other African conceptions look at brotherhood (hospitality) as crucial ingredients of the survival of the African individual (Onyedinma and Kanayo, 2013). The idea in relation to brotherhood is that one has to identify him/herself with and within a certain group of individuals that live in a certain physical location in which “the celebration of ritual ceremonies takes place” and one where there is the practice of submission to established gods and authorities (Onyedinma and Kanayo, 2013). Other interpretations of community stress that as Africans, the meaning of individual belonging was obtained when an individual got attached to a community of other human being in a certain village in order for the individual to fulfill his/her social objectives (Agulanna, 2010).

The African and the Western ideas of community have a remarkable resemblance. Some scholars note that “Western writers have generally interpreted the term 'community' in such a way that it signifies nothing more than a mere collection of self-interested persons, each with his private set of preferences” (Menkiti, 1984: 169). However, Tonnies (1887b: 27) originally had noted “a community of spirit, working together for the same end and purpose”. As this chapter notes at the beginning however, community literature published in the early 20<sup>th</sup> century rallied against the idea of a community that was peaceful and serene. This was based on the fact that as long as

community is made up of human beings, and since man is a gregarious animal, his several weaknesses resulted into conflict (McKenzie, 1924). By taking a normative stand which explains the ideal, instead of explaining the misfortunes and under-privileges that face geographical communities, the African meaning of community differs from the geographical interpretation used in this study. The physical communities described in this study still face communication challenges that only community media (discussed below) that identify life in a physical space can solve.

### **Community Media**

This section locates CATs within the general study of community media, in a way of delineating CATs as a particular form of community media. The meaning of community media can vary as subject matter depends on the needs of a particular community. For example, community media in Kenya means puppetry, community theatre, audio listening groups and participatory videos, while in Uganda, community media take on a radio form (Wanyeki, 2000; Nassanga *et al.*, 2013; Semujju, 2014). In South Africa, apart from radio, community media take on the form of grassroot comics (Dicks, 2011) and body mapping (Govender, 2013) as a form of community communication, and several other forms elsewhere. As long as we understand the type of community for whom we are identifying community media, explaining community media should be a very simple task (Opubor, 2000). The study considers community media as an umbrella term for local communication platforms that are non-profit, non-government, run by community members, as an avenue for local information needs. Such media can use radio, TV, CATs, among others, as tools to uplift local communities.

Community media have the following characteristics (Tabing, 2002; Ali and Conrad, 2015):

- They serve a recognizable community.
- They encourage participatory democracy.
- They offer the opportunity to any member of the community to initiate communication and participate in program making, management and ownership of the station.
- They use technology appropriate to the economic capability of the people, not that which leads to dependence on external sources.

- They are motivated by community wellbeing, not commercial considerations

Tabing's assertion that community media employ technology or means that are affordable within a particular community can be used to understand why Uganda's community radio, both the geographical and the interest-based are noted as experiencing several challenges like poor accessibility and lack of sustainability (Musubika, 2008), most of which stem from lack of funds to start and run radio technology. Technically, community media currency in the Global North has moved on to a convergence of such media with ICT, for example, where a number of community radio stations may unite and share content and connections online (Carpentier, 2007; Chiumbu, 2013). The convergence of ICT and community media that has been recorded in the Global South helps journalists at some community radio stations in Mali, Uganda, Mozambique (Manyozo *et al.*, 2013; Nassanga *et al.*, 2013) and South Africa (Chiumbu and Ligaga, 2013) to improve their investigations in terms of quality and save time. However, challenges of slow or lack of necessary skills to use the internet have been cited too (Manyozo *et al.*, 2012). In the Global South, such lack of technical capacity to fully apply the newest innovations in ICT, in several countries, accommodates several grassroots communication initiatives under community media, which is why Tabing notes that "in some facilities, a simple loudspeaker or a community audio tower system (the medium under study here) is used" (Tabing, 2002: 12). Such a digital divide between ICT appropriation in the Global South and the Global North creates discrepancies in community media form that should also reflect in the way we define and operationalise community media worldwide.

Community media are known by several names and two of them are addressed below because they relate to this study.

#### *Community media as radical media*

Community media are referred to as "radical" because they try to resist the influence of oppressive social, economic and political conditions that people find themselves in (Downing *et al.*, 2001; 2016). It "refer[s] to the media, generally small-scale and in many different forms that express an alternative vision to hegemonic policies, priorities, and perspectives" (Downing *et al.*, 2001: v; 2016). As such community or radical media may be understood as the direct opposite of

the mainstream media. Downing's classification of radical media, which is Marxist and Gramscian due to its identification of the dominant and oppressed voices, argues that dominant media propagate dominant ideologies that are also hegemonic in nature. The radical media are, on the other hand, noted to rise up as a way of insulating the public against such influence, which could explain their survival and in fact existence. CATs can be considered "radical" because of mainly their counter-hegemonic content and their operationalisation that reverses the way mainstream media work, which will be discussed in Chapter 5.

### *Community media as alternative media*

Community media are alternative media since they are "de-professionalised, de-institutionalised and de-capitalised" (Atton, 2001: 1; Howley, 2002; Atton and Forde, 2016). To bring out the "alternativeness", community media disregard the behaviour of conventional media, something that resembles radical media. The idea of professionalisation runs at the heart of mainstream journalism as global efforts are made often to achieve ethical behaviour (Foreman, 2010; Kellam and Stein, 2015), based on training, existence of a body of knowledge, and professional bodies (Merrill, 1997; O'Donnell and Van Heekeren, 2015). Alternative media are manned by community members whose justification to be on radio, TV, or another alternative media, comes from the experience gained about a certain issue that may be affecting the community (Atton, 2001; Atton and Forde, 2016). In practice and in the academia, the differences between conventional and alternative media are sometimes blurred. In practice, this is because of the licencing regimes that tend to maximise profits from all media including alternative media (more details on this aspect in Chapter 6). In the academia, although Atton (2001) notes alternative media to be what mainstream media are not, he attempts to investigate alternative media by observing their routine practices of news production. This definitely brings in news values as a yardstick for nuancing events that make it on air, something that an investigation of conventional news practices would do. Nevertheless, alternative or small-scale media would encompass a great deal of media including banners, television, radio, T-shirts, video, film, posters, and a host of others (Hollander *et al.*, 2002; Lev-On, 2012). This study adds CATs to that list. Most importantly, if that list of community or alternative media teaches us something, it is that "small-scale media varies in type and differs from large-scale mass communication and from large, formal and institutionalised mass media" (Hollander *et al.*, 2002; Lev-On, 2012). The intention is general however. They (community media) provide:

a voice to the voiceless, power to the powerless, and give way to help rural masses establish their right to information, development, communication, governance, decision making, participation, freedom of expression, employment, health, education and security through well designed programmes. (Singh *et al.*, 2010).

The challenges, as discussed later in this chapter, vary from country to country, although some African countries may share a commonality of community media stumbling blocks ranging from non-participation due to poverty to lack of a special licence which forces such media to pay high taxes.

#### *Four Theoretical Approaches to Alternative/Community Media*

Nico Carpentier *et al.*, (2001; 2008) identify four types of community media theories. The first of the four theoretical approaches explains community media as one that serves the community (Carpentier *et al.*, 2008; Bailey *et al.*, 2008; Carpentier, 2016) by promoting self-management, access and participation. This approach is close to the World Association of Community Radio Broadcasters (abbreviated by its French acronym AMARC) explanation of what community broadcasting should be by identifying access, participation and self-management as integral. The approach, however, falls short on implementation in that while the theory advocates for participation, communities still have the non-participatory mindset created by mainstream media (Carpentier *et al.*, 2008; Semujju, 2013b). This means that some community members have not overcome the effects of centralised media and so consider participation as “the other” activity and non-participation as the normal way. Some community media however, like CATs, can overcome this barrier as detailed later in this section, something that brings the first approach closer to explaining CATs.

With the second theoretical approach, community media can be explained as alternatives to mainstream media (Carpentier *et al.*, 2008; Carpentier, 2016). This approach suggests an antagonistic relationship between the mainstream media acting as the top dog and alternative or community media as the underdog. Seen from this approach, the relevance of community media is “supplementing, contesting and resisting mainstream media discourse (Carpentier *et al.*, 2008: 354). The main idea in this second approach is that whatever mainstream media stand for,

alternative or community media do the opposite, on one hand while on another, community media may fill a gap left by mainstream media. For example, if mainstream media are competitive, the alternative media aim at providing voice to the voiceless. While mainstream media run on the liberal theory of market place of ideas, which also fosters competition, alternative media take on a role of representing the marginalised.

<b>Description</b>	<b>Mainstream Media</b>	<b>Alternative Media</b>
Size	Large-scale and geared towards large, homogeneous audiences.	Small-scale, specific communities, minority groups, respecting their diversity.
Ownership	State-owned organisations and commercial companies.	Independent of state and markets.
Structure	Vertically (or hierarchically) structured organisations staffed by professionals.	Horizontally (non-hierarchically) structured, local unskilled workers.
Content	Carriers of dominant discourse and representations.	Carriers of non-dominant (possibly counter-hegemonic) discourses and representations, stressing the importance of self-representation.

*Table 2.1: The difference between mainstream and alternative media. Adapted from Carpentier et al. (2001; 2008).*

The antagonistic position, however, disadvantages community media in a way that “being small scale, independent, and horizontally structured organisations that carry non-dominant discourses and representations hardly guarantees financial and organisational stability” (Carpentier *et al.*, 2008: 335; Bailey, 2008). In relation to CATs, the towers carry both types of content, which challenges the assumptions of both the first and second approaches. However, in terms of size, ownership and structure, CATs obey the assumptions of the second approach.

The third approach to alternative media links the media to civil society. As civil society or part of the civil society, media in general act as the fourth estate by reflecting government to the

audience in order to promote a system of checks and balances and accountability. The public are therefore, ideally informed on how leaders who were tasked with looking after the public resources and managing them are doing the job. What makes community media as a civil society different from mainstream media is that community media “can overcome the absolutist interpretation of media neutrality and impartiality and offer different society groups and communities the opportunities for extensive participation in public debate” (Carpentier *et al.*, 2008: 25). The other advantage is that community media theoretically have a provision of refraining from the evils created by state and capitalistic influence (Bailey *et al.*, 2008). However, this approach also has weaknesses. Carpentier *et al.* (2008) for example admit that being a civil society requires that community media confront established authority and in a country with less media freedom, the ruling party may look at alternative media as a threat to its power. While CATs offer a platform for debate, the nature of attention created by the community to the towers is very narrow to local events and emergencies.

Community media is also considered to be rhizomatic, in the fourth and last theoretical approach raised by (Carpentier *et al.*, 2001; 2008). The Oxford English Dictionary online reveals that rhizome means “a continuously growing horizontal underground stem which puts out lateral shoots and adventitious roots at intervals<sup>4</sup>”. To liken the idea of a spreading underground root to community media, Carpentier (2016) cites Deleuze and Guattari (1987) as the owners of the metaphor. What attracts the scholar is that a rhizome is non-linear and it connects to all directions. In terms of community media, these media can act as a starting point for communication to be spread just like a root would spread in all directions underground. The function of community media then would be to link all parts of a social system such as the state and the market (Carpentier *et al.*, 2008: 359), including the civil society for the improvement of society. This gives community media a chance to work with the state, private media, market, and all other sectors, for development (Carpentier *et al.*, 2008).

What is not very clear in the fourth approach is to what extent community media deal with the state and the terms of that relationship. Then the other issue would be about why alternative media would care to connect state agencies and other organs and civil society when those parties

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<sup>4</sup> <http://www.oxforddictionaries.com/definition/english/rhizome>

have mainstream media that they think can do the job better. Such media (used by the state and some civil society organizations) are resourceful too and can also be referred to as community media because they serve such communities as civil society organisations (Howley, 2010). Of Carpentier *et al.*'s (2008) four theories described above, none specifically explains CATs, although the first approach mentions some characteristics found in CATs like access and participation (Gumucio-Dagron, 2001; Semujju, 2016b). Mostly, the approaches define community media as radio and other licenced bigger community platforms, characteristics that the CATs do not have. In addition, most literature reviewed in this chapter fails to acknowledge CATs as a formidable community media that can be used by communities that are economically marginalised (apart from Gumucio-Dagron, 2001 and Tabing, 2002). The relevance of this study therefore is to isolate CATs as an independent platform that can foster community development and to create knowledge for future researchers about CATs.

#### *Methodological approach to the study of community media*

Apart from theory, there are two levels of methodology upon which community media can be studied: the individual level, where individual personal traits are studied, and the social system level which covers the characteristics or traits of the community (Hollander, 2002). The changes at both levels, investigated through a case study, triangulation of both qualitative and quantitative methods, can reveal volumes of information about community media and how the individuals use them (Hollander, 2002). This study uses Hollander's model by investigating community media at both levels. The use of quantitative research was aimed at identifying individual dependency on the channels, while selecting two CAT examples helped to throw more light on the differences that different communities using community media may have. Working as a critique to previous theoretical efforts, Hollander suggests that any theoretical framework for community communication must take into account two basic levels: the first one is the level of the social system (community) and the corresponding communication system, and then the individual characteristics (Hollander, 2002: 36). The individual characteristics are not well represented in the above four theoretical approaches.

Today, there are attempts to integrate the diffusion of information communication technology (ICT) into community media (O'Donnell *et al.*, 2006). The argument is that ICT helps community media to act as intermediaries between the communities on one hand and the

leadership from the elected persons. ICT in other words act as a link between these media and the rest of the social and political system. ICT assists community media journalists in research and easy access to sources in some African countries (Manyozo *et al.*, 2012). However, CATs, as possible forms of community media do not include journalists. Instead, CATs have the village members to gather information willingly without a promise of any incentives. It is the need that forces them to take information to the CATs. The village members rarely use ICT to gather information for CATs although data indicates in Chapter 5 that some of them use mobile phones. The challenges of community media in Africa may not guarantee the effective use of ICT yet. For example, while investigating community radio in South Africa, Stanley Tsarwe (2014) notes that South Africa's community radio suffers from lack of participation and engagement due to poverty and marginalisation. In Uganda specifically, similar concessions have been reached (Semujju, 2013a; 2014). What we need to remember always is that communities around the globe communicate using various platforms which include: CATs (investigated in this study), grassroots comics, rock carving (Dicks, 2011), body mapping (Govender, 2014), community puppetry (Wanyeki, 2000), blackboard newspapers, wall newspapers (Tabing, 2002), new media community media (especially in the Global North where the digital divide is minimal), and several others. Since access to ICT differs from region to region, how the ICT applies to community media also differs. Consequently, this ICT approach of community media is discriminative of the other locally used types of community media that may not require ICT and those whose jobs may not actually be to reach out to government but to raise awareness within communities and to help individuals within the communities express themselves. However, O'Donnell *et al.*'s (2006) study raises an important issue of where community radio and TV stand in the global diffusion of ICT although the subject is outside the scope of the study of CATs here. To comprehensively understand CATs, community radio is briefly examined below.

### *Community Radio*

According to the World Association of Community Radio Broadcasters (AMARC), "community broadcasting is referred to as a broadcasting service not for profit, owned and controlled by a particular community under an association, trust or foundation" (Mtimde *et al.*, 1998: 19; Ali and Conrad, 2015). The three aspects or characteristics that define community radio are:

- Non-government
- Community ownership and control

- Community participation

Government and private or commercial radio stations that have programmes designed and implemented for rural development are categorically ruled out of the community radio bracket (Mtimde *et al.*, 1998: 22; Lewis and Booth, 1998; Dunaway, 1998; Bosch, 2014b) due to the insistence of the community radio model on community: ownership, access and participation (Gustafsson, 2016). The attempt to rid community radio of control was becoming popular both in practice (where communities no longer had control over their communication platforms for state or commercial interests), and in the academia by making a strong reference of community radio as radio stations that served a certain community. Community radio has the ability to empower and transform communities by increasing the community awareness and convincing the community to take part in development programs that uplift their own communities (Mhagama, 2015).

To contextualise CATs, community radio as a channel under the umbrella of community media has to be examined here for mainly two reasons. The first reason is that community radio ideally is participatory (Lapsansky, 2012; Gustafsson, 2016) but several studies (Musubika, 2008; Semujju, 2013b; Tsarwe, 2014) identify challenges like political influence, low financial base, lack of a special licence, that make community radio fail to fulfill this promise. Although community radio has been a success in several countries in Europe (Cammaerts, 2009; 2016; Kuipers, 2010) and the US (Deuze, 2006), its failure in Uganda creates space for CATs (Semujju, 2016b) as channels that facilitate the community to engage with local information. The second reason is that in areas where data was collected, and indeed in other locations where the towers are used (see Tabing, 2002), CATs' "programming" and behaviour are replicas of radio behaviours, although the two community media (radio and CATs) differ in content, regulation (CATs are not regulated), transmission, and several other ways as data shows in Chapter 5. In Uganda, where this study was carried out, the first community radio was Kagadi-Kibaale Community Radio (KKCR) in 1999, followed by Mama FM in 2000 (Nattimba, 2004) and Radio Apach, which, along with KKCR are not licenced by the UCC as community radios (Semujju, 2016c). They are referred to as community radio because they were established on the basis of the above three criteria (non-government, community ownership and control, and community

participation). The challenges that these community radios face (noted above) are the reason why community broadcasting (radio) in Uganda has not permeated most rural communities and yet narrowcasting (described below) carried by CATs is growing fast.

### **Narrowcasting**

To understand narrowcasting, a comparison to broadcasting needs to be provided. Broadcasting, in its original sense, was used in farming to mean the act of scattering seeds from one centre to the rest of the garden (Gripsrud, 1998; Hartley *et al.*, 2002). The current study therefore adopts Hartley *et al.*'s (2002) definition of broadcasting as the practice of scattering radio and TV information from one centre to a wide audience. According to Uganda's National Broadcasting Policy (2004: 4), broadcasting means "any communication or transmission of any message or signal to the public by means of any electronic apparatus." Although both of these definitions do not articulate the position of the audience well, they do identify the idea of transmission (which means broadcasting is strictly mechanical), and then information moving from one centre to the wide unidentified area where the audience might be. CATs carry out narrowcasting by "aiming to raise and discuss local issues and mobilise community members on social events that matter to them" (Gumucio-Dagron, 2001:85). The study uses definitions of narrowcasting from broadcasting (TV and radio) in order to create a working definition for narrowcasting by CATs.

Narrowcasting was used to produce content that would respect and restore "racial pride among African-America audiences" in 1929 in the United States (Isaksen, 2011: 760). Since then, narrowcasting in mainstream media has been used to mean market depth, which is a situation where television tries to narrow down to certain specified audiences, as opposed to market breadth, through which television sends content to undefined audiences (Chae and Flores, 1998). The normal broadcasting (market breadth) is therefore extensive while narrowcasting (market depth) is intensive (Chae and Flores, 1998).

In radio and the internet, audience segmentation calls for a redefinition of what radio is (Priestman, 2004), bearing in mind that radio audiences can now be found on the internet consuming content according to their varying tastes and preferences (Priestman, 2004). The audiences no longer have to consume whatever radio gives them which might not be in line with

their tastes and preferences. Priestman (2004) and Chae and Flores' (1998) studies above can be used to relate to this study's CAT breadth and depth alongside demand for content.

Due to the refocusing that TV introduced from broadcasting to narrowcasting through cable, the internet is creating "My-casting" where individual audience members gather, process and disseminate their own information or news without going through the rigorous process of professional content requirements (Young, 2004). This same concept that explains how new media have reversed the agenda setting role from the journalist to the audience (McQuail, 2006) relates well with how exactly CATs in the rural and semi-urban communities work by giving the community member a chance to interpret news from his/her perspective.

Narrowcasting is when information is sent to a targeted small audience (Smith-Shomade, 2004). Since advertisers define specific audiences only if those specific audiences have buying potential, the poor, less consuming communities, from the perspective of business are never catered for. As Eastman *et al.* (1985) note "by attempting to reach a demographically or psychologically defined group that the established services do not serve" (Smith-Shomade, 2004: 73), one is doing narrowcasting. The idea of established services, compared to the corporate idea of maximising profit through narrowcasting resonates more with this study. Just like Beretta Smith-Shomade (2004), this study argues that narrowcasting in CATs can reach out to communities which are not a target of big commercial media because they do not have buying potential or cannot be quantified in commercial terms by mainstream media. Narrowcasting disseminates information on a small scale to targeted audiences that are most likely socially homogeneous.

In wireless communication, narrowcasting is used to target the people with smart gadgets that can tap into a specified network within a certain location (Bellas, 2005). As a precondition for the success of this kind of narrowcasting, internet access has to be free, meaning that it has been paid for by the advertiser. The commercialisation of the concept comes in when individuals get attracted to the product being advertised. An example would be unsolicited adverts on an airport network directing people where to get currency exchange. In relation to the current study, Michael Bellas (2005) notes that most of the unsolicited adverts on public networks have nothing to do with some of the people receiving them because they might have connected on a network

for different reasons. The difference between the internet narrowcasting and that described in this study is that the internet content producer is able to change content in one location while keeping the same content in another (Albanese, 2005). CATs still use the broadcasting system only that what they define, in narrowcasting terms, is the smaller community that they are able to ring off.

In Europe, television has broken the audiences into three groups that are narrowcast to: “the housewife, the Sex and the City woman, and the South Park boy” (Kuipers, 2010:179). For example, television could release entertainment programmes like sitcoms to target any of the above groups. While Giseline Kuipers’ (2010) study sees narrowcasting in the lenses of content, this study approached narrowcasting through the perspective of the channel, which inspires content because content can be temporary, depending on the changing attitudes of the community about an issue. In the United States, when the black population realised that national broadcasting had been taken over to discuss white people issues, the black people made an effort to start narrowcasting campaigns that saw them take information down to fellow blacks who had been denied access to information for so long (Isaksen, 2011). Narrowcasting started with the introduction of cable TV as a way of resisting the mainstream mass broadcasting (Isaksen, 2011). This meaning of narrowcasting connects with the current study’s articulation of CATs, used as a way of resisting information that people think is not useful on one hand but also, in some communities, as the only channel available to discuss village issues.

Radio audiences that are not catered for by the mainstream establishments, for example the Spanish or black communities can get satisfaction from the fact that a channel that narrowcasts certain specialised content directly targets their tastes and preferences (Overby and Barth, 2006; Coffey, 2012). If the station in question is commercial, regardless of the intention to narrowcast, decision must be made on the basis of financial gains. For the channel to dedicate a certain time for a particular niche audience, it has to be established that such an audience is commercially capable of attracting adverts, especially the ones that sell the products that the intended target audience consumes (Tabing 2000). However, using the broadcasting format, CATs can narrowcast to targeted audiences by gathering, processing and disseminating village information (Semujju, 2016a). What needs to clearly be articulated is that radio can easily target the groups

that are possibly hoped would bring advertisers on board but narrowcasting in CATs is not modeled on the idea of adverts as data discussed in Chapter 5 indicates.

Apart from radio, even internet narrowcasting uses the economic model. For example, wireless devices are personal which means that advertisers aim at individuals not masses (Tripathi and Nair, 2007). But even then, this narrowcasting has complaints of untargeted individuals receiving unwanted spam emails which may lead to psychological discomfort. Other articulations come from the computer world where joining particular audiences on a conference network can also be referred to as narrowcasting (Alam *et al.*, 2008). Although this has no relevance to this study, it is evidence of how wide narrowcasting has been used elsewhere before and besides, all these fields use the same concept of narrowing information down to a certain person or small group. Regardless of the progress of narrowcasting, sending information after identifying a certain target is achievable but it is not mandatory that those people will listen (Pagliuca, 2011). This is another problem that faces narrowcasting in CATs, channels that are discussed below.

### **Community Audio Towers (CATs)**

The platforms under study, CATs, are described in the following account starting with how they are understood in countries other than Uganda.

#### *CATs Globally*

CATs have been used in the Philippines as a small media approach to development communication by the Food and Agricultural Organisation (FAO) and the United Nations Development Programme (UNDP), having been successful in Thailand (Gaviria, 1996). In the Philippines, other small community-based media like blackboard newspapers (*Moalboal Times*), notice board newspapers, and CATs were also used (Tabing, 2000). CATs are “powerful speakers hoisted on top of 10 to 20 metre bamboo or steel poles. Regular programmes are broadcast at specific times of the day over the loudspeakers” (Tabing, 2000: 84). The farming communities in Thailand utilise CATs to access information relating to farming, health and several other subjects (Tabing, 2000).

The kind of information that CATs disseminate is not organised in the same way as a radio broadcast. Instead, the towers tell the village about when the community meeting will be, what the weather might be that day (based on indigenous knowledge not scientific weather forecasts); they are able to say when the bad weather is expected and suggest the kind of action the community should take. They are able to say when, for example, immunisation of children will next take place so that the community can mark that day, and so on (Tabing, 2000). What appears to be a very small negligible platform, in the end provides vital news that commercial media would not broadcast without seeking a sponsor. It is evident then that the smaller or the more “community” the channel becomes, the more important its information becomes and therefore the harder (in reference to the mainstream media idea of hard news) the news becomes. Additionally, Tabing (2000) notes that the Philippines’ farmers had turned the CATs into some kind of radio school (a version of this in cities today would be online degrees), where husbands and their wives attended courses on pest-management, family planning, nutrition, and several other subjects, all in their homes.

“Very early in the morning, just as the sun rises, the music from *Tacunan Audio Tower* filtrates with an echo through trees and plantations, providing company to peasants as they work over their crops,” notes Alfonso Gumucio Dagron (2001 : 84) as he details how *Tacunan Audio Tower* in the Philippines works. The idea of CATs in the context of development communication was created by FAO in the 1980s using “two microphones jacked into a Karaoke playback system connected to 20-watt...amplifiers” in addition to “four or six cone speakers mounted on small towers,” for social change information within communities (Gumucio-Dagron, 2001: 84). To the marginalised communities that cannot afford radio technology, CATs are useful. In Asia, CATs emulate radio formats to an extent that programme slots are created by the workers as though the towers were radios (Tabing, 2002).

To explain how CATs are used in Ghana’s rural areas, Robert Chapman *et al.* (2003) note that CATs could push their information to a radius of over three miles. During the ninth United Nations Conference on Communication for Development, Jan Servaes and Patchanee Malikhao (2004) presented what they called “a background paper” and referred to Gumucio-Dagron’s account of CATs. Gumucio-Dagron (2001) cites Tabing (2000) and Gaviria (1996) as seminal

sources on CATs in the report. However, although most descriptions of CATs out of Uganda are consistent with the definitions used in this study, the literature available does not discuss the level of individual dependency on CATs, something this study is interested in. As a point of clarification, there are some differences between the CATs found elsewhere and those located in Uganda. For example, the towers in Asia are funded by non-government organisations (as indicated above) while data in Chapter 5 indicates that CATs in Uganda are funded by the community. The CATs defined in this study also differ from those used in Maoist and Stalinist regimes of Europe and Asia (Fenby, 2009; Kristof, 2011) which were fixed in each home, as the former are started and run by village members for development communication while the latter were run by the state to transmit propaganda.

In maintaining CATs in the Philippines, the FAO worked in collaboration with the Philippine Council for Agriculture, Aquatic and Natural Resources Research and Development (PCAARRD). CATs are considered as one of the main effective communication platforms for rural agriculture programmes, which is why 43 new students have been trained in CAT communication skills in order to manage the towers and the different agricultural programmes aired (PCAARRD, 2014). Although the CAT project was started by PCAARRD and funded by United Nations, it was later maintained by local development officers, who would see it provide important agricultural information over the years from its inception in 1992 (PCAARRD, 2014). From the above examples, the issue of funding remains pertinent to CATs. Most of the examples given in Asia had an intervention of government funding and FAO or UNDP. What this study presents in Chapter 5 is an example of two CATs in Uganda and how all these issues, including funding, are dealt with. Three main ideas can be identified in the Asian CAT literature: the first being that CATs are mainly used for rural farming or other development information; the second is about an attempt to professionalise the practice through training (in the Philippines) and the third being that the CATs rely on NGOs and government for funding. CATs in Uganda differ as the section below indicates.

#### *CATs in Uganda*

In order to fill the gap left by lack of literature on the practice of CATs in Uganda, the information about CATs in Uganda below is drawn from field observations during data

collection and local newspaper articles. A more detailed account is found in Chapter 5 which presents the findings.

### Structure

The media structure discussion normally includes a media system's regulatory framework, policy, media types and ownership (Nassanga *et al.*, 2014). The discussion of the structure of Uganda's CATs concerns legal framework. There are no direct provisions specifically created for CATs in Uganda. Laws that apply to radio and TV (electronic media) for example, are the same laws invoked whenever necessary to deal with CATs. This scenario is created by the generic definition of broadcasting in the law: "broadcasting" means the transmission of sound, video or data intended for simultaneous reception by the public (UCC Act, 2013: Part I section II). The Act does not specify whether or not the word transmission requires the platform referred to in the section above to have a transmitter, which would indicate that communication is taking place and messages are sent to large numbers of people. Due to CATs' limited technology, only a few lines of the above definition of broadcasting explain CATs. For example, although there is transmission of sound and that sound is intended for simultaneous reception, the intended size of the audience determines how CATs operate and how other processes thereof are going to be deliberated. Nevertheless at present, the 2013 UCC Act regulates CATs (James Nsimbe, Mukono District Legal Officer, interview, 12 August 2014). Besides the above informant confirming that the law is used to regulate CATs, there have been cases when UCC closed-off CATs as examples below indicate.

In 2012, the UCC moved to close six CATs in Luweero District, found in the central part of Uganda (45 km from the capital). The closed CATs were: *New Paradise*, *Kalaso Luweero*, *Kalaso Wobulenzi*, *Voice of Kasana*, *Mirembe*, and *Nsera Radio* (Luwaga, 2012). While pleading with the UCC to reconsider its decision, the district chairman challenged the UCC saying that the law used to close down the CATs was not binding on CATs because the towers have no frequency and that they serve a very limited number of people compared to the general concept of broadcasting (Luwaga, 2012). Additionally, the Act states that "broadcaster means a licenced person..." (UCC Act 2013: Part I section II), and yet the CAT presenter/owner is not licenced. As this study shows later in Chapter 5, the government (through UCC) has not decided yet to licence CATs because the UCC sees "no need although people are using the towers" (Paul

Mukasa, Content Manager, Uganda Communications Commission, interview, 15 August, 2014). In short, the application of the UCC Act to the regulation of CATs signifies a bigger problem of CATs not being properly regulated.

From a different regulatory angle though, residents of the same district where CATs had been closed-off mobilised themselves and called a village meeting presided over by several local leaders. In the meeting, the village devised different ways to regulate CATs, contrary to the government way of closing them. The village members resolved that CATs should have limits in order to regulate their noise. Each CAT under the new village regulations would narrowcast four times a day and each narrowcast would last for 15 minutes (Bakalu, 2014). It was also resolved that the CATs would have to do this in turns as opposed to all of them narrowcasting at once. Uganda does not have a specific policy for CATs. However, the country has a broadcasting policy. The 2004 Uganda Broadcasting Policy does not define broadcasting/broadcaster differently from the UCC Act. “Broadcaster means a legal person or organization, which composes, packages or distributes television or radio programmed services for reception by the public or sections of the public”, while “broadcasting means any communication or transmission of any message or signal to the public by means of any electronic apparatus” (Uganda Broadcasting Policy, 2004: 4).

As the policy does not refer specifically to CATs, it puts into question the logic of using it to guide a discussion on CATs although as a form of community media, some characteristics of CATs<sup>5</sup> are provided for in the policy. However, the community broadcasting section of the policy could be used to inform a policy that can match the intensions of CATs. The policy advocates for “broadcasting which is for, by and about specific geographical communities or communities of interest, whose ownership and management is representative of those communities, which pursues a social development agenda and which is not-for-profit” (Uganda Broadcasting Policy, 2004: 21).

The objectives of the policy towards community broadcasting include:

- To provide citizens with a platform to articulate their local issues;

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<sup>5</sup> CATs are non-government, owned by the community for community development

- To provide more opportunities for programming in the indigenous Ugandan languages;
- To provide indigenous programmes relevant to development at the grassroots;
- To reduce the gap between urban and rural communities in accessing communication for development;
- To encourage members of the community to participate in the planning, production and presentation of programmes;
- To promote ownership of media by low income groups of society i.e. the poor and vulnerable (The Uganda Broadcasting Policy, 2004: 21).

As the assessment of CATs in this study was approached from the communication for social change perspective (Servaes, 2016), the above objectives of the policy connect well with the objectives of CATs. CATs, as Chapter 5 shows, give a voice to local people to address local issues. The definition of local is also revised from the original “local” advocated for in the community radio discourse, which could be a geographical area or people with the same interest (Howley, 2010), to what this study has called area-local or village-local. This means that CATs are not concerned with communicating to areas beyond the confines of one village. This also implies that their access is limited to a few households that constitute a village. The language of CATs’ content is local depending on what language is spoken in that village. It is quite unlikely that a community member will be a target audience member of CATs if he/she does not understand the local language. There is a difference between the way people participate in CATs and the way they participate in community radio. In CATs, participation is done individually and it is done by having the community members gathering the information for CATs (Semujju, 2016b). Community radio participation on the other hand happens in groups of people who come together and create management committees to run the radio (Nassanga, 2008).

#### Ownership

CATs are locally owned. They are created when a community member realises the need for a platform that communicates only “hard news” about the village situations, as the *Voice of Nyendo* presenter Joseph Mugerwa (interview, 9 July 2014) confirmed. The owner, who also doubles as the presenter, then receives information from the village members who walk to the towers and submit their information needs. At each tower where the data for this study was

collected, there was only one worker who was also the owner. The reason behind this structure is economic. There is simply not enough resources to pay someone else to present, something that the owner himself can do<sup>6</sup>.

### Content

CATs' content is local and is generated by individual members of the community. Every day, there are mainly two narrowcasts (the number of narrowcasts varies according to area of operations). In contrast, community radio content in Uganda is generated by volunteers (and hired journalists who get some little pay) who do the jobs of the journalists like news gathering, processing and dissemination (Nassanga, *et al.*, 2013). The following was observed from the two CATs that were under study: *Voice of Nyendo* and *Nassuuti FM*. CAT narrowcasting starts at 6:30am up to 7am and then from 9:30 pm to 10pm. This routine is broken when there is an emergency like someone losing a child or property, and when police have something to say about security, if thieves break into someone's house or place of work and other emergencies (Semujju, 2016a; Semujju, 2016b).

As in radio broadcasts, CAT presenters too begin by greeting listeners, identifying the name of the CAT that has started to narrowcast and telling the community from which location the tower is narrowcasting. On the first day of observation at 6:30am, *Voice of Nyendo*, the rural CAT, had lost-and-found announcements, local sports competitions that would take place that week, death announcement, an announcement thanking those who attended a previous funeral for the recently buried member of the community, Eid day special adverts, missing children, and ended with music at the end of the narrowcast. The evening narrowcast followed the same format (field notes, July 2014).

The following day, it was still the same format except that the CAT started narrowcasting at 6:32 in the morning and stopped at 7:13am with announcements, followed by music until 7:20am, when the morning narrowcast was done. There was no new information given. It was as if the previous evening's announcements had been recorded except that this time, there was more emphasis. After the narrowcast on the second day, two community members came in to give the presenter information that he would narrowcast in the evening. The third person came to inquire

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<sup>6</sup> All the towers visited are commanded by men.

when his curriculum vita (CV) was going to be narrowcast for potential employers in the same area to know his specialty. The evening of the second day had specifically information about the dead, missing children and property. This format ran across five days with each announcement lasting between one and two minutes due to repetition. This arrangement also differs from the community radio's arrangement. At one community radio in Uganda called Kagadi-Kibaale Community Radio (KKCR) for example, broadcasting is done for 18 hours a day (Semujju, 2012).

### Form

Finally, from what was observed in the field over a period of 10 days, it is clear that CATs in Uganda use the following technology: horn speakers (about three or four) hoisted on top of long dry wooden poles next to a small room that has an amplifier, microphone and a CD player for playing music. Although in ordinary media there is a trend for technical convergence, CATs use very elementary technology because it is cheap to get, as explained by the Minister of State for ICT, Nyombi Thembo (interview, 24 August 2014). However, the presenters use their mobile phones to receive information from the community through calls. Such information is written on a piece of paper and gets read out when the CAT is switched on, if the information does not report an emergency. This happens, for example, when a community member calls the tower to report an emergency, like a crime. One of the examples that were cited at one of the towers was that at one time, a community member called in to report thieves who had broken into his neighbour's farm. The Chairman Nassuuti Local Council One, Moses Mulindwa (interview, 22 July 2014) noted that when the thieves heard that they were being announced and that the details of their dress code and position were being given, they abandoned the cows and ran off. Based on this close level of engagement with their surrounding communities, there was need to understand the realities of such a platform which ordinary people find user-friendly in terms of achieving results.

### **Conclusion**

The above literature has explained the four main ideas that make up this study. Beginning with community, the literature has identified mainly two types. The first one is geographical, which also operationalises this study and the non-geographical ones separated into: Sense of Community (McMillan and Chavis, 1986; Ditchman, *et al.*, 2016), Imagined Communities (Anderson, 1991; Kanno and Norton, 2003; Njami, 2011; Jenkins, 2016), African Community

(Mbiti, 1970; Onyedinma and Kanayo, 2013) and virtual community (Abfalter *et al.*, 2012; Pan *et al.*, 2014). Apart from the term community, the literature has also discussed the idea of community/alternative/radical media as an umbrella term that encompasses various small media including community radio, an idea that has been discussed too. The chapter suggests that in order to accommodate CATs, a general term, small media, which does not discriminate according to technology or nature of service rendered, should be applied. The theories and methods that explain community media like, community media as service to community, rhizomatic media, alternative media, and community media as a civil society (Carpentier *et al.*, 2001; 2008) have been addressed by the literature as well, except that this study argues that each of them has a missing link which isolates instead of uniting community media types. The review argues then that a more inclusive explanation of community media is needed that can include narrowcasting and CATs, ideas that were discussed towards the end of chapter. While the current chapter presents the main concepts that constitute this study and how various scholars have debated those concepts, the next chapter engages theory in order to situate the CATs debate in communication/media theory, and to elaborate on the theoretical approach that guides this study.

## **CHAPTER THREE**

### **THEORETICAL FRAMEWORK**

#### **Introduction**

The chapter discusses the concept of development because of the assertion by this study that Community Audio Towers (CATs) can uplift rural and semi-urban communities from poverty. Since the CATs debate has been circulated within communication for social change scholarship (Servaes and Lie, 2013), which itself is a strand of development communication, particular development communication theories are discussed in order to identify the current debate of CATs but also to situate the argument that CATs can communicate development information. The section thus presents the paradigms of modernisation (Lerner, 1958; Inkeles, 1966, Rogers, 1969; 1976; 1995), dependency/dissociation (Gunder-Frank, 1966; Baran, 1967) and participatory communication (Freire, 1970; Wilkins, 2003; Servaes, 2008; Waisbord, 2014; Thomas, 2015) to assist in the theorising of CATs. The chapter then presents the Media System Dependency (MSD) theory (Ball-Rokeach and DeFleur, 1976, Ball-Rokeach, 2014) to explain the level of individual dependency on CATs. One of the advantages of using the MSD theory in this research, besides using its assumptions to form research questions and objectives, is that it helps the study to explore the micro (audience or individual level) relations with CATs. The challenges of a lack of an independent theory to explain small media dependency relations is identified at the end of the section, creating room for this study to suggest new theoretical assumptions in that regard (see Chapter 7).

#### **Current CAT Conceptualisation**

The CATs debate has been mostly held by Tabing (2000) and Gumucio-Dagron (2001) under the communication for social change framework, itself a branch of development communication. This is the main reason why the current study highlights a history of development communication theories relevant to this debate. The historical perspective of the development communication theories from the modernisation to the participatory approaches assists the study in establishing a theoretical trajectory for CATs and to use the existing assumptions to suggest more appropriate theoretical underpinnings for the future of CATs.

The researcher has argued that there are insufficient participatory (or alternative/small media) communication theories to explain dependency relations in small media or CATs. Therefore, a one-way theory, in addition to the participatory communication theory, is best suited to explain how dependency relations in CATs work, since the theory was created to explain such relations in mainstream media (Westgate, 2008). The MSD theory is used to explain how individuals and CATs co-exist in the social system.

The relevance of the MSD theory today is shown by several studies, including the current ones that explain dependency relations and the interactive nature of new media (Lee, 2012; Li, 2013). This is discussed towards the end of this chapter. Additionally, the MSD theory has been applied in development communication before to identify the dependency relations among community media stakeholders at macro (government, international organisations) meso (NGOs, interpersonal) and micro (individual) levels, arguing that “social reality are products of the ever changing dynamics of these relationships” (Lapsansky, 2012: 103-104). Using the above study that applies a positivistic theory to development communication as an example, this study interrogates the level of individual dependency or the level of micro MSD relations in CATs. To identify with the micro dependency relations, the word “audience” is treated synonymously with “individual” in this study since the studies in the MSD tradition sample individuals in order to make conclusions about audiences in general (Patwardhan and Yang, 2003; Westgate, 2008; Cheng and Lo, 2012).

However, after two weeks of observation and deliberations with CATs’ workers and listeners, detailed in Chapter 5, the researcher realised that there are some characteristics of CATs that are not well explained by the MSD theory either and yet even the two-way participatory theory cannot explain them single-handedly. This creates the need for a new model and theory (introduced later in Chapter 7) to accommodate the characteristics of CAT dependency relations beyond what the MSD theory can explain.

Although the first attempt to explain the role of information in development adopted the transmission model, the model is not enough to independently frame this study bearing in mind that the phenomena under study (CATs) are used by local communities. Participatory

communication theories therefore are used as well to explain CATs as a local communication effort. Both the diffusionist (Rogers, 1995) and the participatory approaches (Servaes and Lie, 2013) are expounded on in this chapter after an understanding of the concept of development is provided.

### **Development**

After the success of the Marshall Plan in Europe, in which the United States financed the reconstruction of European infrastructures and economies that had been destroyed by the Second World War, the United States moved to modernise the Third World using the Western industrial societies' model (Fraser and Restrepo-Estrada, 1998). This modernisation model, known as the dominant paradigm, described pre-modern societies as having a work force that depended on muscle power while the modern societies in the West survived on mechanical power (Splengler, 1966), among other classifications. Proponents of the modernisation paradigm, Everett Rogers and Rabel J. Burdige (1972: 402), explained who the pre-modern people, or as they called them, “the peasants” were:

- They suffer from malaria, dysentery, tuberculosis, trachoma, due to lack of medication.
- Their daily food intake is about one third less measured in calories than that of developed countries while their diet is very starchy and contains fewer meat, proteins, minerals and vitamins than diets in more developed countries.
- Only the minority has the opportunity to attend school; only about one in five is literate.
- The average income are less than one tenth of those in the US (the lowest income in North America are better off than the average in less developed countries.

Prior to this classification, Rogers (1969: 19) had commented on peasants as “people who are portrayed as lazy, ignorant, and resistant to change”. The dominant development communication perspective thus aimed to persuade peasants to change their status through access to information that originated in the modern Western societies. In light of the above description then, development was defined as “a type of social change in which new ideas are introduced into a social system in order to produce higher per capita income levels of living through more modern

production methods and improved social organisation” (Rogers, 1969:18). Before Rogers, Alex Inkles (1966) had noted that the modern man was made of two parts: one that dealt with his external environment and the other that dealt with internal attitudes. The external environment connection of the modern man motivated him to improve his surroundings by looking for something better for his environment or community. Most importantly, the internal attitudes of the modern man always exhibited his “readiness for new experiences and his openness to innovation and change” (Inkles, 1966: 141).

These individual differences were thought to be reflected in how countries developed. David C. McClelland (1966) proposed the “need for change” as a measure for development, arguing that the people who were less developed had a very low need for change. Therefore, need for change could be achieved by appealing to the internal and external man in peasants to adopt new scientific technologies that had spurred development in the West. Economic development then became an avenue for explaining the “entry of continuing technological advance into traditional societies” (Hagen, 1957: 193). If the peasants were given scientific methods, it was assumed that would rid them of their cultural practices and beliefs that had kept them in peasantry for so long and as a result, modernise. This development approach which fostered economic growth, as the sign of development, was common in Uganda and was always based on population statistics as the ones presented in Chapter 1 (Table 1.1). This study finds that CATs, although used to transmit government information down to the community, are mostly used by communities to share information among themselves (more details in Chapter 5 and 6). The three theories: modernisation, dependency/dissociation and participatory communication are discussed below with an intention of examining how communication was used to foster development. The first two (modernisation and dependency) create a background for the participatory communication theory which is used later to explain the community activities in CATs.

### **Development Communication**

How much and in what way can communication contribute to development is a question that concerns this study. The solution, according to the modernisation paradigm, was in changing the way people think and the things they value (de Sola Pool, 1966), in order to achieve modernity. To change the way people think, one needed a platform that could reach out to people in large numbers. This is how modernisation theory entered development communication or how

communication was conceived as a tool for development. Three scholars are credited for initially promoting this view point: Daniel Lerner, Wilbur Schramm, and Everett Rogers. Daniel Lerner (1958) argued that for peasants to develop empathy, which is the capacity to see oneself in another situation, new communication technology had to be adopted. Mass media were to inform them of this new technology and its benefits within a rapidly modernising world. According to Lerner, people who developed empathy “were more likely to become future-oriented and rational” compared to their counterparts who had not developed empathy (Servaes and Lie, 2013: 9). After developing empathy, an individual would go through a four-stage evolutionary process which included: “urbanisation, literacy, media participation and political participation” to achieve full development (Lerner, 1976). This process helped scholars to define communication as a one-way flow of information dissemination from the West or modern man to the Third World (Schramm, 1964). Wilbur Schramm too advocated for the introduction and distribution of radio and television to the underdeveloped world through which ways to modernise could be demonstrated. It was assumed that if mass media were introduced to traditional villages, images of change would make people yearn to achieve development too (de Sola Pool, 1966).

Apart from the fact that one-way communication is positivistic epistemologically, thereby assessing the success of communication by quantifying development results and neglecting the quality thereof, Melkote and Steeves (2001) argue that one-way communication promoted state influence in private (community) lives where the state was an all-knowing entity that decided what the people needed for development.

In Uganda, such influence today tends to be political and individuals are often denied participation in government-run initiatives simply because they failed to declare their political affiliation publically (Semujju, 2013a; Waisbord, 2014). Additionally, the modernisation paradigm inherited “historical and institutional biases emanating from propaganda research” where media were utilised like external stimuli to boost the brain into believing something (Melkote, 2003: 131).

In the long run, even such stimulated responses did not add up to development and the modernisation paradigm did not provide a solution to what would happen if “irrational”

individual behaviour (such as assumed superstition, familism etc.) wore off due to the absence of the external stimuli (media messages). When the individual (from communities up to administration structures) realised that what he/she had been made to believe was not actually his/her own version of progress, there was resistance. Cognitive psychology theories, as applied to communication, can help to explain this scenario better with the ideas of selective perception and retention. Individuals do not believe all the information with which they engage because a powerful source transmitted that information (McQuail, 2006). The pictures in our heads are based on the cultural codes and frames of reference from our surroundings. Therefore in the above case of modernisation theory, individuals eventually could select what information to understand and what to abandon (like modern information) using the pictures in their heads (media versus traditional beliefs). Since modern information contradicted traditional beliefs (cognitive dissonance), it was resisted or not understood (selective perception), and therefore selective retention (deciding to remember only information that relates with held beliefs and attitudes) of modern information did not happen (Baran and Davis, 2003).

Towards the beginning of the 1970s, criticism was leveled against the manipulative categorising of people into modern and pre-modern but most importantly, against the approaches that had been used but failed to uplift the Third World from poverty (Waisbord, 2001). One such approach that categorised people was the diffusion of innovations (Rogers, 1976; 1995). While attempting to explain how innovations diffuse in a social system, the diffusion of innovations theory noted that people adopted new ideas or innovations (an idea, practice, or object that is perceived as new by an individual or another unit of adoption) at different rates (Rogers, 1995). Each period that an individual spent before using an innovation placed that individual into a certain adopter category. The first category, of innovators, is of risk takers, being that they are young in age compared to all adopters in other categories (Ramos, 2007). However, the disadvantage with them is that their obsession can make them seem dangerous to the majority who consider an innovation carefully (Robinson, 2009). The second category is early adopters. They have financial lucidity and are more socially fronting than the third category of the early majority (Rogers, 1995; Ramos, 2003). The early majority take a little bit of time to jump to a conclusion. When they do however, they are slower. Their social status, although not very high, is above average while they keep themselves in touch with the early adaptors. The fourth

category is called late majority. This group adopts an innovation after society because of their skepticism about new ideas. Their social status is below average and they have little financial lucidity (Robinson, 2009). The last of Rogers' adopter categories are the laggards. They are aged, first of all, and this subjects some of them to traditional norms. They have low financial lucidity while their most connection is family and friends (Rogers, 1964; 1995).

These classifications were used broadly to explain how modern and pre-modern communities accepted innovations since the development paradigm of the time capitalised on transfer of new ideas. Most importantly, although the original diffusion of innovations model was used to explain the diffusion of hybrid corn in Iowa (USA), it also was used to explain individual technology adoption and use around the world. For example, the theory was used to assess the diffusion of ICT in Asia (Wong, 2003) and in the Third World countries (Baliamoune-Lutz, 2003). However, among the conjectures of the diffusion of innovation theory is the fact that "the technology moves in a discrete package from an independent innovator to the adopter through a constant social ether called a diffusion arena" (Lyytinen and Daamsgard, 1997: 6). The challenge comes from the fact that the social ether (space) in which the innovations spread is defined from space to space by different socio-economic and socio-cultural factors which in the end have an effect on the diffusion of an innovation. For this reason, a model built on a socio-cultural setting from the United States is likely to fail to accurately explain how rural Ugandans adopt CATs since most of the rural citizens belong to the last categories of the late majority and laggards, if one were to use Rogers' classifications. However, in such communities, there are young people who do not adopt innovations because of illiteracy, poverty and several other reasons which are not accounted for in the model. This is an example of how the diffusion model fails to account for development where structural and external constraints act as barriers.

However, Rogers, in an interview shortly before his death in 2004, told Arvind Singhal and Rafael Obregon (2004) that by 1962 when his book *Diffusion of Innovations* popularised how innovations spread in the social system from the top down to the community, he had already changed his mind about the top-down movement of innovations, particularly with regards to the universal applicability of the model. Rogers noted that his understanding changed after he visited Colombia. He said that most countries in Latin America were under military dictatorship, a

factor that his own model, which was designed from research data collected among highly educated and technologically expert European and Americans, had never considered. There had been an overestimation of what communication could do by assuming that if the gadgets like radio and TV were delivered, communication would be successful after all the process of adoption had been outlined and information on its own was enough to automatically trigger changes (Quarry and Ramirez, 2009).

The biggest setback to the modernist view came when the scholars who had promoted it in communication reversed their stand. For example, Schramm (1976: 45) realised that 20 years of development efforts had not lifted the rural poor out of poverty because “the model of change that was derived mostly from the experience of the West has proved inadequate to the task in many of the developing countries”. Rogers (1976: 49) noted that “what happened in Western nations regarding their pathways to development is not necessarily an accurate predictor of the process in non-western states”. Among the reasons Rogers gave for this reversal was that the West had accumulated resources through colonialism and had more capital intensive technology. These resources, which the underdeveloped economies never had in plenty, had supported social-economic transformation of the developed world.

It is difficult to ascertain if the change of stand-point by these prominent scholars was based on empirical data as they claimed or political pressure from the Non-Aligned movement that had advocated for new global economic reforms in 1973. Modernisation of the peasants through sending them information from the gate-keeping capitals of the world therefore was challenged since the approach had assumed that people in the underdeveloped world were as economic as the people in the West and that they would put the idea of economic incentives before anything else (Rogers, 1976). The new idea, started by the Third World, unlike modernisation that came from the West, would have to consider how the West manipulated the people that it claimed to assist. This came to be known as Dependency/Dissociation Theory. The resistance was against the view held by the UN Economic Commission for Latin America that the region was underdeveloped because capitalism (capital investment by US as it had done in Europe through the Marshall Plan) had not been fully embraced (Dutta, 2011). For the current study, dependency theory is part of the history that helps to show the recent debate of CATs in development

communication, from which new dimensions have been suggested in Chapter 7 under the general topic of CATs.

### *The Dependency/dissociation Theory*

The dependency/dissociation argument emanated from South and Central American Social Movements as a major resistance to modernist tendencies and it received full support from the Non-Aligned Movement, made up of countries that were neither communist nor capitalist against the US-led/UN modernisation policies (see Tomaselli, 2011). Latin American scholars rejected the notion that lack of capital investment kept the region in poverty and argued that poverty or underdevelopment should be understood in terms of “forced underdevelopment”. Andre Gunder Frank (1966: 18) noted that “contemporary underdevelopment is in large part the historical product of past and continuing economic and other relations between the satellite underdeveloped and the now developed metropolitan countries”. Therefore, the dependency theory’s main tenet was that underdevelopment of the periphery, or the countries that were politically known as the Third World was a result of the development of the US and Western Europe, two regions that had manipulated the Third World in order for them to attain economic supremacy (Melkote and Steeves, 2001). The assumed solution, according to the *dependistas* (Baran, 1967; Frank, 1966) was for the developing world to dissociate from the developed world and manage its own resources.

“All the countries named as underdeveloped are exploited by others and the underdevelopment with which the world is now preoccupied is a product of capitalist, imperialist and colonial exploitation” (Rodney, 1980: 14). Particularly, Walter Rodney points out that Africa and Asia were developing independently before the direct or indirect control from capitalist powers started. The modernisation plan turned into “a nightmare of massive underdevelopment and impoverishment” and the time was ripe for the Third World to stop being dependent on the so-called Western exploiters (Escobar, 1995: 4). This exploitation, according to the critics, is what the modernisation theory and its practical interventions had promoted.

Another criticism leveled against modernisation was that while the theory was extended<sup>7</sup> to solve problems of the developing world, it instead “explained the process of social change as it happened in Western Europe and America” (Melkote, 2003: 123). The problem was that those developed regions had differences in terms of education levels, scientific discoveries and most importantly, their way of knowing was more scientific than authoritarian (for example believing in religious leaders) and intuitive, still used in the Third World. The other problem was that modernisation failed to handle the process of developing the Third World according to different contexts found in different Third World countries. Beliefs and practices were not the same in the former colonies and this called for a separate consideration of all these realities instead of summing-up the region into the “Third World” and introducing it to Western values.

In terms of communication, the argument within the dependency / dissociation perspective is that the global news-gathering paradigm of giving priority to crisis was skewed because it only showed the negative aspects of the developing world (Shamsuddin, 1987). The call for a New World Information Order (NWIO) ‘accused’ the West of exploitation in the late 1960s and gained momentum in 1973, thus reducing the popularity of modernisation (Shamsuddin, 1987). However, as a system, the dependency theory was also criticised for failing on clarity, as it did not elucidate how the traditional values and modern lifestyles were going to coexist (Melkote and Steeves, 2001). In addition, dependency had not laid out a plan that could be adopted for the Third World for development, apart from a call for dissociation from the West. Although this call for dissociation re-energised more nation-states to call for political independence as well, for example Uganda getting her independence in 1962, the Western powers still maintained influence because the new nation states needed resources to rebuild their infrastructures that had been vandalised in different conflicts that brought postcolonial elites in power (Keith, 2002).

When President Museveni was just one year in office, in 1987, Uganda received \$235m under the Structural Adjustment Plan (Ssonko, 2007). The conditions of such programmes would see service delivery decline in most countries that embraced or accepted the revised version of modernisation. For example, higher education in Uganda was to embrace market-based reforms

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<sup>7</sup> The Four-Point Programme for the Third World was a replica of capital investment used in Western Europe during the Marshall Plan after the Second World War.

and drop the communist mind-set of state funded university education. The neo-liberal reforms, which saw the West dictate to Uganda on what sectors to fund with the money obtained from the West and what sectors to commercialise (privatise) started in the 1990s and left the quality of teaching and research in the government university in ruins (Mamdani, 2007). The privatisation reforms, in which the Ugandans had no say, also led to an influx of private students without increasing the number of lecturers to handle the increasing number of students, on top of changing the curricula to attract more privately-sponsored students (Mamdani, 2007). It is against such practices of influence that development without public/citizen participation had been questioned vehemently by scholars in the Third World in the 1970s. The dependency argument itself warned against reliance on the West, which never actually went away but instead re-emerged through rural farmers depending on elites who still promoted Western ideas and values.

For the communication platforms, media in many of the newly independent states that supported dissociation from the West were authoritarian in that they promoted the interests of the ruling party. In Uganda for example, Radio Uganda (and later Uganda Television), was commissioned and run by the state between 1953 and 1993 (Gariyo, 1993). Rural communities too embraced the two channels since they were the only channels available and the possibility of CATs (as they are used today) was unheard of until the 1990s when liberalisation started and Uganda got its first participatory radio. The states continued to make use of a linear communication model from the government to the masses. However, they did not see the development process as linear because development varied in societies (no universal path to development), something that connects it to participatory communication thinking (Servaes, 2008). Participatory communication, as Keyan Tomaselli (2011) notes, came to strike a balance between exploitation (modernisation) and separation (dependency). More participatory communication tools like CATs were later adopted by rural and semi-urban communities in Uganda and so the participatory communication theory is used below to locate CATs in media and communication studies.

### *Participatory Communication*

Dependency/Dissociation theory failed to offer mechanisms to facilitate negotiation, conflict resolution and empowerment (Servaes, 1999). There was thus a need for a people-centred conception of development to emerge. In the mid-1970s, scholars and practitioners worked towards this end with what is known as the participatory development approach. First of all, participation refers to having the community/listeners/audience voluntarily involved in the program or activity that is slated for them (Manyozo, 2007). Participation involves communities engaging in programming and running of the communication channel (Carpentier et al. 2001). Development, from the Participatory Communication perspective, should be forged with the people who are being developed (Freire, 1970) and the local context should be considered before undertaking any development initiatives (Quarry and Ramirez, 2009). Referred to as bottom-up communication, this approach suggests that messages should ideally move from the community to the development partner (NGO, government) or media (Wilkins, 2003; Servaes, 2008) in a way that what comes out through the communication platforms or government development plan is what the local people have dialogued and agreed upon. It can thus be theorised as “a process which is built on dialogical processes to enable the local people to exert a level of commitment, ownership and control of the development process” (Manyozo, 2013: 155).

Participatory communication is connected to three locations of action. These include i) participatory communication in development projects, that are usually generated by external agents but include community member participation (see Mefalopulos, 2008), ii) community-based participatory communication that is ideally bottom up and grassroots oriented where, for example, community radio/CATs, may be instrumental (this is the most applicable participatory strand to this study), (see Freire, 2001; Mhlanga, 2015) and iii) citizen participation via new media (see Castells, 2012; Shirky, 2011).

Unlike dependency that lacked the articulation of the “how-to” process, participatory communication scholars have developed models and methodologies ideal for the participatory process (Arnstein, 2011; Bessette, 2004; Kincaid and Figueroa, 2008; Tacchi and Lennie, 2014). Guy Bessette’s (2004: 36) ten steps below are used to identify the participatory elements of CATs as used in rural and semi-urban communities in Uganda.

- 1- Establishing a relationship with a local community and understanding the local setting
- 2- Involving the community in the identification of a problem, its potential solutions, and the decision to carry out a concrete initiative
- 3- Identifying the different community groups and other stakeholders concerned with the identified problem (or goal) and initiative
- 4- Identifying communication needs, objectives and activities
- 5- Identifying appropriate communication tools
- 6- Preparing and pre-testing communication content and materials
- 7- Facilitating partnerships
- 8- Producing an implementation plan
- 9- Monitoring and evaluating the communication strategy and documenting the development or research process
- 10- Planning the sharing and utilisation of results.

The dominant development communication approach has been criticised for not taking cognizance of the above. The idea of “understanding the local setting” in Bessette’s first step of participation is one of the most important requirements of participatory communication. For example, Rogers (1976) had noted that the political set-up of the Third World had not been understood alongside the region’s economic, social and cultural practices by the modernisation paradigm and this led to the paradigm’s eventual failure. Understanding the local set-up would then be aided by “the elimination of the dichotomy between the subject and the object” (Huesca, 2002: 7) where the local person is no longer the person being studied since he/she becomes involved at every step of the development process.

The second participatory step above unites the subject and object by calling for community involvement in the “identification of a problem, its potential solutions, and the decision to carry out a concrete initiative” (Bessette, 2004: 36). Although CATs do not embrace all the 10 participatory steps above, steps four and five fit into some of the CATs activities. For example, the local communication needs are identified when CATs remove the mainstream media idea of gatekeeping in a way that any community member with a communication need can approach the

tower. Community members do not have to wait for journalists to reach out to them in order for them (community members) to speak. By establishing a CAT within the community, people are reaching out to an appropriate communication tool that can work well to raise awareness of the local issues below the district level down to the lowest community nucleus. The above steps are therefore an indication that participatory communication had been raised as a reaction to the dominant diffusionist model.

The Rockefeller Foundation, in collaboration with the Johns Hopkins University Center for Communication Programs suggests that for social change to be attained, “the most affected own the process and content of communication” (Figueroa *et al.*, 2002). The Foundation also gives three recommendations on how social change through participatory communication can be attained (Figueroa *et al.* 2002):

- Communication for social change should be empowering, horizontal (versus top-down), give a voice to the previously unheard members of the community, and be biased towards local content and ownership.
- Communities should be the agents of their own change.
- Emphasis should shift from persuasion and the transmission of information from outside technical experts to dialogue, debate and negotiation on issues that resonate with members of the community.
- Emphasis on outcomes should go beyond individual behaviour to social norms, policies, culture and the supporting environment.

However, like the previous paradigms, the participatory communication approach also has challenges and limitations too that researchers and practitioners debate and aim to address (Cornwall, 2008). Before the challenges are presented however, the approach’s benefits are discussed below.

### Benefits of participatory communication

Participatory communication, firstly, aims to empower communities to be involved in their own development initiatives, a practice that can act as a source of income while generating skills for community members (Dyll-Myklebust, 2011). The second location for example is frequently based on small community media (like CATs) that are identifiable to the common person who identifies what development he/she wants and maintains it on his/her own (Mefalopulos, 2008; Servaes and Lie, 2013).

In other words, social change accounts “more closely for the intangible processes and manifestations of change” (Dyll-Myklebust, 2014: 527). Instead of measuring development by counting tangible things, emphasis in social change should be put on whether or not those tangible things are “desirable” and above all “sustainable” (Servaes and Lie, 2013: 11). Social change also includes empowering the local people and mostly this has been done by establishing various communication platforms in order for the communities to manage their own communication needs. Today, the second participatory communication location stressed above uses mainly community radio, community theatre, local-language newspapers, puppetry and, where affordable, new media like the internet (Chiumbu and Ligaga, 2013), to engage communities in development activities and to encourage both behavioural and social change in Africa (Wanyeki, 2000; Chiumbu, 2010; Mhlanga, 2015). The notion of participatory communication, “stresses the importance of cultural identity” (Servaes, 1996; Escobar, 2006), promotes social mobilisation due to the fact that communication is horizontal (Escobar, 2006), leads to sustainability or affordability since the community maintains the channels, on top of restoring power back to the community through self-generation of content. Although community radio is available in Uganda, smaller media, which also work towards facilitating social change, like CATs, are used.

### The Challenges of Participatory Communication

The participatory approach faces challenges like self-exclusion of members, unequal power relations within and outside the implementing community (Cornwall, 2008), and the fact that the practice of participation can be time consuming (Waisbord, 2008). Melkote (2000) argues too that actually, there is no automatic difference between the framework raised today to foster social change and those used in the dominant top-down approach. In some instances (where

participation involves a combination of donors and community members), the implementation of participatory communication, due to lack of empowerment of the community members especially in rural areas may be elitist, as with the dominant top-down approach. This is because local people need training on how to run their own affairs and sometimes, it is cheaper to get just a few of them on a local committee (who are the rural version of the elites) to represent the majority in the community. This modernist view of representation is promoted by the fact that development partners want to save money so they do not approach everyone in the community.

But for the second location of participatory communication, which grounds this study, Tomaselli (1997: 4) argues for grassroots' communication, noting that it is "less likely to be hijacked for political ends by national politicians who have little contact with living conditions on the ground". The reason he gives for this conviction is that there is a detachment of political interests at grassroots level. However, there are failures of participatory communication in Uganda because at grassroots level, people are divided on the basis of who supports which presidential candidate (Semujju, 2013a). Sometimes, some community members get denied an opportunity to participate in community radio activities because they supported a different candidate in the previous election. Servaes and Malikhao (2005), like Tomaselli above, also argue for participatory communication, saying that the grassroots people have something to say but nobody is willing to listen to them. However, the conditions under which people live can be so tense with poverty, illiteracy, lack of infrastructures, and so forth, that in the end, even with the presence of participatory media, people cannot participate (Tsarwe, 2014). Instead, as data in Chapter 5 shows, communities use CATs to access local/village news, in which they participate mostly during times of emergencies. The other information that comes from or concerns other villages is obtained mostly through radio.

Consequently, other scholars have presented participatory communication with caution. For example, Huesca (2002) notes that participatory communication enjoyed popularity in the 1990s yet few development communication projects are conducted under the participatory communication paradigm. For example, although Rogers had declared the demise of the top-down paradigm, its dominance only decreased in academia but in practice, the organisations that

implement development programmes still have a “diffusionist” mindset (Waisbord, 2008; Gumucio- Dagron, 2009).

The community radio idea, which was identified as participatory (Cammaerts, 2009) for example, has not succeeded in all its objectives (identified in Chapter 2) in the Global South (Bailey *et al.*, 2008; Howley, 2010). Because of the enormous external and socio-cultural constraints that hinder participation such as lack of electricity, gender inequality, leaders’ greed for power, corruption, and several other problems, participatory radio “preside over non-participating communities” (Semujju, 2013b:197; Tsarwe, 2015; Ali and Conrad, 2015). Even developments in ICT that hoped to enhance participation still enforce class domination by enhancing the digital divide which is even wider in the Global South (Castells, 2000; Berger, 2010; Nassanga and Semujju, 2015). In the end, those who can participate take advantage of opportunities, while those who cannot become more desperate and vulnerable.

While ICTs have changed the agenda setting role by creating citizen journalism which empowers people, ICTs like mobile phones are complex for the rural person to operate leave for the fact that they are operated in English (Semujju, 2013a; Nassanga *et al.*, 2012; Manyozo *et al.*, 2013). The population statistics vis-à-vis mobile telephone and internet access can demonstrate this point well. While, as discussed in Chapter 1, Uganda has 35 million people, there are 21 million using mobile phones (UCC, 2015). Internet (both mobile and fixed) subscriptions are 5 million although there is an estimated 11 million users (UCC, 2015). While it is trendy today to research virtual reality, virtual communities, which use the internet (Carpentier *et al.*, 2001; Gupta and Kim, 2004; Elaujali, 2014) or virtual participation, living in poverty does not allow a virtual experience. Taking a neo-Marxist point of view, especially on the recent trend of participation which uses ICT, Banda (2010) notes that the supremacy of a few economic and political forces still exists and they are using the most recent participatory technology to reinforce their position.

The view adopted by this study about participatory communication is that it was raised as an optimistic approach that could help the marginalised people to make choices of how they wanted and should develop. However, challenges still prevail as detailed above. Like the dominant top-down approach, participatory approaches are often taken as a one-size fits all model where the

approach is said to be perfect for each country of the Global South. In spite of the participatory communication theory championing contextual sensitivity (Quarry and Ramirez, 2009) and multiplicity (Servaes, 2009), the practice still retains a level of diffusion of innovations that is top down (Waisbord, 2009; Gumucio- Dagron, 2009). In a nutshell, participation faces challenges like lopsided power relations or the “participation gap (Clinton *et al.*, 2006) at various stages, poor attitude towards the concept of participation itself, and several others that can easily be overcome by CATs as possible participatory avenues.

This review of the participatory communication approach i) lays the foundation for a discussion of the approaches used by CATs, and ii) highlights the communication approaches applied by different stakeholders in rural and semi-urban areas in Uganda prior to CATs, iii) and helps to explain the village participation that takes place in CATs when individuals get involved in the process of news gathering. Due to the CAT communicative effort being started by the community for the community with no government or NGO presence, CATs withstand several of the challenges that face participatory communication. But, while the above theories explain CAT structure, content and technology and how those components are used, none of them explains dependency relations in small media or CATs. Therefore, this study uses the Media System Dependency (MSD) theory to inform the analysis of the level of individual dependency on CATs in the coming chapters. Although the two theories used in this study (the participatory communication theory and the Media System Dependency theory) come from different theoretical traditions, they are connected for this current study in a complementary way. Each of them helps the study to investigate and explain an attribute of CATs as explained above.

### **The Media System Dependency (MSD) Theory**

The Media System Dependency (MSD) theory was introduced by Sandra Ball-Rokeach and Melvin DeFleur (1976) to explain the dependent relationship between the media and the individual<sup>8</sup> (micro) and media and society (macro) although later interpersonal (meso) levels of analysis were also given some attention. The theory was built on the idea that “mass communication...involves complex relationships between large sets of interacting variables that are only crudely designated by the terms ‘media’, ‘audience’, ‘society’”(Ball-Rokeach,

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<sup>8</sup> The MSD theory calls for individual level analysis in order to understand dependency (Ball-Rokeach, 1985)

1985:485). This triad (Power, 1995) or tripartite relationship (Rubin and Windahl, 1986) is the basis of the MSD theory. Several studies about the theory investigate all the three elements, although Ball-Rokeach (1985) admits that more research has been done on the audience (individual) and media side (Westgate, 2008; Ball-Rokeach and Jung, 2009; Lee, 2012; Li, 2013). By definition, media-system dependency “is the relationship in which the capacity of individuals to attain their goals is contingent upon the information resources of the media system” (Ball-Rokeach, 1985: 487). Two elements are important in that quote. One is the goals of the audience (represented by the individual) and two, is the information resources of the media. There are three goals identified by the theory that individuals may have: i) understanding, ii) orientation and iii) play. “Understanding” is concerned with knowing about an individual’s surrounding and about the individual him/herself, while “orientation” narrows down to the need to make sense of or attain guidelines about a certain situation that may have arisen; the goal of “play” is mostly recreational where people connect with media to pass time or escape a task (Morton and Duck, 2000; Lowrey, 2004).

On the other hand, media or information resources include media’s ability to: collect news or information that is of interest to the audience, select it to know what people need and what is useless and then distribute it to them through various means. According to the MSD theory, these are the resources media employ to get the individual connection on one hand and money and survival requirements from the social system on the other. The media select and connect with the individuals by using news values and gatekeeping practices as described later in this Chapter. The crossover of theoretical ideas mentioned before in this chapter is most apparent here in a way that gatekeeping and news values are commercial media rhetoric that is not so prominent in CATs. However, it appears that the MSD theory is the only theory available that explains and guides an investigation of dependency relations on any communication platform.

To understand how individual-media or micro dependency relations<sup>9</sup> occur, media-society (macro-dependency) relations have to be understood. Society in the MSD language is used to refer to a complex political, economic, judicial, legal, and several departments in a country that relate with media, including the advertising industry (Ball-Rokeach *et al.*, 1990; Hindman,

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<sup>9</sup> The level of dependency relations in which this study is most interested.

2004). The MSD theory notes that the macro-dependency relations are symmetrical whereby media provide information and a platform for those several sectors in society to survive, for example an advertiser or politician reaching out to the masses. In return, the sectors of the social system provide the information and money through buying airtime or space, legal documents and statutes, experts for commentary, and several others, for media's survival (Ball-Rokeach, 1998). The micro-MSD relations, on the other hand, are asymmetrical in that media do not directly depend on the individual to survive while the individual must depend (connect) on media to fulfill the three goals of "understanding", "orientation" and "play", listed above. However, what is worth noting is that although individuals may not be as powerful in the above regard, dependency is directly proportional to the ability of the media to reach out or satisfy the three individual goals. The MSD theory assumes that the more individuals perceive media as being able to fulfill their goals, the more dependent they will be and if this changes, then dependency relations decrease. This happens because the need to satisfy the three goals or just one of them, especially orientation (which may increase in times of a crisis) has increased (Hindman, 2004; Westgate, 2008).

On the other hand, the theory also assumes that individuals expect society (government, advertisers, NGOs, etc) to provide stability, happiness, expectations and a good life. When these fail to happen, people turn to media to try and make sense of their situation. Some such incidents may be a natural disaster or any other bad situation like chronic poverty. The MSD theory argues that MSD relations occur when individuals find themselves in ambiguity (structural alienation, poverty, conflict, illiteracy, confusion) over which they have no control (Ball-Rokeach, 1998: 15). In the Masaka and Mukono districts, where this study was carried out, this theory is useful in understanding what motivates people to use CATs.

Dependency therefore is the individual-media connection inspired by the need to understand a situation. Wilson Lowrey (2004: 340) defines dependency as "a relationship in which the satisfaction of needs or the attainment of goals by one party is contingent on the resources of another party". This view is shared by Ball-Rokeach (1985) who notes that the word dependency or of late connection, may be used to imply that a relationship between media and the individual has already been established (Ball-Rokeach, 2014).

### *Value of the MSD theory to this study*

The following assumptions of the micro-MSD relations are central to this theory and were considered in this study:

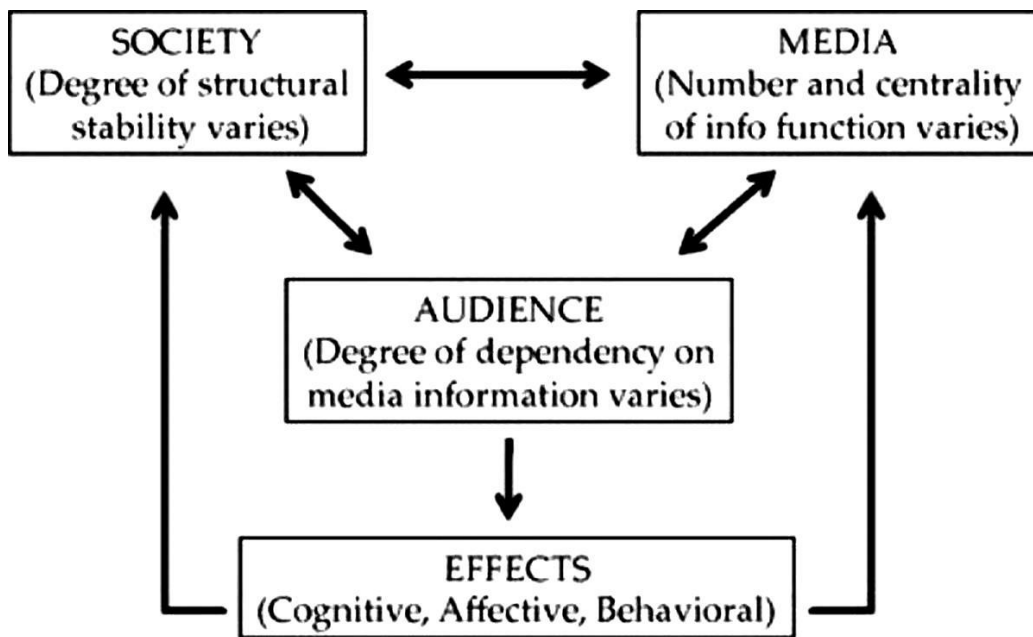
- “Survival and growth are fundamental human needs manifested in universal motivation to achieve understanding, orientation and play goals” (Ball-Rokeach, 1998: 15). These goals will in-turn create individual dependency relations.
- Information is useful in achieving goals, a media system is necessary for “development, maintenance, and change of modern societies” (Ball-Rokeach, 1998: 15).
- Individual MSD relations occur through “a relationship in which the satisfaction of the needs or the attainment of goals by one party (media or the individual) is contingent upon resources of another party.” (Ball-Rokeach and DeFleur, 1976: 6).

The relevance of the MSD theory is identified for this study when the theory is used as a method and a guideline for data collection. Guided by assumption (i) above, the study sought to understand the level of dependency of the individuals on CATs created by the audience’s need to achieve the three goals above. The level or degree (intensity) of connection was investigated by asking individuals questions about how often they listened to CAT information in relation to other channels. Comparing the audience’s frequency of CATs’ usage with other existing sources of information helps the study to understand the degree of the audience’s dependency on CATs. The characteristics of the micro-MSD relations are examined here as well. For example, demographic variables like education, economic level and age are examined to understand whether or not they are predictors of the intensity of MSD relations.

Assumption (iii) above stresses the relationship between the media and the individual, which is dependent on media’s ability to satisfy the goals of understanding, orientation and play. This assumption guides research objective two (ii) to investigate how the individual goals are satisfied by the CATs resources (media resources discussed above). The reciprocity of the individual-media relationship is in the media’s ability to fulfill the goals of understanding, orientation and

play, which leads this study to seek to understand the type of audience goals to which CATs are able to appeal, in order to maintain the individual or audience connection and how these goals are facilitated by CATs (how coverage is done). This is investigated by asking people questions like what kind of information they obtain from CATs. Such questions help the study to identify what goals people seek to meet by relying on CATs. At the same time, the CAT information resources (information gathering, processing and dissemination practices) are investigated. For example, one area of analysis is how CATs gather, process and disseminate information because Ball-Rokeach (1985) argues that those three processes are the resources media employ to attract the individual. When the connection between media and the individual is established, the MSD theory suggests that cognitive, behavioural and affective effects may occur, which would mean that CATs influence the communities that have access to their content.

Assumption (ii), about the necessity of a media system, guides the study's third objective, to understand the consequences of the media system dependency by probing for opportunities and challenges faced by CATs and the individual. Understanding the challenges of CATs and the challenges individuals face while using them, assists this study in providing recommendations to reinforce the necessity of CATs in communities. The MSD theory has been explained schematically by Ball-Rokeach and DeFleur (1976) as seen below.



*Figure 3.1: An illustration showing the tripartite MSD relations between the media, audience and society, and the effect of that relationship (Source: adapted from Ball-Rokeach and DeFleur, 1976).*

#### *Challenges of the MSD Theory*

The biggest challenge of the MSD theory has been noted by Alan M. Rubin and Sven Windahl (1986) who argue that the theory could be subsumed under Uses and Gratification Theory (Blumler and Katz, 1974) to explain how individuals make media choices depending on the satisfaction they hope to achieve. In fact, Rubin and Windahl (1986) even suggest a combination of both the Uses and Gratification and MSD theories to generate the “Uses and Dependency model of mass communication” (1986). However, Ball-Rokeach *et al.* (1990: 249) respond to this criticism saying that MSD theory is an independent theory about what determines the dependency between individuals and media systems.

According to Sandra J. Ball-Rokeach and Joo-Young Jung (2009), the biggest challenge that faces the MSD theory is that it was created in 1970s when traditional media such as newspapers, radio and TV were the only mainstream media. Today, there is a convergence of communication platforms, a factor that the MSD theory does not take into account. Some of the characteristics of the new media in today’s society are its pervasive social movements like citizen journalism (Rodrigues and Miralles, 2014), and activist media practices (Milan, 2013; dellaPorta and Mattoni, 2013) and yet the MSD theory originally explains a social system where conventional media use their news gathering and distribution functions to relate with both the individual and society.

Regardless of the above challenges, the MSD theory still has relevance today. The theory has been most recently applied to explain the modern dynamics of media referred to as new media. For example, Chei Sian Lee (2012: 457) establishes that “users can depend on content provided by new media (YouTube) to meet their emotional needs” after the death of a beloved super star like Michael Jackson. In the same new media direction, Xigen Li (2013) notes that contrary to MSD assumptions, availability of alternative sources of information does not lessen audience-dependency on internet news. The above challenges, especially the one about new media, does

not affect the application of the theory in this study because CATs serve marginalised communities, which are most often far from urban realities of new media (Gumucio-Dagron, 2001). The biggest challenge of the theory for this study is its ineffectiveness in explaining all activities of the CAT dependency relations. This inspires the study to suggest the Small Media System Dependency (SMSD) relations in order to explain dependency relations in CATs and other small media (see Chapter 7).

### **Conclusion**

The chapter above presented the main theories that are used to explain CATs within the field of communication for social change, starting with a theoretical exploration of the modernisation / dominant development communication approach, the dependency / dissociation debate and the participatory communication approach. This section aimed to highlight that most theories articulated in the development communication discipline fail to single-handedly explain the dependency of individuals on local communication channels. The chapter has noted that some tenets of the participatory communication paradigm can be applied to CATs, for example the idea that local people should identify appropriate communication channels. The MSD theory was then presented and it was noted that although it does not fully explain CATs, it helps to explain individual dependency on a communication channel (Westgate, 2008), something that the study was interested in. Therefore, the data presented in Chapter 5 was collected under the guidance of the MSD theory articulated above. Apart from guiding the study's data collection, the theory helps to explain the individual dependency in the presentation and analysis of the findings (Chapters 5 and 6).

## CHAPTER FOUR

### RESEARCH METHODOLOGY

#### **Introduction**

Using both the Participatory Communication and the Media System Dependency theories, this study tries to answer the following research questions: What is the level of individual dependency on CATs? How do CATs depend on the individual resources? What are the opportunities created and challenges faced by the individual-CAT relations? The methods that were used to answer the above questions are introduced, reported and explained in this chapter. The chapter introduces the two main methods that were used for data collection (survey research and key informant interviews). The chapter also highlights how the research sites were chosen, how the samples were selected and the reason for making such choices.

The ways in which validity, reliability and rigour were adhered to in the study are also explained. In addition, how data is analysed using thematic analysis (Braun and Clarke, 2006) for qualitative data to the analysis of quantitative data with a computer software called Statistical Package for Social Science (SPSS) is also explained. The chapter provides the work plan, detailing when the study was started and when it ended, the challenges faced by the researcher during the study and how the challenges were minimised in order to avoid their influence on the study at various stages. This study investigates the micro CAT dependency relations by investigating the level of individual dependency and how CATs serve the community. This was done via the case studies of two CATs: *Voice of Nyendo* and *Nassuuti FM*, located about 120 km and 21 km from the capital Kampala respectively. The Media System Dependency (MSD) theory (Ball-Rokeach and DeFleur, 1976) is used to explain the individual-CAT dependency thereof. In addition, survey research and key informant interviews are used in the study as elaborated below. The MSD theory had been applied before this study using quantitative methods. For instance, Douglas Blanks Hindman (2004) uses a telephone survey of a sample of adults above 18. Hindman's study is one of those that demonstrate how the theory can help studies to explain the data. Therefore, quantitative methods helped this study to reduce dependency to smaller numerical analysable data for explanation and generalisation. The choice for mixed methodology was informed by studies that suggest that quantitative data from questionnaires can be used to "complement inferences drawn from qualitative analysis" (Chasteauneuf, 2010: 6), since "key

informant ideas about and priorities for a given community do not necessarily match and may even conflict with those of community members” (McKenna and Main, 2013: 116). The choice of using both qualitative and quantitative data collection methods was further informed by Anders Hansen *et al.* (1998: 18) who note that “they are both valid methods in a complementary way and that the ranking of the methods according to ‘soft’ and ‘hard’ data is not a valid one”. This study thus assumes that in some cases where one method may not obtain the appropriate data, the other method had to be employed. Most importantly, this study used both quantitative and qualitative methods to ensure validity and reliability.

### **Research Design**

The descriptive design was used in this study as “an attempt to provide a complete and accurate description of a situation” (Struwig and Stead, 2013: 7). This design is appropriate for this study since CATs have not been given much attention before as an area for study in Uganda. The research attempted to describe CATs based on the key research questions: i) what is the level of individual dependency on CATs? ii) how do CATs depend on the individual resources? iii) what opportunities and challenges are faced by both the individuals and by the CATs?

The aim of this thesis is to analyse the current CAT situation in Uganda in order to attract future studies that will deal with the issues raised by this study. Among the advantages of the descriptive design is that it enabled observation while the natural behaviour of the subject remained uncompromised by the researcher (Shuttleworth, 2008), while it also, in addition, allowed for the study of large numbers of research participants where other designs may have found difficulty in terms of finances and other areas. However, it may be difficult to replicate findings of descriptive designs. This is so because the design describes new areas, after which they are no longer new in a way of laying a foundation for further inquiries. However, “as long as the limitation is understood by the researcher, the study [design] can be an invaluable scientific tool” (Shuttleworth, 2008). On the other hand, the case study design helps the study to fit well into the descriptive responsibility that the study set out to do because “the final product of a case study is a detailed description of the topic under study” (Wimmer and Dominick, 2011: 141). To understand the level of individual dependency on CATs, the researcher carried out a survey among listeners of the CATs from the two case studies named above, interviewed CAT

presenters, local leaders, key information administrators and policy makers, and observed how the selected case studies work.

### **Sampling**

This study employed the sampling technique given by Kenneth Bailey (1994) that the idea of choosing a sampling frame from the whole population is wise in both time and financial terms. Bailey's advice was used in this study since it was impossible for a data collection process of less than a year to study all the sampling units in Uganda that are connected to the subject. This would be like a census. Using Bailey's advice above, a type of sampling (details below) based on the nature of communities and location of the CAT, whether rural or semi-urban, was used. Additionally, qualitative samples were based on special knowledge and relationship with the subject of CATs.

Two CATs served as the sample units, one in Nyendo (rural Uganda) and another in Nassuuti (semi-urban Uganda). The choices of the locations and which CAT to use were made purposively in order to help the researcher in identifying a case study that had features of interest (Silverman, 2005). For instance, the two CATs were distinct from each other mainly in terms of geographical location and distance from the capital city (which is also the business city). This means that they served communities that are economically different. The economic factor influenced purposive sampling of CATs since this study argues that the usage of CATs saves the communities from incurring any expenses of buying radio batteries and operating radio gadgets that come with instructions in a foreign language. The researcher therefore sought a sample of CATs that would be inclusive of people of different economic status (this is analysed more in Chapter 5 and 6). Among the advantages of this kind of sampling is that the researcher, in making a choice, can use his/her experience or prior knowledge on the issue (Bailey, 1994).

### *Sample size*

While choosing the sample size, the study used Joann Keyton's (2006) advice that a researcher should understand the size of the general population and narrow it down to the sub-groups within that same population. This reflection is done so that the researcher can determine the representativeness of the sample size. For this study, the researcher was cognizant of the fact that there is an audience that listens to CATs countrywide. The choices of the sample size made here were meant to be characteristic of all the listeners as explained later in this same chapter.

The decision of how many respondents should be interviewed was based on “the nature of the population and the purpose of the study” (Bailey, 1994: 96-97). Other researchers recognise other criteria on which to base one’s decision for interview sample size. For example, Roger Wimmer and Joseph Dominick (2014) add time and financial constraints. Although Bailey (1994) identifies a number when he says that studies that intend to use statistical data analysis tend to have 30 respondents at the very least, this study’s choice was informed by Wimmer and Dominick (2014: 104) who note that “research designed as a preliminary search for general indications does not usually require a large sample”. This current study therefore settled for 100 respondents in total for the survey (using a questionnaire) due to the fact that the typical CAT audience is narrow in a way that it occupies just a single village.

Different studies use different numbers of informants. For example, while Krishna Kumar (1989) argues for a range of 15 to 35 participants, a study of the first-hand experience of the Prostitution Reform Act in New Zealand by sex industry workers had 73 interviews (Mossman and Mayhew, 2007). In comparison to the above studies, Jung Ran Kim *et al.* (2004) used nine interviews to study sociocultural factors and organ donation transplant in Korea. Due to lack of agreement on how many exact informants are needed, the key informants for this study were ten (three from each district and the other four from national communication bodies) selected based on responsibility and expert knowledge. Information from the key informant interviews complemented the data obtained through interviewing 100 respondents by adding an expert opinion about CATs.

#### *Random and Purposive Sampling*

The survey respondents were selected using a variation of the random sampling technique that has been applied in Africa and several other areas that do not have the requirements for pure random sampling (Manyozo *et al.*, 2012; Nassanga *et al.*, 2013). Random sampling allows every person in the sample a fair chance of participation. This affordance helps to eliminate bias that might come from the selection of samples, for example in cases where the researcher or field guide or anyone connected to the study might influence the selection to include or exclude educated people, friends, opinion leaders, or the rich. However, Hansen *et al.* (1998), Bailey, (1994), and Wimmer and Dominick (2014) advise that the researcher needs to obtain a sampling

frame, or a list of people with equal chances, living in a given area. Depending on the type of probabilistic sampling, the researcher then would select participants from the list based on, for example, even numbers for participation.

In respect of the above process, the study encountered two challenges. The sites where the investigation was done, Nyendo and Nassuuti, have no records of how many people live in the area. The villages do not have home addresses too. The decision to investigate CATs from a geographical point of view informs how people live in some parts of the country. Such geographical communities are tied together by a communal understanding and interpretation of life (Tonnie, 1887a). In such a group of togetherness, everyone knows where the other person lives. Allocating names or numbers to homes is a new practice that is taking root in the capital but not yet in the rural and semi-urban communities. This study had to adjust the above sampling technique based on the availability of resources and nature of problems encountered in the field, like lack of an organised housing system which could have helped to generate a sampling frame. Random walk sampling (Nassanga *et al.*, 2013), was the most appropriate method to accommodate the challenges above.

Random walk sampling was done by selecting an initial starting point and walking to a house after skipping one house (Manyozo *et al.*, 2012; Nassanga *et al.*, 2013). The selection of the initial starting point was also random, from all the houses at the centre of the village. To correct for gender bias, if the first respondent was a male, the researcher looked for a female in the next house, unless where available evidence suggested that a certain area was dominated by one gender. Children below 18 years were also excluded from participating because the Ugandan regulations on research suggest that they have to be interviewed in the presence of an adult who doubles as a caretaker. Otherwise, any adult of a sound mind, provided he/she lived in the village and was willing to participate, was invited to participate. Those who declined (these were seven people in total) to participate gave reasons like prior arrangements, mostly due to business, and being new comers in the area, and they were not included in the study.

In studies that take long hours or days, the habit of respondents talking to the people yet to be interviewed ahead of the researcher has been reported in Uganda before (Manyozo *et al.*, 2012).

This sometimes creates bias when the researcher finds some respondents already familiar with the questions and the very answers previous respondents gave. The house-after-house walk sampling (Manyozo *et al.*, 2013) therefore invited potential respondents to a venue from where they were individually interviewed, 30 metres away from the rest of the group. After answering the questionnaire, each of the 100 respondents left without talking to the next person to be interviewed. For the response rate, the seven (three in Nassuuti and four in Nyendo) people noted above, who declined to come to the interview area during the random walk sampling, due to prior arrangements were not forced to. These were replaced by seven extra houses within the same communities. Each questionnaire took about 30 minutes to administer.



*Photo 4.1: The researcher addresses the invited Nassuuti community members on the purpose of the research before the interviews begun. Looking on, from the right is the community chairperson, Moses Mulindwa. (Photo by Cyrus Ssegawa, July 2014).*

On the other hand, the qualitative interviews were useful in obtaining information from a sample of people selected purposively in order to have an in-depth engagement with 10 subject experts. The interview sample for the tower workers and the technical government people was purposive and based on competences on the subject under study and official position. In order to understand diversity in individual MSD relations, the study paid attention to differences that arose out of demographics like age, gender, economic status, and education of the listeners.

The sample for the participants was selected from CAT proprietors/presenters, the communication experts, local community leaders, and the community members. These were divided as follows:

For research question one, data was collected via: 100 CAT audience members (50 from each tower) using a questionnaire.

The following sample was interviewed (face-to-face and semi-structured):

For research question two: 2 CAT proprietors/presenters (one at each tower)

For research question three: 2 CAT presenters/ announcers (one from each tower)

For research question three: 6 community, district and national CATs stakeholders. These were designed as follows: 2 local council chairmen (one from each village with a chosen tower), 2 district information/communication officers (one from each district with a chosen tower), 1 technical person from the Uganda Communications Commission, and the State Minister for Information and Communication Technology.

Observation and field notes were crucial too in revealing some information that other methods could not reveal, like describing the atmosphere under which events were happening during the study. Observation was mainly important for this study because there had never been a study in Uganda about CATs. This technique helped the study to describe the scene (Patton, 2002) of what was happening at the CATs in order to give the reader a vivid picture of how CATs work. Observation included listening to both towers narrowcast every morning and evening for 10 days (five days at each tower), and carefully observing what the near-by residents were doing at the time of the narrowcast. This was intended to provide information on whether or not people

stopped their work for a few minutes to sit and listen to the tower or they worked as the tower gave them information. This helped the study to give additional information about audience behavioural patterns.

### **Data Collection**

The study used two primary instruments to collect data. These were the questionnaire and the interview guide, as explained in detail below:

#### *Questionnaire*

This study's choice to use a questionnaire was informed by Colin Chasteauneuf's (2010) argument that a questionnaire can avail the researcher with a method to gather data about people's beliefs, attitudes and opinions about an idea under study. One of the advantages of using a questionnaire is that "everyone in the sample was systematically asked the same questions in the same order in each interview" (Payne and Payne, 2004: 3). This was important in creating quantitative data to identify the intensity of individual dependency on CATs. The other advantage of using a questionnaire to obtain quantitative data was that a high level of information would have been very hard to gather from all the 100 respondents through in-depth interviews and this problem would have been carried on to the data entry and data analysis stages. Quantitative data, collected through questionnaires, was on the other hand reduced to manageable numbers presented in Chapter 5. The questionnaire design was informed by Eve Waltermaurer's (2008) view that the questions in the questionnaire should be revised so that sensitive ideas are asked in a polite way.

#### Questionnaire Design

Questionnaire design is the process of arranging the format and setting the questions that will be used to attain the study's primary data (Holyk, 2008). When designing the questionnaire, this study was informed by other studies which had used similar instruments. For example, Waltermaurer (2008) advises that the researcher needs to be conversant with the problem he/she is trying to investigate so that it can be reflected in the questionnaire. This study thus designed questions that were "a reliable and valid measure" (Keyton, 2006) of CATs and their target audience. Cognizant of the fact that the respondents were going to be ordinary people, mostly farmers and small business operators and vendors whose education levels were expected to be basic (judging by Uganda's literacy rate described in Chapter 1), the questions were first of all

asked in the local language and, using several scholars' advice, were simple, unambiguous and straight forward (Keyton, 2006; Payne and Payne, 2004; Chasteauneuf, 2010). The objective of following the above advice was to make sure that each question produced the same meaning for each individual who was going to be asked (Payne and Payne, 2004). Payne and Payne's (2004: 4) work also informed this study at the questionnaire design stage to avoid some common errors such as "leading questions", questions that seek to obtain a particular answer from a respondent, or joining two questions in one which would entice the respondent only to answer the last question. To obtain some facts like demographic information and reasons for behaviour, the designed questions were both close and open-ended respectively. The close-ended questions asked for specific answers about, for example, whether or not the respondent was employed, married, while open-ended questions demanded for explanations.

Most importantly, the three objectives of the study were instrumental in helping the researcher to formulate the questions. The process of designing a questionnaire begins with "a definition of objectives and goals of the study" in that a clear purpose acts as an anchor that sets the stage for questionnaire format and question-construction or ordering" (Holyk, 2008: 3). Each key research question therefore helped to formulate questions in the questionnaire. For example, to understand the level of individual dependency on CATs, some questions that sought to highlight "the level" or intensity were asked. Such questions aimed at establishing individual's listening behaviour to CATs in comparison with other channels of information. Such a question then would warrant the creation of another question to understand the available channels of information to which people had access besides CATs.

In order to create a logical flow of ideas, the questionnaire was divided into several sections (see Appendix 1). The first section, "Socio-demographical questions", aimed at understanding the biographical and demographical characteristics of the respondents. This helped the study in the analysis section to understand the characteristics of people who listened to CATs more and the characteristics of those who listened less. The second section, "CAT access, usage and trust", aimed at understanding the nature of media or platforms the respondents accessed and the hierarchy of the usage of those communication channels that were accessed. By looking for this information, the study was able to place CATs under a certain level of listenership. The third

section is called “CAT equipment, ownership and usage” and was concerned with understanding the nature of ownership of CATs and how the towers were used or accessed. Some of the challenges and opportunities were explored as well. In the end, the above parts generated a total of 45 questions. The number of questions was aimed at inclusivity. Some of the questions under the first part were about age, marital status, and other demographic information which did not require the respondent to spend time explaining, while several others were close-ended with multiple choices already given to the respondents. In the end, the questionnaire was not tiresome to the respondents.

The other consideration during the design process was to decide on whether or not the questionnaires were to be self-administered or administered by the researcher. The final decision was based on Keyton’s (2006: 166) argument that the researcher needs to “understand the literacy and language proficiency” of the respondents. The areas where research was to be conducted are among those in Uganda where literacy levels are high, but the measure of literacy levels is so basic that it includes anyone able to write his/her name. For example, literacy levels in Mukono district stand at 79 percent while in Masaka district, literacy levels stand at 82 percent (UBOS, 2015). Therefore, the researcher was left with only one choice: to administer the questionnaires. This came with the advantage of the researcher interacting with the respondents during the administration of questionnaires and also guiding the respondents on several questions to make sure that meaning of the question was not altered. The biggest advantage that the researcher got from administering the questionnaires was that even the illiterate people participated in the study. Having the questionnaires self-administered would exclude all the people who did not know how to write and yet they also live within the community and listen to CATs. It would then create a bias that would present results obtained from literate and semi-illiterate people only.

The last decision to make was which platform to use in the administration of the questionnaires. The options left after isolating self-administration of the questionnaires were telephone and face-to-face. The telephone platform was ruled out because not all the potential respondents have mobile or any other kind of phones. Due to the digital divide where ownership and access to technology is mostly in the city (Castells, 2008), the research sites are among those in Uganda

where technology is not well diffused. Although “more economical modes were used such as telephone interviews up to the end of the 20<sup>th</sup> century” (de Rada and Domínguez-A´lvarez, 2014: 256) and later webpage survey also came into usage, these technologies are not reliable in some parts of Uganda since only a few people own or access them. Therefore, the face-to-face approach was used.

### Pretesting the Questionnaire

There are four recognised approaches to pretesting questionnaires that include: Cognitive, Conventional, Behavioural Coding and Expert Panels (Keyton, 2006). Cognitive pretesting aims at unearthing multiple meaning of questions or obtaining divergent interpretations from questions. Behavioural Coding pretesting on the other hand is done between the researcher and the respondent but in the presence of a third person whose aim is to monitor the interaction between the researcher and the respondent. Expert Panel pretesting is where the researcher identifies experienced people to go through the questionnaire so that flaws can be identified. The fourth type of pretesting, which was used by this study is Conventional pretesting. In this type of pretesting, the researcher selects a section from the sample and administers questionnaires just as the real data collection process is expected to be. The major purpose of pretesting conventionally is to identify questions that may be inappropriate, ambiguous, embarrassing, difficult to understand, and several other anomalies.

Before the actual data collection process was started, the researcher travelled to one of the research sites and applied Conventional pretesting to the questionnaires. The intention was to ensure validity. This was done in Nyendo, where 14 community members within the vicinity of the CAT (*Voice of Nyendo*) were asked the questions in the questionnaire (see Appendix 1). It helped to remove any ambiguities in the questionnaire that was later used to obtain information from the listeners at both towers. Using the same questionnaire at both towers later to collect data allowed for reliability and generalisability. Besides identifying difficulty for the respondents in the questionnaire, the pretesting also helped the researcher to harmonise varying concepts in the questionnaire, based on the understanding that had been provided in this preliminary data collection exercise.

### *Interview Guide*

An interview guide (see Appendix 2, 3, and 4) was used in the current study to obtain information from key informants in relation to the subject of CATs. The identification of such key informants was based on their position in relation with CATs. These were people who directly worked with CATs as workers or presenters, and as regulators (both at district and national level). The interview guide that was used to conduct data from the informants was designed to reflect the objectives of the study (Keyton, 2006). The interview guide helped to gather data that the questionnaire above could not obtain effectively. For example, while the questionnaire was instrumental in gathering data for research question one, the interview guide, which had semi-structured questions, helped to gather additional data for research question two and three. The way CATs gather and report information could only be obtained by interviewing the presenters. This meant for a creation of a special guide for these specific informants as opposed to a general questionnaire. The other category that required an interview guide separate from the one used to gather data from the presenters was the local community leaders and the policy makers both at district and national level. Nevertheless, each interview guide was designed to selectively sample specialised knowledge from the category that it had been designed for (Temby, 1957; McKenna and Main 2013; Dominick and Wimmer, 2014).

### Designing the Interview Guides

Since there were three guides: one for the presenters (Appendix 3) one for the CATs' owners (Appendix 4) (who turned out to be the presenters) and another for CATs regulators (including local community leaders) (Appendix 2), the basic aim was to make all guides respond to particular research questions although each guide would have special questions designed to obtain information from a particular group. There was no specified length for any interview guide since Sherry and Marlow (1999: 2) advise that "the length of the interviews depends on the number of questions you decide to ask". This implies that there is no specific number or size of the interview guide as this can only be determined by relevance. In the same line, the questions designed can make the interview last for 30 minutes or several hours (DiCicco-Bloom and Crabtree, 2006).

There are three basic parts of an interview guide (Guion *et al.*, 2011: 2): the *facesheet*, which contains the biographical data of the informant alongside the information about the setting, like

place, date and time of interview, *the interview questions*, which are semi-structured for the purpose of allowing the researcher to follow up with questions of previous responses, and *the post-interview comment sheet*, where details about the interview, like the mood of the informant and whether or not there were disruptions (like constant mobile phone interruptions), are found. This study's interview guide was designed using the above method which divides the tool into three parts. For example instead of *facesheet*, the current study labeled the first part as "Technical Information", while the interview questions were introduced using the research objective theme that each part was trying to address (See Appendix 3 for example). On the number of questions to include in each interview guide, the current study was informed by Carolyn Boyce and Palena Neale (2006: 5) who note that "there should be no more than 15 main questions to guide the interview". The reason the authors give is that additional questions may come-up as the interviewer probes specific responses further. If the main questions are many, the follow-up questions in that case, will make the interview unnecessarily longer (Turner, 2010). Therefore, the three guides for this study had eight, 10 and 11 questions respectively.

The biggest advantage of using the interview guide was that the study managed to obtain different sets of data from different informants since each guide had a different agenda towards the general objective of the study. However, Keyton (2006) warns that it is easy to stray off the interview guide as your informant meanders to different topics from the objective of the interview. During the interviews, this was minimised by politely asking the informants to stay on course. The researcher for example asked one informant that "could you please provide more information on the previous topic?" This took the interview back on course.

<b>Population Sample</b>	<b>Method and Instrument</b>	<b>Reason for consultation</b>
100 listeners (50 from each tower)	Survey (Questionnaire)	<b>Answer RQ one:</b> - To know the level of individual dependency on CATs. - To understand which source they depended on mostly for news and information, the advantages they have and the challenges faced, and how they solved them.
2 CAT- proprietors/presenters (one at each tower)	Key Informant Interviews (Interview Guide)	<b>Answer RQ two:</b> - To understand the nature of individual resources obtained by CATs and the goals and values of the towers. - To know what technology they use.
2 CAT-presenters (1 from each tower)	Key Informant Interviews (Interview Guide)	<b>Answer RQ three:</b> - To know the technical advantages and challenges of CATs. - To find out how they solve those challenges.
6 local, district and national CAT stakeholders.	Key informant interviews (Interview Guide)	- To understand the challenges of CATs

*Table 4.1: A summary of the research methods and instruments used in the field*

### *Supplementary Data Collection*

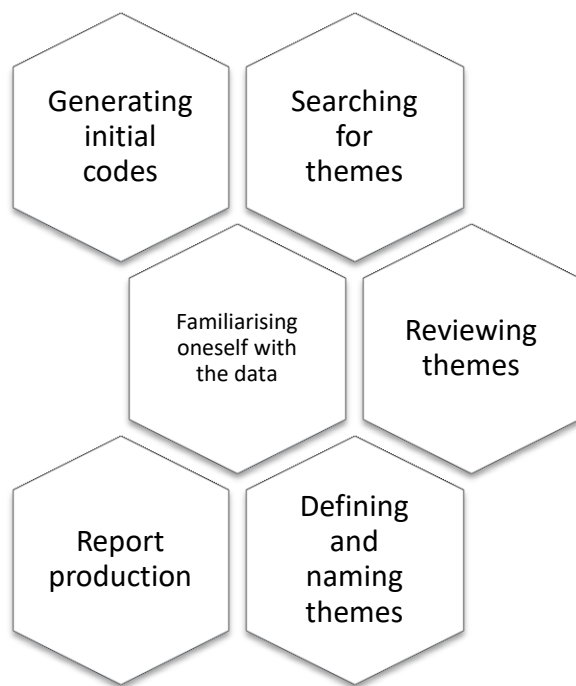
Observation and field notes were crucial too in revealing some information that other methods could not reveal, like describing the atmosphere under which events were happening during the study. Observation was mainly important for this study because there had never been a study in Uganda about CATs. This technique helped the study to describe the scene (Patton, 2002) of what was happening at the CATs in order to give the reader a vivid picture of how CATs work. Observation included listening to both towers narrowcast every morning and evening for 10 days (between July 14 – 18 at the rural tower and July 21 – 25, 2014 at the semi-urban tower), and carefully observing what the near-by residents were doing at the time of the narrowcast. This was intended to provide information on whether or not people stopped their work for a few minutes to sit and listen to the tower or they worked as the tower gave them information. This helped the study to give additional information about audience behavioural patterns, discussed in Chapter 5 and 6

### **Data Analysis**

The study used an integrated data analysis strategy combining both qualitative and quantitative data in the analysis and interpretation. This study was aware of Valerie J. Caracelli and Jennifer C. Greene's (1993) warning that most scholars that claim to use an integrated data analysis method only do separate analysis with integrated interpretation. Therefore, a method called typology of development, which helps to integrate both qualitative and quantitative data was used (Caracelli and Greene, 1993). The typology of development was used by analysing quantitative data using a typology or group category created from qualitative data. This mixed method analysis helps to develop new categories that generate from the differences identified between the two groups: data from i) key informant interviews and ii) survey (Caracelli and Greene, 1993). This method was helpful in explaining variations between the two CATs under study.

To create themes for qualitative data, a thematic analysis was conducted. Virginia Braun and Victoria Clarke (2006) argue for creation of a data set, which includes particular topic items identified from the overall data corpus. Since Braun and Clarke (2006: 82) note that a theme “captures something important about the data in relation to the research question” with a connection among all items clustered under one theme, a typology of three data categories

(themes) was therefore created from the three research questions. Specifically, of the two types of thematic analysis: theoretical and inductive, this study employs the former (theoretical analysis), by exploring themes as they manifest in the data collected and how the themes fit into each group informed by a research question (Braun and Clarke, 2006). The themes were arranged from “level of individual dependency on CATs” (the first research question), “CATs dependency on the individual” (the second research question) and “opportunities and challenges” (the last research question). There are six steps to be followed while doing a thematic analysis (Braun and Clarke, 2006): Familiarising oneself with the data (this includes noting down crucial ideas as one reads), generating initial codes, searching for themes, reviewing themes, defining and naming themes and then report production.



*Figure 4. 1: The figure above demonstrates how this study applies Braun and Clarke’s (2006) Thematic Analysis.*

While Braun and Clarke present getting familiar with the data as the first stage, for this study a good understanding and appreciation of the data helped the researcher to deal with various responsibilities demanded by each stage, as the figure above demonstrates.

But before moving to the last stage however, since the study used an integrated analysis method, quantitative data was analysed using Statistical Package for the Social Sciences (SPSS) and the analysis followed the qualitative themes obtained from using the above five steps. The sixth step (report production) was a combination of qualitative and quantitative data. The discussion of the findings and themes in Chapter 5 therefore is grounded in the broader discourse of development communication (Melkote and Steeves, 2001) and MSD Theory (Ball-Rokeach and DeFleur, 1976).

### **Ethical Obligation**

As the rules governing research at the University of KwaZulu-Natal stipulate, the study obtained an ethical clearance certificate (Appendix 10) from the Humanities and Social Science Research Ethics Committee. The researcher additionally obtained gatekeeping passes from the rural CAT presenter (Appendix 6), the semi-urban CAT presenter (Appendix 7), the Masaka District Information Officer (Appendix 8), and the Mukono Community Development Officer (who serves as the information officer for the district) (Appendix 9). Since the researcher was in Durban while the research was going to be conducted in Uganda, letters requesting for participation and permission were scanned and emailed to field guides who then approached the relevant people for the above gatekeeping passes. Additionally, an informed consent form (Appendix 5) was generated and given to the respondents for signatures during data collection. To be sure that the respondents understood clearly what they were signing, the form was translated in Luganda (Appendix 5-a), the local dialect in the areas where data was collected.

### **Validity, Reliability and Rigour**

To make sure that the findings and the methods of investigation produced results that the study intended to get, issues of validity, reliability and rigour were given priority. This was aimed at achieving results that truly represented the phenomenon under study. How the study handled the process to minimise mistakes like forgetfulness, inaccuracy of descriptions, biases (both on the side of the researcher and the respondents or interviewees), unsuitability of questions, and several other issues, is described below.

### *Participant Observation*

The researcher dealt with the issues of rigour through observation and taking field notes of the daily activities basing on the concepts under study. The field notes journal helped the researcher

to keep track of events and records that may otherwise have been forgotten and yet could make the interviews more relevant and representative. Such events included the daily narrowcasts of CATs. FW Struwig and GB Stead (2013), on the issue of rigour, warn of researcher and participant bias. A journal was useful in noting down some of these biases on both sides in order to avoid their possible influence on the findings. Where some biases could not be dealt with, this was noted in the thesis (Chapter 5). For example, as the researcher had wanted to interview an equal number of male and female participants to avoid gender bias, more females participated in answering questionnaires than males while the key informant interviews were dominated by men by the virtue of their offices. The other measure to minimise bias was to have an after-field meeting every day with the field guides, first to make arrangements for the following day but most importantly to review issues that may have impacted on the data collection process during the day. Some of these for example included elusive respondents and key informant interviewees, cancelled appointments and others.

Lastly, since CAT practice is new in academics although not in practice, the researcher had to spend 10 days listening to the narrowcasts. The problem was that the CATs operate early in the morning and late in the evening. Observation and listening therefore happened at strange hours. For example, on each of the 10 days, the researcher waited outside the towers as the presenters did their job. To get the feeling of someone who is far away, the researcher then moved about 2 km away as he listened, to understand how the reception was for someone in a distance. All these were done before or after day light.

#### *Pre-testing*

Based on Struwig and Stead's (2013) advice, reliability and validity in the survey were dealt with through pre-testing of the tools to get rid of any ambiguity that may have caused varying interpretations. Pre-testing also helped to reduce subjective and inaccurate scores in the final tool. To ensure validity, the sample size was put at 100 respondents divided between rural and semi-urban communities, considering the fact that CATs serve small scattered groups of people. This was so because the issue under study is both in semi-urban and rural areas and therefore was necessary for generalisation. Choosing samples from semi-urban and rural areas also helped to correct for any biases that may have been brought in by demographic variables like education and economic background. Lastly, the respondents were asked not to talk to those not previously

interviewed. In fact, after choosing the houses randomly, all the possible respondents were invited to a venue so that after the interview, one just went back home. This was arranged with the help of local council chairpersons of the two villages where data collection was carried out.

### **Limitations to the study**

The major limitation the researcher found stems from the fact that narrowcasting and CATs in Uganda have not been studied in detail. If they have been studied, then the documentation of that information has been inadequate. In fact, a Google search of narrowcasting reproduced studies done on narrowcasting from the computing and broadcasting perspectives. This problem has been highlighted in the thesis but also the researcher tried to search through hard copies in the University of KwaZulu-Natal library, on top of the rich online databases that the university has. All these avenues were explored to minimise the lack of narrowcasting and CATs literature problem. Also, new conceptions have been formed from data collected through observation, survey and key informant interviews about narrowcasting and CATs. This also adds more urgency to the need for studies like this and several others on the subject. As a solution, literature was built on narrowcasting from other fields like broadcasting (conventional radio and TV) (Overby and Barth, 2006; Kuipers, 2010), computer (Alam *et al.*, 2008), internet and marketing (Bellas, 2005), to make a case for CATs.

The other limitation was of time. For a study that investigates how people use CATs, the researcher relied on data collected in an isolated period and yet the MSD theory assumes that the relationship between a communication platform and the individual can best be seen clearly during times of crises or conflict (Ball-Rokeach and Jung, 2009). When the external stimuli that contribute to the behaviour of the respondents during such a period are non-existent, that means use of CATs can also change. However, limited time and money could not allow for a prolonged study of the problem. One of the solutions to minimise this was to seek for flash-back responses, for example the researcher asked respondents about their previous behaviour in relation to the current problem. The researcher for instance asked respondents if, for the last three years, they listened to CATs at the same rate and time, for the same period a day.

**Conclusion**

The above challenges conclude the methodology chapter, aimed mostly at showing the reader how data, presented in the next chapter, was collected and the methods that were used in the process. The chapter noted above that the study used survey and key informant interviews as the main data collection methods. The chapter also noted that the data, which is presented in the next chapter (Chapter 5), was collected at two CATs found in rural and semi-urban communities in Uganda among 100 respondents and 10 key informants.

## CHAPTER FIVE

### PRESENTATION OF FINDINGS: AUDIENCES AND COMMUNITY AUDIO TOWERS

#### **Introduction**

This chapter presents the findings of the study. The chapter starts by explaining how the research questions were answered using a combination of quantitative data entered into the Statistical Package for Social Science (SPSS) software and that obtained through group categories from qualitative approaches, for example key informant interviews (Caracelli and Greene, 1993; Braun and Clarke, 2006).

#### *An integrated approach during data analysis*

Using thematic analysis, the broader themes are arranged under the guidance of the research questions: level of individual dependency on CATs (first research question), CATs dependency on the individual resources (second research question) and CATs opportunities and challenges (last research question). The section starts by identifying single district responses to the questions that sought to know how often individuals use CATs. The responses are later combined to obtain the level of individual dependency on CATs. Most importantly for this study, the integrated approach yields a new data set that was not accounted for under the three themes of the three research questions. This creates a fourth theme on the regulation of CATs. The fourth theme adds an element of inductive thematic analysis. The theme, like the first three themes created under the research questions, is explained more in the next chapter (6).

#### *Research question one: The level of individual dependency on CATs*

This part of the chapter introduces the answers to the first research question with how each district's respondents use CATs and whether or not they trusted CATs (whether they think CATs would lie or exaggerate information). Then the Chapter provides a combined picture of both districts' responses on both usage and trust of CATs. The level of individual dependency on CATs is reflected by considering other media platforms as well, although responses about CATs, since they are the platform under study, are presented first. After identifying frequency responses of districts on CATs, the study computes the level of individual dependency by generating figures from SPSS that show the mean of CATs alongside the three main media platforms (radio, TV and newspapers) accessed in areas where the research was carried out. To get "the level" cited in the first research question, the study compares the mean of CATs with that of other

media and gives a mathematical representation. This part concludes the presentation of research question one data. Therefore, the study draws on questionnaire data to answer research question one.

*Research question two: How CATs depend on the individual resources*

The second research question is answered by highlighting the goals that CATs help the individuals to achieve. To further understand how CATs attract the interest of the individuals in order to maintain operations, the CATs' information gathering, processing and dissemination methods are given. In order to reflect further on how CATs attract attention from individuals, the technology used by CATs, as well as respondents' insights about this technology, is provided. Pictures taken during fieldwork assist in illustrating the CAT technology.

*Research question three: CATs opportunities and challenges*

The final research question shows the opportunities created by the availability of CATs in communities for different stakeholders. Such opportunities include access to village-local information, providing a channel for local emergencies, and others, as well as the challenges that CATs face, like having no licence, weather-conditioned narrowcasting, and several others, faced by the audience due to the presence of the towers in their areas. The current chapter concludes by summarising the findings in a table (Table 5.4) in order to remind the reader of the major issues that were pursued in the study and the main findings obtained. Throughout the chapter, apart from tables, other figures like pie charts, graphs and pictures, are used to illustrate the idea of CATs. But first, the study introduces the findings by describing CATs using empirical evidence. By presenting the findings of the study below, this Chapter helps to create a foundation for the analysis that comes in the next Chapter (6) using the theories cited in Chapter 3 and the literature reviewed in Chapter 2.



*Photo 5.1: The picture above shows the four horn speakers used by Voice of Nyendo to narrowcast to the community. (Photo by Brian Semujju, July 2014).*

### **Community Audio Towers**

This section presents data on what technology CATs use and the opinions from different stakeholders about the availability of the technology in society. As noted in Chapter 2, CATs in Uganda use horn speakers, an amplifier, a microphone and a compact disk (CD). The speakers, each facing a different direction, send information to that direction. Each sends to approximately three kilometres, depending on time and weather. Information narrowcast at night with no wind would go further than information narrowcast during day or during a thunderstorm (Henry Lwanga, Nassuuti FM presenter, interview, 21 July 2014). On explaining what CATs are, the key informants reveal relevant information about CATs. Overall interviewees (including the CAT workers, the district information officers) agree that CATs are small media platforms that allow communities to remain informed on local information. CATs help the communities to stay in touch with village events. “There was a need to disseminate information, which is why CATs came in to fill that gap” (Nyombi Thembo, State Minister for ICT, interview, 24 August 2014). Additionally, another informant called CATs “mini-FM stations that address a local issue” (Godfrey Kibuuka, Manager Broadcasting at the Ministry of ICT, interview, 20 August 2014).



*Photo 5.2: Some CATs, like in the case of Nassuuti FM above, can use less than four horn speakers. (Photo by Brian Semujju, July 2014).*

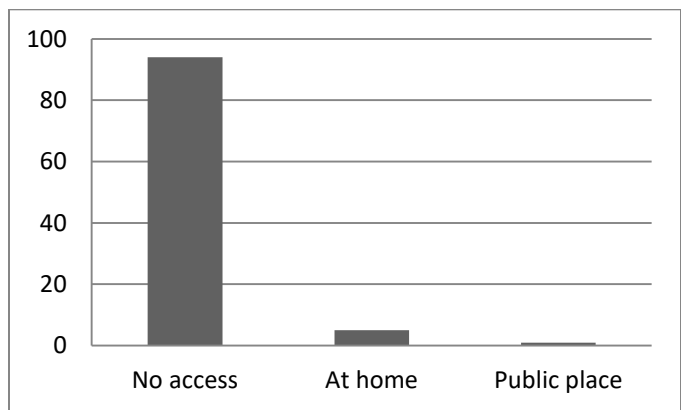
This functional definition of CATs is not enough to explain the form of CATs. Therefore, the researcher asked for specificity in terms of technology. Most of the stakeholders at the ground level (operators and district communication officers) did not call them CATs. They frequently used the term “community radio”, which is already used in the academia to mean radio stations that promote community access and participation (See Chapter 2). However, the stakeholders at policy-making level, like the key informants at Uganda Communications Commission (UCC), and the Minister of ICT were knowledgeable of the nomenclature of CATs. The reason as to why the operators and the district communication officers call the CATs radios is because the CATs serve a similar function to radio. They add the word “community” to mean that while radio is for all who receive its signals, the ‘community radio’ (CATs) is only for a single community service. The Director of Broadcasting in the Ministry of ICT said that

It is not an ICT. To be an ICT, there has to be sharing of a national resource, a body to manage it and the infrastructure”, adding that “CATs are a misuse of a loud speaker, which used to be held by one person who walked around the village disseminating information (Kibuuka, interview, 20 August 2014).

To be clear on the position of the CATs among regulators, CATs are taken to be illegal because they are not licenced (Paul Mukasa, Content Manager, Uganda Communications Commission, interview, 15 August, 2014). Although there is no law that mentions their illegality, the current UCC Act (2013) declares any information dissemination to the public using an apparatus illegal, if it has not been licenced by the UCC. The interviewees from government were divided on the illegality vis-à-vis communication potential of CATs. The Minister said that CATs are “an illegal disruptive innovation” and called for government efforts to try and understand the genesis of CATs as they signify a bigger communication gap. Another informant said that CATs are broadcasters according to the law (James Nsimbe, Mukono District Legal Officer, Interview, 12 August, 2014). The definition of broadcasting according to the UCC Act (2013: 6) is that “broadcasting means the transmission of sound, video or data, intended for simultaneous reception by the public”. Although what CATs are is a subjective debate based on particular differing perspectives, the current effort to understand what they are relies on observation which yielded the information used to describe them above. Other than that, none of the regulatory officers provided a definition that could help to understand how the towers operate. Some of them said the towers were illegal, which means they spoke from a regulatory point of view, adding that the CATs are shutdown whenever the government gets a chance. Although this is more theoretical than practical as the CATs are operating and some of them have been in operation for over seven years, it poses a risk to locally established communication efforts which might be an answer to the previously used top-down communication models. On the contrary, each CAT has some kind of unwritten code or informal norms of practice within that particular community, which may be unacceptable in another community. Therefore, information relevance is determined based on small media boundaries. Beyond a certain area, information might lose value. In addition, information heritage from those that have done it before helps to create a script for the new proprietor on how to start and run a CAT.

Before the data that answers the three research questions is presented, some of the biographical data of the respondents is summarised here: The gender distribution of the respondents was 41 males (18 in Mukono and 23 in Masaka) and 59 females (32 in Mukono and 27 in Masaka). In relation to marital status, 69 respondents were married (or living with someone), 14 were single, 14 were divorced or separated while there were 3 widows among the respondents. In terms of

literacy, 78 respondents knew how to read and write. This was based on responses given by the respondents when issued with questionnaires. 17 respondents said they could only write a few words while 5 said they could not read or write. In terms of employment, 58 respondents were self-employed, 30 were employed by someone else while 11 were unemployed. There was one student. 48 of the respondents who had jobs said they get slightly above \$28 dollars a month while 36 said they received between \$ 14 and \$ 28 a month. In addition to those two categories, there were 10 respondents who said they get below \$ 14 a month. In terms of other facilities, 72 respondents said they have electricity in their houses while 28 said they did not have electricity in the house. When the respondents were asked where they accessed the internet from, 94 respondents said they had no access to the internet while five accessed it from home. One respondent accessed the internet from a public place. The age distribution of respondent was as follows: Between 21 – 30 years were 58 respondents, 31- 40 years were 22, 41 -50 years were 9, 18 – 20 years were 6, 51-60 years were 3, while those above 60 years were 2. Since the current study comes at a time when new media is ubiquitous as several studies (some reviewed in Chapter 2 about virtual community) note, the Chapter follows the above biographical data with a figure that emphasises access to the internet among the communities under study.



*Figure 5.1: Internet access points of respondents.*

*This figure intends to highlight the position of people who use CATs, on the information superhighway.*

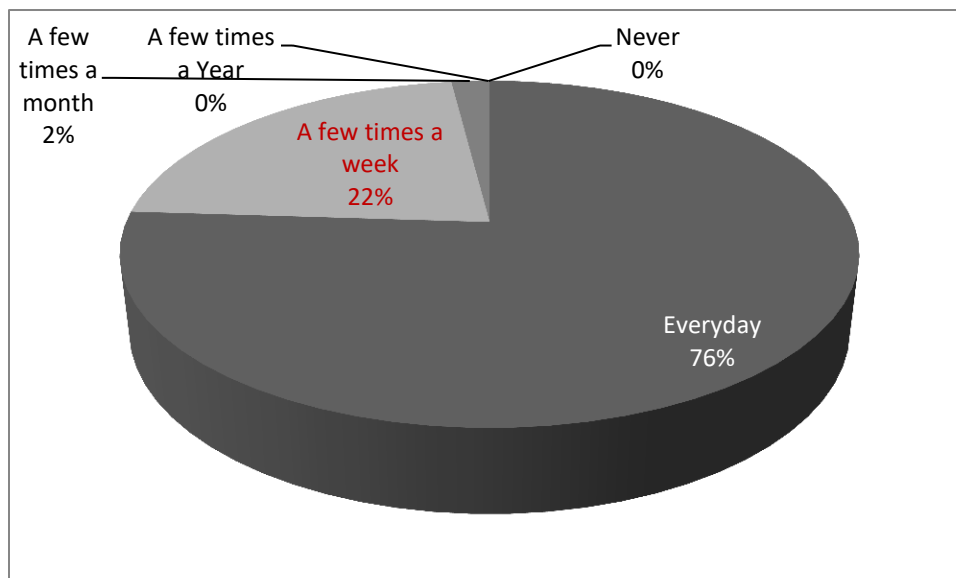
## Answering the Research Questions

### *Research Question One: What is the level of individual dependency on CATs?*

This section presents the separate districts' data as well as combined districts' responses about media usage. It thus shows the individual dependency by revealing "how many units difference there is" (Bailey, 1994: 74) between scores obtained from responses on individual usage of other available media channels and CATs. However, before the individual dependency on CATs is presented, the individual districts' responses on listenership of CATs are detailed below. The independent district responses help the reader to understand what the individual attitudes and opinions about CATs are before a measure with other media channels is done which helps to obtain the level of dependency.

### Mukono district

The respondents in Mukono District were asked how often they listened to CATs. The responses would reveal the individual connection (listenership) of CATs, which the MSD theory notes to be the dependency of an individual on a channel. The categories available in the Questionnaire (Appendix 1) were: "Everyday", "A few Times a week", "A few times a month", "A few times a year", and "Never". The pie chart below shows the responses from Mukono district on how often individuals used CATs.

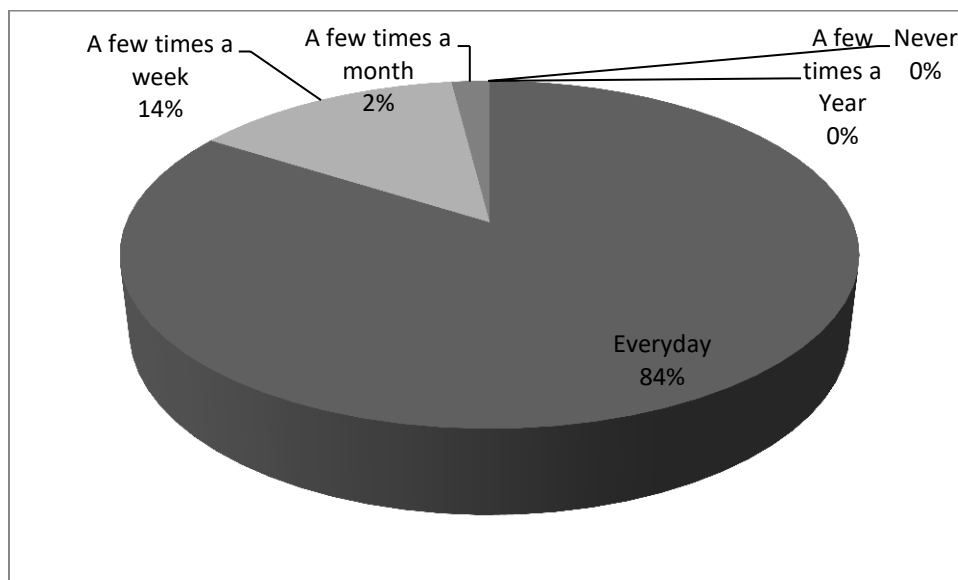


*Figure 5.2: Mukono district responses on how often respondents use CATs (N=50)*

In Mukono district, 76 percent of the respondents listen to CATs every day. This means that CATs are popular. It also means the majority of the respondents (76 percent) are interested in a certain kind of information which is only provided by CATs. As seen previously, such information is about the events not within the entire district, but just within Nassuuti village from where data was collected. A more nuanced discussion follows in the next chapter (Chapter 6) in order to fully account for the popularity of CATs in semi-urban communities.

Masaka district

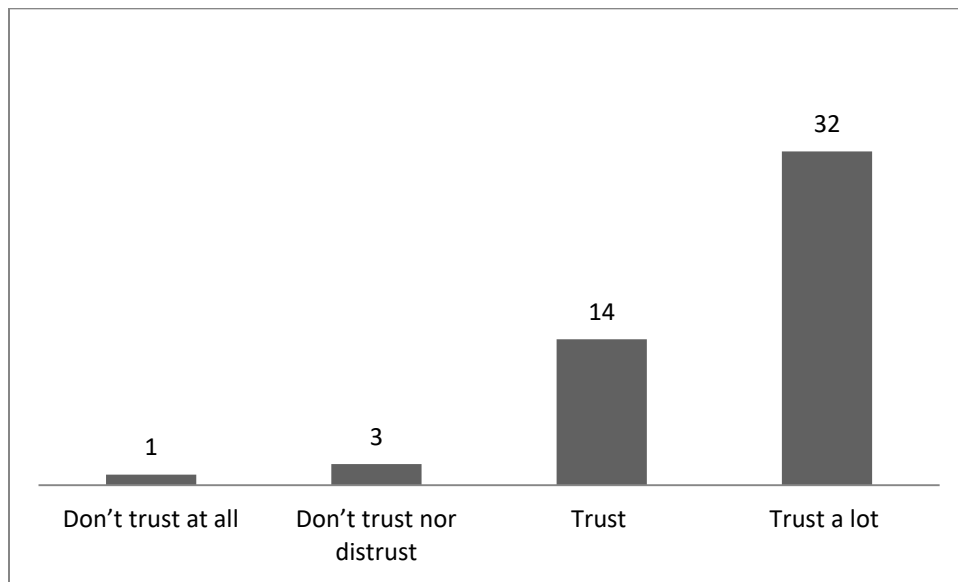
Similarly, the Masaka district respondents were asked the same question about the listenership of CATs, using the same categories as in the Mukono district case above. As the pie chart below indicates, there are more respondents who listen to CATs every day in Masaka district (84 percent) than there are in Mukono district (76 percent). However, Mukono district has more people listening “A few times a week” (22 percent) than Masaka district (17 percent). Both districts tie on the “A few times a month” category with 2 percent each.



*Figure 5.3: Masaka district responses on how often individuals use CATs (N=50).*

There were no responses for other categories (“A few times a year”, and “Never”) from both districts. For Masaka district, the daily listeners (to CATs) are more than the daily listeners in Mukono. While an assumption that CATs are more popular in rural than semi-urban areas can be

made, the location of a CAT (rural or semi-urban) was found to have no significant association with a higher level of individual dependency on CATs (more details are given later in this chapter). What the data pointed to instead is the income status of the individuals in both locations that entice people to make choices of listening (or not) to CATs. On top of how often individuals listen to CATs, the researcher also asked respondents how much trust they had in CATs. This was aimed at understanding whether the respondents, apart from listening to the towers, consider the information given to be true. The categories given for both districts include: “Trust”, “Trust a lot”, “Don’t trust nor trust”, and “Don’t trust at all”. The responses for both districts are given on the graphs below.



*Figure 5.4: Mukono district responses on how much individuals trust CATs (N=50).*

More respondents in Masaka said they “Trust a lot” CATs (38 respondents) than in Mukono (32 respondents). However, more respondents said they “trust” CATs in Mukono than in Masaka (14 versus 9 respondents respectively). Both districts had the same number of responses under the category of “Don’t trust nor distrust” (3 responses), while Mukono district had one respondent under the “Don’t trust at all” category against Masaka district’s zero response.

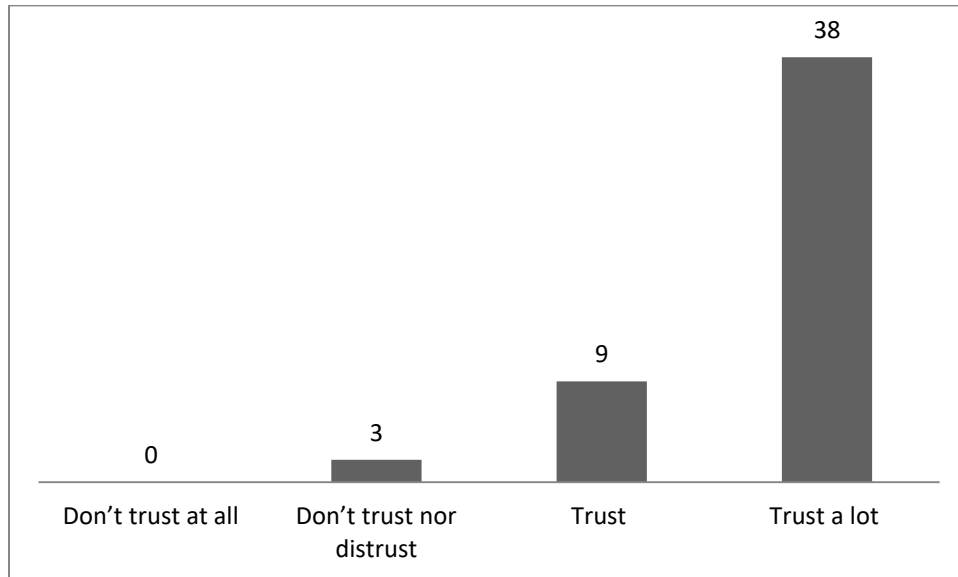


Figure 5.5: Masaka district responses on how much individuals trust CATs (N=50).

After the single districts responses on the issues of usage (listenership) and trust, below are the combined responses on both issues for comparative purposes.

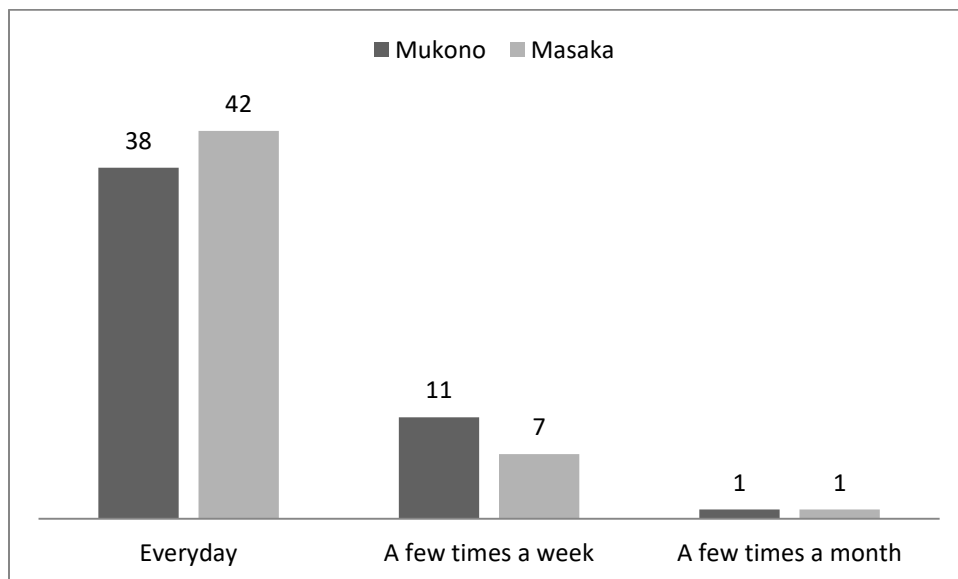


Figure 5.6: Use of CATs among respondents in Mukono (N=50) and Masaka (N=50)

In order to obtain the level of individual dependency on CATs, the study compared CATs with the available media platforms but first the responses on usage for each of the main three media (radio, TV, and newspapers) were analysed.

#### How often do you listen to radio?

More responses were obtained for the “Everyday” category from Masaka district than Mukono district (30 to 22 responses respectively). However, more people listened to radio “A few times a week” in Mukono district (8 responses) than in Masaka district (5 responses). Mukono district also had more responses under the categories of “A few times a month” (5 to 1), “A few times a year” (3 to 1), while Masaka district had 13 responses under the “Never” category in relation to Mukono district’s 12.

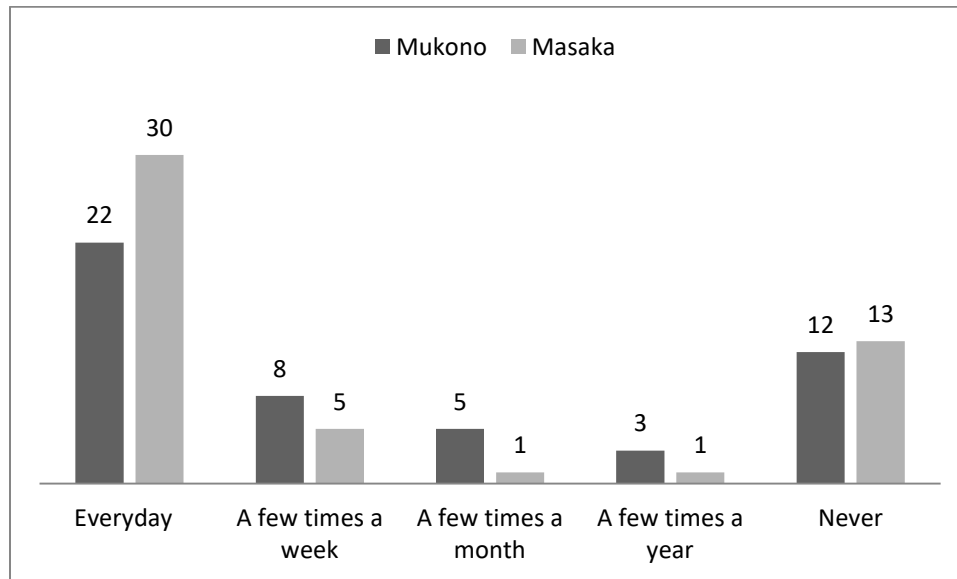


Figure 5.7: Radio Listenership among respondents in Mukono (N=50) and Masaka (N=50)

#### How often do you watch TV?

In terms of the respondents' watching TV, Masaka district still had more responses under the "Every day" category for TV usage than Mukono district (24 to 21). More people responded in Mukono district to "A few times a week" category (8 to 5) than in Masaka district. There were equal responses for the category of "A few times a month" from both districts (2 to 2) while Masaka district had no response under the "A few times a year" category alongside Mukono district's 2 responses. There were more responses from Masaka district for people who never use television (19 responses) than there were in Mukono district (17 responses).

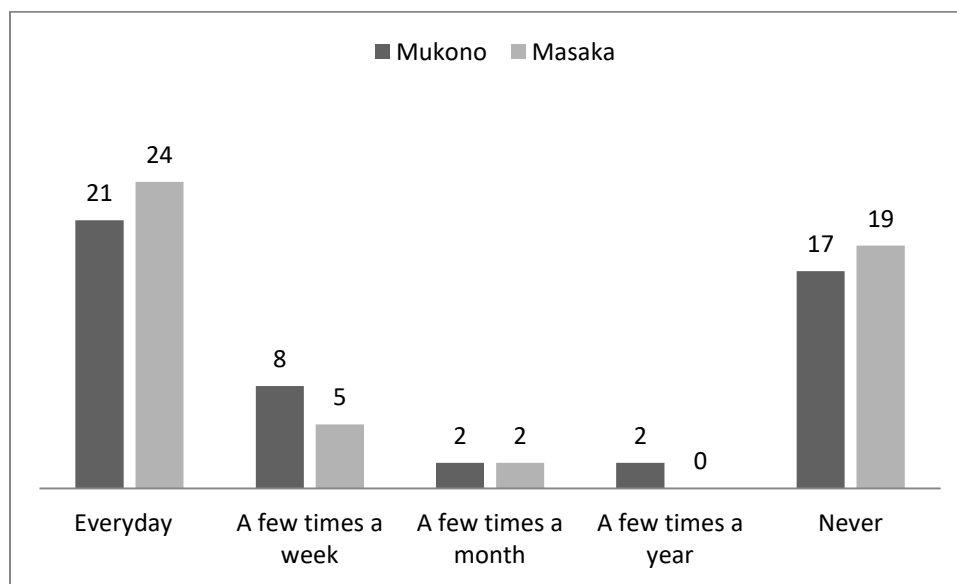
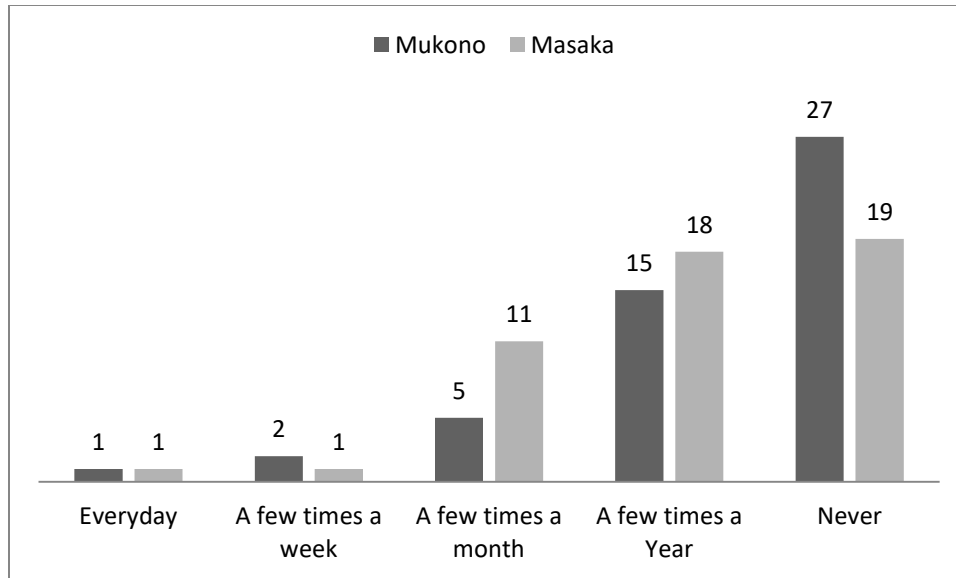


Figure 5.8: Television watching among respondents in Mukono (N=50) and Masaka (N=50)

#### How often do you use (read) newspapers?

Unlike radio and TV responses, the newspaper responses were few on the more often side and more on the not-often side. For example, there was one response from each district under the "Everyday" category. There were two responses under the "A few times a week" category for Mukono district and one for Masaka district. Masaka district in addition had 11 responses for "A few times a month" compared to Mukono district's five responses. The "A few times a year" responses for Mukono district were 15 and 18 for Masaka district. Under the "Never" category, Mukono district had 27 responses while Masaka district had 19.



*Figure 5.9: A figure showing how often respondents read newspapers.*

After the above single-case responses from both districts, the chapter presents the combined district responses for all the media accessed in both districts on the issue of usage. For the mainstream media, data still indicates that respondents in the rural areas listen to radio and watch TV more than the respondents in the semi-urban area under the “everyday” category. For newspapers, which are not read by so many respondents in the areas where data was collected, only one individual read the papers every day in both locations. While the study did not test for the relationship between mainstream media channels (radio, TV, newspapers) and their location (they are not located within the villages like CATs), since it was not important to inform the objectives of this study, the differences in rural and semi-urban listenership can be attributed to the availability of more non-media sources of information for the semi-urban respondents than the rural area respondents. Other channels that respondents said they get information from include: family, friends and places of worship. To explain why more respondents in the rural areas listen to mainstream media everyday than the semi-urban respondents, some of the above non-media channels have to be acknowledged. While the explanation for more listenership to the CATs in rural areas is given in this chapter and the next chapter, more studies need to be done to assess the “non-media sources” assumption above about why respondents in rural areas listen more to mainstream channels.

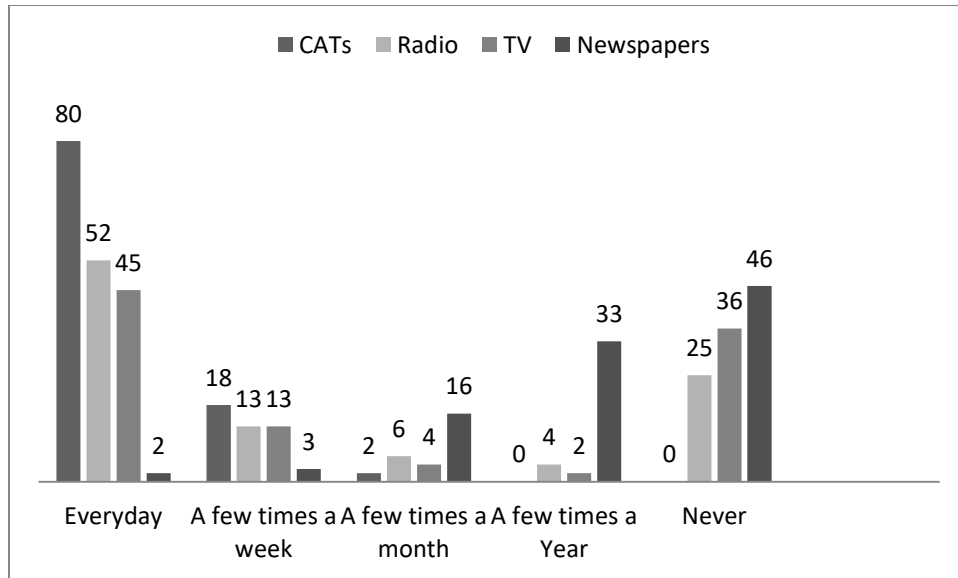
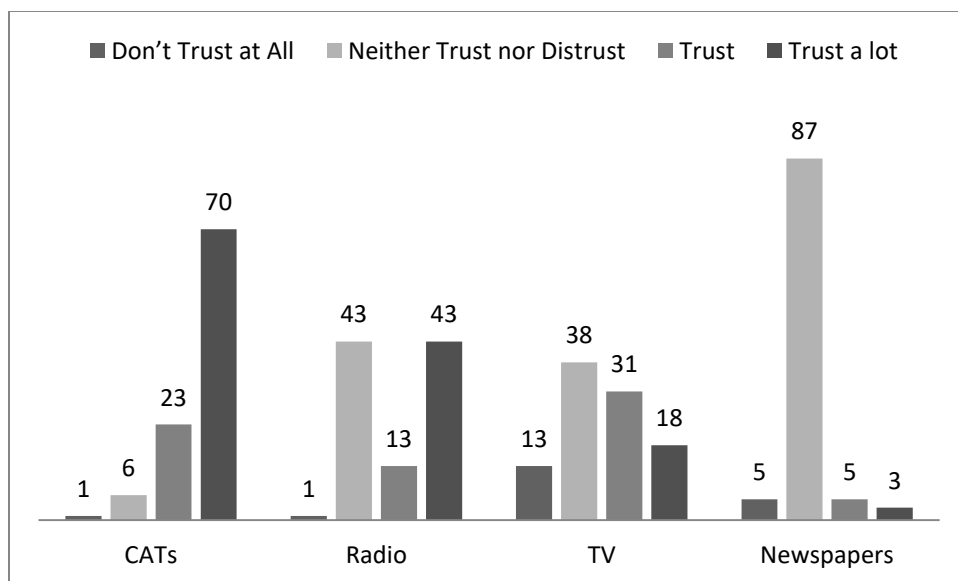


Figure 5.10: Media use among respondents from Mukono and Masaka combined (N=100)

After identifying how often individuals used CATs and how often people used CATs alongside other media platforms, the study analysed the issue of trust which was probed from the angle of believability. The local word for trust, “*okwesiga*”, translates into whether or not someone thought the channel would lie to him/her or exaggerate information.

#### How much do you trust the following channels?



*Figure 5.11: Trust in various media types among respondents in Mukono and Masaka combined (N=100)*

To understand the level of individual dependency on CATs, which was obtained here by seeking individual usage of CATs, it was crucial for the study to compare individual usage of CATs alongside individual usage of other available media platforms. This way, the level of individual dependency was obtained by understanding how much dependency on each of the media platform varied from the mean. The CATs’ mean was then compared with the mean of each category to understand how CATs performed alongside the three major media platforms.

The following frequencies were obtained from the question: How often do you use the following channels (CATs, Radio, TV, Newspapers)? The respondents were given the following options: Everyday; A few times a week; A few times a month; A few times a year; and Never. The data from the above question was used to generate the following tables using SPSS, showing the frequency (Table 5.1), the mean of each category and the Standard Deviation (Table 5. 2).

	<b>CATs</b>		<b>Radio</b>		<b>TV</b>		<b>Newspapers</b>	
	Freq	%	Freq	%	Freq	%	Freq	%
Everyday	80	80	52	52	45	45	2	2
A few times a week	18	18	13	13	13	13	3	3
A few times a month	2	2	6	6	4	4	16	16
A few times a year	-	-	2	2	2	2	10	10
Never	-	-	27	27	36	36	69	69

*Table 5.1: A table showing the frequency of the four channels.*

	Mukono (N=50)		Masaka (N=50)		Both Mukono and Masaka (N=100)	
	Mean	SD	Mean	SD	Mean	SD
CATs	4.74	.48	4.82	.43	4.78	.462
Radio	3.46	1.70	3.76	1.74	3.61	1.72
TV	3.24	1.83	3.34	1.84	3.29	1.82
Newspapers	1.48	.97	1.70	1.01	1.59	.99

*Scale: 1=Never, 2=A few times a year, 3=A few times a month, 4=A few times a week, 5=Every day*

*Table 5.2: A table showing the mean scores of each district plus the combined scores.*

The data above indicates that CATs are depended on slightly more in Masaka (Mean = 4.82; SD =.43) than in Mukono (Mean = 4.74; SD= .48). This is the same case with the rest of the platforms. In Mukono for example, dependency on Radio (Mean = 3.46; SD =1.70) is lower than it is in Masaka (Mean = 3.76; SD =1.74) just like TV (Mean = 3.24; SD= 1.83) compared with Masaka (Mean =3.34; SD = 1.84) and Newspapers (Mean =1.48; SD = .97) with Masaka (Mean = 1.70; SD = 1.01) respectively. On the other hand, the combined district figures show that respondents depend more on CATs than any other media platform. The level of individual dependency on CATs therefore is higher (Mean = 4.78; SD = .46) than the level of individual dependency on radio, TV and newspapers.

Since CATs have a mean of 4.78, they are the only platforms listened to almost every day (on a scale of 5 as indicated in the scale description below the table) by the majority of the respondents. Radio scales between “A few times a week “and “Every day” categories while TV and newspapers scale under “A few times a month” and “A few times a year” categories respectively. For that reason, there are three major conclusions from the above data. One is that people in rural areas depend more on, not only CATs but, mainstream media platforms as well than those in semi-urban communities. The second conclusion is that the individual dependency on CATs is higher than that of Radio, TV and Newspapers in both rural and semi-urban communities, while the third conclusion is that CATs in both rural and semi-urban communities are the only platforms depended on every day. Finally, another major conclusion is obtained by using a Chi-square analysis as the table below details:

Characteristics		n	How often do you use CATs? (%)		
			A few times a month	A few times a week	Everyday
District	Mukono		2	22	76
	Masaka		2	14	84
			$\chi^2 = 1.0889, df = 2, p = 0.580$		
Income (per month)	Below \$14		50	6	5
	Between \$14-\$28		50	61	42.5
	Above \$28		0	33	52.5
			$\chi^2 = 9.8103, df = 4, p = 0.044$		

*Table 5.3: A table showing a Chi-square analysis of the association of the location of a CAT (rural or semi-urban) and individual Income with the level of dependency on CATs.*

From the above table, the location of the tower had no significant relationship with usage of CATs. In other words, the differences in location (one tower is located in the rural district and another in a semi-urban district) do not significantly influence the level of individual dependency on CATs as the p value > 0.58 above indicates. Instead a significant relationship was observed between the level of individual dependency on CATs and the income status of individuals (p = <0.04) regardless of whether or not those individuals were in the rural area. The two main reasons given by the respondents as to why they listen to CATs were that the CATs provide local/village information and that the CATs are cheap, something that validates the Chi-square results above on the income status (p = <0.04). Since CATs are listened to mainly by self-employed blue collar workers who own mostly small scale retail shops or hawking business, the idea of depending on a platform that is cheap to use is logical. Chapter 6 will put these figures into perspective by discussing the various possible reasons for these scores.

*Research Question Two: How do CATs depend on the individual resources?*

The lack of symmetry in the Media System Dependency relations on the side of the individual resources to media has been highlighted by several scholars (Ball-Rokeach *et al.*, 1990; Hindman, 2004; Westgate, 2008) as Chapter 3 indicated above. In the tripartite relationship of individual-society-media, while the last two complement each other by exchanging services and

resources, it is argued that the individual does not contribute directly to the survival of media. “The reciprocity of the individual-media relationship is in the media’s ability to fulfill the goals of understanding, orientation and play” (Ball-Rokeach, 1998:15). The nature of the reciprocity between individual and media relations is thus asymmetrical (Lowrey, 2004). This means that the contribution by individual listeners is indirect. The relevance of the MSD theory to this study is reflected in the fact that the indirect contribution that individuals make to media is by connecting or tuning (radio and TV) to the media. If the individuals stop tuning in, the contribution (relevance) of media (to give people content that appeals to the three goals) will also stop to exist. Therefore, media need the individual to tune in. The impact of the MSD theory towards the second research question comes from understanding that counter intuitive assumption. Media need to make sure that their goals attract the individuals in order to retain the relationship.

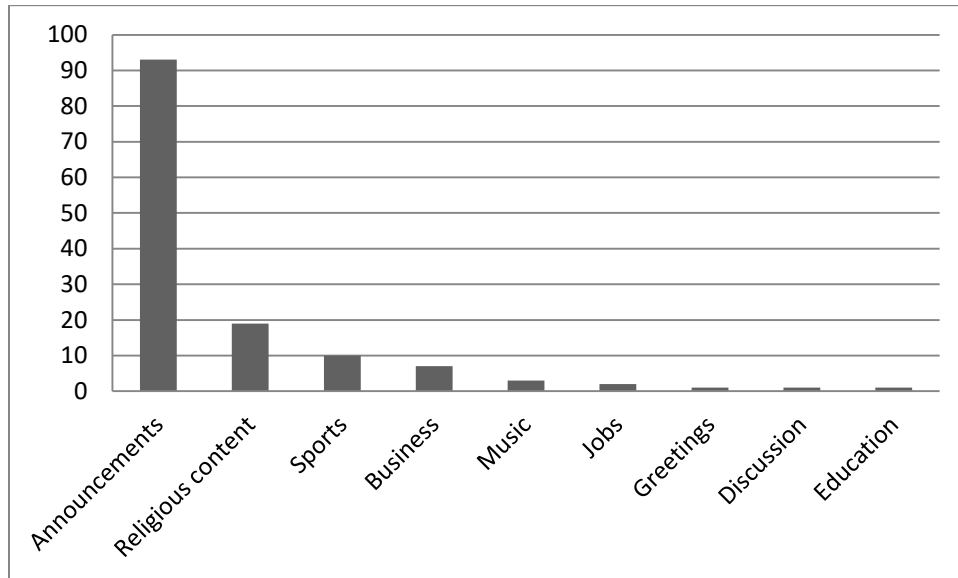
Therefore, to understand how CATs depend on the individual, the types of goals that CATs appeal to, which in the end attract the individuals, had to be examined in order to answer the second research question. By fulfilling these goals, the CATs are able to maintain the individual connection. Ball-Rokeach (1985) notes that media employ resources (gathering, processing and disseminating functions) to attract the individual. In order to fully show how CATs attract the individual, the study presents the CATs information resources in the second research question. By capitalising on the information resources, the CATs depend then on the individual to pay attention and this keeps the CATs existing while on the other side, as the MSD theory notes, the cognitive, behavioural and affective effects occur. By identifying the above types of effects, the theory argues that, for example, CATs can make people think, feel and act on the information given in various ways.

#### Individual goals fulfilled by CATs

There are three types of goals identified by the MSD theory: understanding, orientation, and play (Ball-Rokeach and Jung, 2009; Lee, 2012; Li, 2013). Of the three goals, CATs information falls mostly under understanding, which was identified in Chapter 3 as one that concerns knowing the individual’s surrounding and about the individual him/herself in general. In very few (negligible)

cases, orientation, which is the need to make sense of or get guidelines about a certain situation that may have arisen, also may suffice. The third goal of play is lacking in CATs.

The respondents revealed what kind of information they obtain from CATs. This information is represented in the graph below:



*Figure 5.12: Programme content that respondents listen to on CATs*

The above data indicates that announcements are listened to by 93 respondents and they take the biggest number of listeners. These are followed by religious programmes which are listened to by 19 respondents, followed by sports with 10 respondents, business with 7 respondents, music with 3 respondents, jobs with 1 respondent, while the others (greetings, discussion and education) have 1 respondent each. Divided between the total programme time on CATs, announcements take up 68 percent of the time, followed by religious programmes at 14 percent, sports at 7 percent, business at 5 percent, music at 2 percent and the rest at 1 percent. Most times, even the content that is not classified as announcements gets narrowcast as announcements.

The major part of the content that CATs give under the understanding goal, are announcements as a form of news, with a designated time known within the communities. Apart from music, religious programmes and sports, the responses in the graph above can be summed up under

announcements. The announcements, observation notes indicate, are mostly about: the dead, lost-and-found, jobs, people bringing in their CVs in order to attract potential employers, appreciation to the community for service rendered towards another community member's function or any other help rendered during difficulty, police notice, local council notice, and warning about thieves. Beyond the community-generated content, there is mobilisation for government and non-government programmes like immunisation, farming, climate change, blood donation, national ID registration and several others. One of the goals individuals seek to fulfill under CATs therefore is information (understanding).

As Henry Lwanga (*Nassuuti FM* presenter, interview, 21 July 2014) noted, the exception in timing happens when there is an emergency. Emergencies, which would be an equivalent of breaking news in mainstream media, include a missing child in the market full of people, a cow that has wandered off from the kraal or one that has been found, a wallet lost in a taxi or one that has been found, thieves who have been seen stealing in real time, or those running (after stealing) (Joseph Mugerwa, Presenter, *Voice of Nyendo*, interview, 9 July 2014). This information does not have a specific designated time like the other information. As soon as information comes in, the presenter switches on the tower and informs the community for intervention (John Ssendago, Chairman Local Council One, Nyendo Village, interview, 8 July 2014). This behaviour was supported by data from both CATs under study. However, the practice differed between the towers although in a minor way. Where the rural tower, *Voice of Nyendo*, had a gospel programme very early in the morning, some times before the morning narrowcast, the semi-urban tower, *Nassuuti FM*, had sports, although the presenter said that for lack of a regular presenter, sports came on once in a while, which was once or two times a week. Sports and gospel are the closest effort CATs have towards fulfilling the goal of orientation, which goes beyond mentioning what is happening in the vicinity to giving details about the situations. During the ten days of observation, both towers did not narrowcast any sports or religious programmes.

#### How CATs Gather, Process and Disseminate Information

Chapter 3 summarised the following assumptions of the MSD theory (Ball-Rokeach *et al.*, 1990; Hindman, 2004) in relation to the second research question: that dependency is the individual-

media connection inspired by the need to understand a situation, and that dependency increases if the individuals perceive media as being able to fulfill their goals. To fulfill the goals (in order to attract individual resources or attention), media employ information resources including: collection of news or information that is of interest to the audience, selecting this news to know what people need and what is useless and, distributing it through various means. Since the second research question intended to find out how CATs depend on individual resources, the information resources used by the CATs are presented below.

### CATs Information Gathering

CATs do not have an established newsroom structure as community radio or other normal media do. Information collected through observation shows that only one person, a man (at both towers), runs the towers. From the interviews with each presenter, it was clear that each of them does not have any more co-workers as the CAT budget does not allow for extra workers. Besides, there is not a lot of work that requires more people to handle. This kind of a one-man structure informs how information that goes through the tower is going to be gathered. The CATs have a fixed or permanent address which implies that everyone in the community knows their location. As soon as something happens in the village, someone takes the information to the tower willingly without being appointed by anyone to do so. If the presenter is away from the premises, since running a tower is not a full time activity, the person goes away and returns later if the information was considered important. At *Voice of Nyendo*, the wooden poles that hold the speaker high above have a mobile phone number inscribed on them. Some community members who are able call and inform the presenter and if it is an emergency, he returns and reports it to the rest of the community right away. The *Nassuuti FM* presenter noted that emergencies include: a fatal accident in which a community member died, whether within or outside the community, robbers breaking into a house or a business, a missing child, unattended pigs or cows that may be feeding on other people's crops, and several others. If it is not an emergency, the information becomes part of the events the presenter collects to be narrowcast in the evening. "Most times the information that community members bring is of a serious nature, which means I have to listen carefully and note down all the important points" (Henry Lwanga, Nassuuti FM presenter, interview, 21 July 2014).

The other way that information or news is gathered is through direct contact with the presenters away from the towers. After the morning session, the presenter may decide to lock the premises and go along with other businesses. Community members who have something to say use this opportunity to inform the presenter and demand that they expect to hear the information on the tower for the rest of the community to share. Of course whether or not any information gets through the tower is determined by the presenter. When asked the nature of information for example that he has been given before, away from the tower, one presenter said that “sometimes it might be a suggestion from a concerned citizen that theft is rampant so there should be a warning to the community to be careful and beware of thieves” (Henry Lwanga, Nassuuti FM presenter, interview, 21 July 2014). Reports like the one about thieves are accompanied by examples of whose home the thieves broke into and what they took and what police is doing so far about it. Indeed during one of the observation evenings, *Nassuuti FM* had information warning community members who lay their coffee beans out in the sun during day but did not store them safe at night to be careful because thieves had been reported to have stolen such from two houses the previous night.

Besides community members taking information to the towers, using mobile phones, and contacting the presenter away from the towers, information is also generated by the presenters themselves while going about their business in the community. “I try to keep my ear to the ground even when I am doing something unrelated to the CAT in the community” (Joseph Mugerwa, Presenter, *Voice of Nyendo*, interview, 9 July 2014). The other presenter said that some of the themes that he may talk about include “a heap of rubbish that the town council did not remove on time, pupils who wander around instead of going to school during school time, and several others, ranging from education, social to health matters” (Henry Lwanga, Nassuuti FM presenter, interview, 21 July 2014). These issues are addressed by the presenter in a way of encouraging the community to work together and make the situation better. Most importantly though, “these opinions or advice have to be in line with acceptable social norms within the community in order to avoid the ideas coming off as radical and irresponsible or even taboo” (Joseph Mugerwa, Presenter, *Voice of Nyendo*, interview, 9 July 2014). For example, Mugerwa said the accepted norm promoted by the government of Uganda is that children of a certain age should be at school. In order to gain acceptance in the community, he can only re-emphasise that

stand whenever he sees children wandering about. The alternative would be to ask parents to keep their children at home during the rainy season so that the children can help on the family farm. This last option would go against the district's long promoted stand on education, which encourages all parents to take their children to school (MDDP, 2011) and so CATs stay away from conflicting information like that.

### CAT Information Processing

Judging by the way information is gathered, processing it takes different methods as well from the way information or news is processed in mainstream media today. As soon as information gathering is over, the role of most community members as “journalists” is finished. The responsibility remains on the shoulders of one community member, who happens to be the presenter to ensure that information is processed. He rearranges all the events or ideas that he gathered through community member visits, mobile phone, and direct contact with the community members within the community, by writing them clearly on paper noting which one comes first, up to the last. He uses his discretion to decide what should come first, and which information needs more emphasis. This means he is going to read out the information two or three times in one narrowcast. In terms of hierarchy, from observation, the Nassuti FM presenter had arranged the following information chronologically: missing child, death of a community member, and robbery. The bottom of the list had events like greetings, as well as some information about a community member showing gratitude for attendance during a recently-concluded women's meeting. When asked what information he mostly repeats for emphasis, the presenter at *Voice of Nyendo* noted that “if I am talking about a missing person or child, I have to read the descriptions of the complexion and clothes, several times, for people to get acquainted with those facts” (Joseph Mugerwa, Presenter, *Voice of Nyendo*, interview, 9 July 2014). Sometimes it is a description of lost or lost-and-found property that he has to detail.

Omuwala Fatuma Lutaso nga  
 mutuzze we nasuuti mukono  
 alange muwala we egamubuyeko  
 lwajje abaze kumunsi ezabwungezi  
 Omuwala oyo abadde  
 ayitibwa fachi nabungo wamjaka  
 14 years Omuwala oyo abadde  
 mumpi wab mutaro ekimale wakwara  
 browse wabite nga kamusala  
 nkumama sikati ya black mukigere  
 heru soft nga bunyuti nga enyiri  
 nlate marine atera akwambala  
 akawoti akapiki  
 abadde  
 Omuwala oyo ateranyo akuba  
 muka browse akabaleke nga ku top  
 nakasikoti akera akawoti  
 073155784

Photo 5.3: Unlike mainstream media that use modern technology, CAT workers rely on pen and paper to process information like the above piece written by the Nassuuti FM presenter, before reading it out for the community. The heading in the first line on top of the document is the Luganda phrase for “Missing Girl” (Photo by Brian Semujju, July 2014).

In order to process this information, and to sustain the small gadgets that the towers use, community members pay for the information that they bring, if this information is not an emergency or a matter of life and death. For example, information about a community member showing gratitude would attract a fee, while emergencies like accidents and police or local council notices or other administrative information is aired at no charge. Mugerwa noted that “community members pay an equivalent of between half-a-dollar and four dollars maximum” (Voice of Nyendo presenter, interview, 9 July 2014). He also said that sometimes, the situation calls for him to understand the economic status of someone who is in trouble.

Some people come with no money but the look on their face can tell you that they are in danger, like someone whose child is missing. In that case, I do not charge them. There have been cases when individuals found their children and came back after days and gave me money to show their appreciation (Joseph Mugerwa, Presenter, *Voice of Nyendo*, interview, 9 July 2014).

At the semi-urban CAT, the presenter noted that sometimes people walk in and hand him more than four dollars for the job well done (Henry Lwanga, Nassuuti FM presenter, interview, 21 July 2014).

### CAT Information Dissemination

When it comes to dissemination of information, after gathering and processing it, there are two time slots for it. The first one takes place very early in the morning. Although the presenters said the first time slot is at 6:30 up to 7, from observation, sometimes both towers started at 6 and went on up to 6:20, while other times, they started at 6:20 or 6:30. The latest time a tower ever signed off in the morning was 7:30. This was the *Voice of Nyendo* CAT. The second time slot is in the evening between 9:30 and 10. However, when there is an emergency, or when police/local council has some information for the community, the towers can be switched on at any time, including after midnight (especially when thieves are terrorising the community). The way dissemination is done is a clear copycat of radio behaviour. The presenter starts by mentioning the name of the tower, since in some villages like Nyendo, there are two CATs in the same area. This mention is followed by a greeting, but unlike radio news, both presenters never mention their names when starting to read out the local information. This is because it is the same person doing the service all the time. During observation, the *Voice of Nyendo* tower for example on the first day had the following information disseminated: a death announcement, two missing children, lost-and-found property, local sports competition, gratitude to the community for attending a funeral, Eid day festivities, and music at the end of the narrowcast. This was the same information aired in the evening, something that implies that no new information was gathered.

The next day, the towers would follow the same format but with different information apart from the information about the two missing children that was repeated by the *Voice of Nyendo* CAT. The researcher observed how two members came in between an interval of three hours to give

the presenter different information to narrowcast in the evening. About the timing of the narrowcast, the presenters noted that some community members complained that the CATs are switched on at a time when radio news is on as well. “Since then, we try to follow radio news schedules. We try not to interrupt the 9pm or 7am news” (Henry Lwanga, Nassuuti FM presenter, interview, 21 July 2014). In relation to what happens in areas with more than one CAT, the *Voice of Nyendo* presenter, in whose area two CATs are located, noted that “we narrowcast in turns between me and the other CAT operator so that we do not confuse the community with noise” (Joseph Mugerwa, Presenter, *Voice of Nyendo*, interview, 9 July 2014). This understanding had been agreed upon in a meeting between the two presenters so that when one heard the other CAT narrowcasting, he had to wait for it to finish.

*Third Research Question: what opportunities and challenges are faced by both the individuals and by the CATs?*

The advantages that come from using CATs are explored below. Alongside the advantages, the section provides the challenges both the operators and the community face in relation to CATs.

#### Opportunities created by CATs

One of the reported advantages of CATs is that they mobilise communities faster than radio would do to respond to a local issue (Paul Mukasa, Content Manager, Uganda Communications Commission, interview, 15 August, 2014). All the informants agreed that this is a service that CATs are credited for and that some mobilisation that has been done by CATs has been critical. For example, the towers help to intercept thieves when they are breaking into a community member’s house or business. In the Nassuuti community, this actually happened when thieves broke into a citizen’s house and a neighbour called the CAT operator instantly, who started to narrowcast the information. When the thieves heard the information about them, they ran off, only to fall into an ambush staged by the community members.



*Photo 5.4: The Voice of Nyendo presenter narrowcasting during the research visits. On the table are his two amplifiers and the microphone (used from a box). (Photo by Brian Semujju, July 2014).*



*Photo 5.5: The Nassuuti FM presenter demonstrating to the researcher how he uses the CAT technology. (Photo by Brian Semujju, July 2014).*

The other advantage is that CATs are cheap to run. Both the presenters and the district information officers attested to this. Both presenters said that if electricity goes off, the generator fuel for the day costs half- a dollar (the rural tower) and 2 dollars (for the semi-urban tower). The other angle is that CATs' operations can fit in a limited space, for example a very small bedroom.

Due to the low costs of disseminating information, the presenter can take two or three minutes talking about the same event. This creates a lot of room for emphasis, especially if the information in question requires one to give a description.

When the presenter is talking about a missing child, he may run that information three times repeating the descriptions given to him by whoever is looking for the child (Betty Naluwoza, Mukono District Community Development Officer, Interview, 12 August, 2014).

On the other hand, the information put out is strictly local which means that CATs do not give communities information that does not directly relate to them as radio or TV do. Localising information enables CATs with a listenership whenever they start to narrowcast. Additionally, the community members do not have to bear any responsibility of incurring expenses to receive information (Olivia Nakanwagi, Masaka District Information Officer, interview, 19 July 2014). For example, they do not have to buy batteries. Ideally, information is thought to be free for everyone (Betty Naluwoza, Mukono District Community Development Officer, Interview, 12 August, 2014).

### Challenges

The CATs are not licenced and so the government refers to them as illegal. All the Ministry and UCC informants said that the CATs are illegal since the law requires a licence for this kind of service. When asked if the UCC would grant a licence in the event that the CAT operators applied for one, the informants said that UCC has not decided to licence CATs yet. "When one member of the community complains, we close the tower" (Paul Mukasa, Content Manager, Uganda Communications Commission, interview, 15 August, 2014). Therefore, community members' complaints stand a big threat to CATs. However, both CAT presenters said they had

not had a problem with the law and that they had sought permission from the local area chairpersons to establish the towers.

Additionally, there are some technical challenges like the clarity of the information being dependent on the weather of the day. During a windy period, information will be easily blown away. Apart from that, the CATs also use very cheap technology, which also is old. This is partly because the proprietors can only afford such old technology. To make matters worse, one of the operators said that thieves come and steal the cables that connect the speakers to the amplifier” (Henry Lwanga, Nassuuti FM presenter, interview, 21 July 2014).

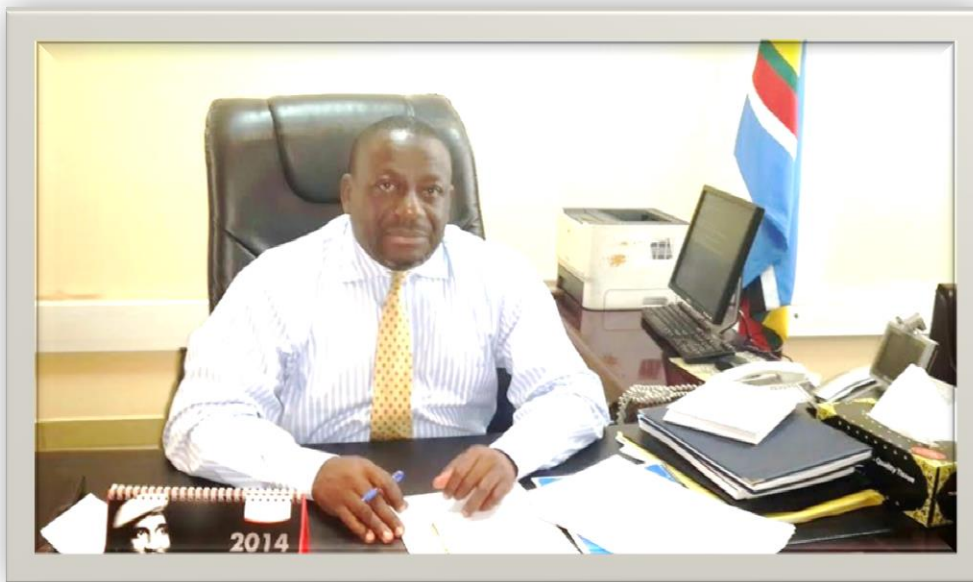
Due to the complaints in other districts to the UCC against CAT noise, there is self-censorship among CAT workers in Masaka and Mukono. To avoid similar complaints and closure by government, CATs try not to narrowcast during the time of radio news (7 am and 9pm). However, since Uganda has 253 radio stations currently on air (UCC, 215), time for news varies and since different people listen to different radio stations, CATs are not able to wait for every station’s news to be read (Moses Mulindwa, Nassuuti village Local Council chairman, interview, 22 July 2014). Although CATs try to abide by this community rule, as another presenter admitted (Henry Lwanga, Nassuuti FM presenter, interview, 21 July 2014), observation data indicates that some days, the CATs narrowcast alongside radio news. Further still, the CATs do not have bodies that may unite operators to discuss some of the challenges that affect them.

On the side of the community and the entire communication system, some problems can be identified too. For example, since anyone can start a CAT, there is no way to regulate who should not. If that is the scenario, although neither of the communities reported having had that situation, there will be noise, as each of the many CATs tries to reach out to the people. However, in Nyendo, where there are two towers within the same community, the presenter noted that each tower narrowcasts at a different time. They agreed that one of them starts 30 minutes before the other.

Another challenge, as most informants including the presenters, reported, is that the people running the CATs are not informed of the basics of managing information. They do not know

about slander for example, or basic journalism principles. “The presenters are not informed of media ethics or other technical subjects” (Paul Mukasa, Content Manager, Uganda Communications Commission, interview, 15 August, 2014). In the future this could possibly threaten the rights of the listeners. The other challenge connected to this, which was pointed out by the informants, is that some people may use the towers to mobilise the community for wrong reasons. There is no guarantee that all the time narrowcasting is going to be public instead of a personal good (Nyombi Thembo, State Minister for ICT, interview, 24 August 2014).

One problem that was noted by all informants (apart from the presenters) is that CATs make people compulsory listeners by blowing information into everyone’s house or living/working area, without having to establish if everyone wants to hear the information. This is the reason why UCC admitted that some people have come out to complain about the CAT noise. This has happened in the city where some politicians complained that the CATs were too close to their residencies and emitted a lot of noise that disturbed their concentration.



*Photo 5.6: The Minister of State for ICT, Nyombi Thembo, in his office during the interview. (Photo by Brian Semujju, July 2014).*

## Conclusion and Summary of Findings

Theme / Research Question	Data Source	Findings
<p><b>Theme One</b></p> <ul style="list-style-type: none"> <li>• How often individuals seek CAT information in relation to other channels</li> <li>• Trust</li> <li>• Usefulness</li> </ul>	<p>CAT listeners</p>	<p>The level of individual dependency on CATs (Mean= 4.78; SD = .46). This means that the level of individual dependency on CATs is higher than the dependency on any other channel.</p>
<p><b>Theme Two</b></p> <ul style="list-style-type: none"> <li>• What kind of information do individuals obtain from CATs (goals appealed to)?</li> </ul>	<p>CAT listeners  Presenters</p>	<ul style="list-style-type: none"> <li>• Gospel, Sports, Music</li> <li>• Announcements: the dead, lost-and-found, jobs, CVs, appreciations, police notice, local council notice, warning about thieves.</li> <li>• Mobilisation for immunisation, farming, climate change, blood donation, national ID registration.</li> </ul>
<ul style="list-style-type: none"> <li>• How CATs gather, process and disseminate information.</li> </ul>	<p>CAT presenters/proprietors.</p>	<p><b>CATs Technology</b></p> <ul style="list-style-type: none"> <li>• Horn speakers.</li> <li>• Amplifiers</li> <li>• Microphone</li> <li>• CD player.</li> </ul>

		<p><b>CAT Information Gathering</b></p> <ul style="list-style-type: none"> <li>• Information finds the reporters at the towers.</li> <li>• Sometimes it is given to them when walking within the community.</li> <li>• Through phone calls</li> </ul> <p><b>CAT Information Processing</b></p> <ul style="list-style-type: none"> <li>• Information is written down on a paper in a legible formula</li> <li>• It is ranked according to importance.</li> <li>• People pay for this information.</li> <li>• Police and local council announcements are free</li> </ul> <p><b>CAT Information Dissemination</b></p> <ul style="list-style-type: none"> <li>• CATs narrowcast at 9:30 pm and or in the morning at 6:30am.</li> <li>• Emergency information runs immediately.</li> <li>• Each announcement is given between two to three minutes.</li> </ul>
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<p><b>Theme Three</b></p> <ul style="list-style-type: none"> <li>• Opportunities and challenges faced by CATs and the individual.</li> </ul>	<ul style="list-style-type: none"> <li>• CAT presenters/proprietors.</li> <li>• Local, district and national CATs stakeholders</li> </ul>	<p><b>Opportunities</b></p> <ul style="list-style-type: none"> <li>• Cheap for community. Listeners do not bear any financial burden like buying cells to receive information.</li> <li>• Cheap to run</li> <li>• Can fit in a very limited space.</li> <li>• Mobilising tool</li> <li>• Not limited by time</li> <li>• Within community (people do not have to travel).</li> <li>• It is strictly local</li> <li>• Best for local emergencies.</li> </ul> <p><b>Challenges</b></p> <ul style="list-style-type: none"> <li>• Complaints from some community members over noise</li> <li>• No licence</li> <li>• No CATs trade union</li> <li>• CATs use cheap old technology</li> <li>• Dependent on weather</li> </ul>

		<ul style="list-style-type: none"> <li>• They are not regulated.</li> <li>• Presenters are not informed of media ethics and technical subjects</li> <li>• Sometimes people abuse CAT power by mobilising for wrong reasons.</li> </ul>
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*Table 5.4: A summary of the findings of the study according to themes/research questions*

## CHAPTER SIX

### DATA ANALYSIS: ASSESSING AUDIENCES AND COMMUNITY AUDIO TOWERS

#### Introduction

The current chapter follows up with an analysis of the data that is presented in the previous chapter. This chapter is arranged according to the themes created from the research questions. The first part analyses data from the first research question which sought to understand the level of individual dependency on CATs. In this section specifically, the meaning of the quantitative data obtained from the questionnaires is given. The second section provides the analysis of data obtained for the second research question. This includes a discussion on the individual goals that CATs help to fulfill and the towers' information gathering, processing and dissemination techniques. These are analysed in order to show how the CATs are sustained by attracting individuals to listen to them. The last section of this chapter debates research question three data by analysing the opportunities and challenges cited in Chapter 5. To make an assessment of CATs and their audiences, the theories of participatory communication and Media System Dependency (MSD), alongside some of the literature that was reviewed in Chapter 2, are used. Specifically, for the parts of data that deal with how communities depend on CATs, the MSD theory is used while the explanation of the nature of the media in question (CATs) is done using the participatory communication theory and community media literature identified in both chapter 2 and 3. Firstly however, as a reminder, some major demographic data presented in Chapter 5 is summarised below to prepare ground for analysis.

Several studies in Uganda before this one have explored the issue of media use (Nassanga *et al.*, 2013; Manyozo *et al.*, 2013; Semujju, 2013), and the differences and similarities, when compared with the current study, are apparent. For example, while radio has been identified to be used by 82 percent of Ugandans (Semujju, 2013; UBOS, 2014), the current study shows radio usage to be at 52 percent in the sample communities, lower than CATs' 80 percent listenership (see figure 5.10). This discrepancy is accounted for in the next section. The data from the survey (N=100) further reveals that the typical CAT regular listeners are younger, between 21 and 30 years and the second most listening audience group is between 31 and 40.

<b>Age</b>	<b>Everyday</b>	<b>A few times a week</b>	<b>A few times a month</b>
18-20	4	1	1
21-30	45	13	0
31-40	17	4	1
41-50	9	0	0
51-60	3	0	0
Above 60	2	0	0
<b>Total</b>	<b>80</b>	<b>18</b>	<b>2</b>

*Table 6.1: Age distribution among CAT listeners.*

The biggest audience group, as this study shows, are self-employed or blue collar workers who earn slightly above \$40 a month from their small scale informal retail enterprises. This matches the previous data on radio usage and income status (Nassanga *et al.*, 2013; Manyozo *et al.*, 2013). The other indication from this study is that such people work fulltime in their own businesses.

<b>Work Status</b>	<b>Frequency</b>	<b>Percent</b>
Employed full time	28	28.0
Employed part-time	2	2.0
Self-employed	58	58.0
Unemployed	11	11.0
Student	1	1.0
<b>Total</b>	<b>100</b>	<b>100.0</b>

*Table 6.2: Work status of the respondents*

In terms of education level, most of the respondents who reported that they paid attention to the CATs everyday are either primary or secondary school leavers. However, with regard to standards of living, 72 percent of the people who listen every day have electricity in their houses (the national average of people with electricity in their households is 20 percent) while 28 percent do not. Those who do not have electricity therefore have to buy batteries for radio sets. Most of them will not be able to watch TV at home. Twelve percent rely on the village well as their water source which is free; 48 percent get water from a communal tap (at a fee), while only 24 percent have water inside their houses. All these household bills and expenses have a bearing

on what channel someone decides to use to access local information. However, a higher radio ownership is reported in this study compared to the national average of 59.6 percent reported by the most recent census (UBOS, 2014). The current study indicates that 62 percent own a radio set although they listen to CATs every day. 16 percent own a radio set but listen to CATs once a week while 20 percent of the people who listen to CATs do not own a radio set. These findings have implications for radio usage and CAT listenership in Uganda. They indicate that each of these platforms is important in its own right. CATs have been theorised in Chapter 3 as community media and therefore acquire their relevance by reaching out to community members with local information to achieve what Susan Forde *et al.* (2003) refer to as cultural empowerment. Radio on the other hand occupies a position of a channel that gives the communities information about other communities (whether within or out of the national boundaries). The above media characteristics of the respondents aim to assist the reader to follow the upcoming analysis of CAT narrowcasting in Uganda.

#### **Analysing Data for Question One: The level of individual dependency on CATs**

Chapter 5 notes that the level of individual dependency on CATs is higher (Mean = 4.78; SD = .46) than the level of individual dependency on other platforms. This finding leads further to the following three conclusions from the statistical analysis. One is that people in rural areas depend more on, not only CATs, but mainstream media platforms as well, than the people in semi-urban communities. For this conclusion, the Chi-square analysis revealed that differences in income are responsible for the variations in dependency than the location of the towers (whether rural or semi-urban). More details are given about this later in the Chapter. The second conclusion is that the dependency on CATs is higher than that of Radio, TV and Newspapers, while the third conclusion is that CATs in both rural and semi-urban communities are the only platforms depended on every day. Three major factors can help to explain the nature of the above CAT dependency. These are locality, affordability and inclusivity, as addressed below.

### *Locality*

Local information is needed more by the community than the kind of information that community radio in Uganda gives which, due to commercial, political and several other influences, fails the objectives of providing unconditional local information (Musubika, 2008). The local information is counter-hegemonic (Downing *et al.*, 2001; 2016) and helps the local people to connect with each other (Atton, 2001; Atton and Forde, 2016). The findings that show a high dependency on CATs (presented in the previous chapter) mean that communities prefer listening to what is happening within their community than listening to affairs from other communities. This is so because data in Chapter 5 suggests that CATs give local information within a limited village radius (Gumucio-Dagron, 2001) while radio, including community radio (in Uganda) merges several villages (or districts) and calls them one “community”. Although some of the village members in Nassuuti and Nyendo listen to radio to be informed of what is happening elsewhere (in other villages), CAT information is more local and useful (Tabing, 2000; Gumucio-Dagron, 2001; Semujju, 2016b). The above point of local information and how it differentiates community media (in various types) from mainstream media is widely understood in community media rhetoric as the basis of community/alternative media practice. The relevance of local information and local processes of handling information are highlighted below:

A majority of programming is locally produced and is relevant to the needs of the poorest in the community. This includes the promotion of dialogue and debate on issues of education, health, legislation, human rights and social organisation, among others...Broadcasting needs to be in languages spoken by the community and that respects local cultural beliefs and practices. (Gumucio-Dagron, 2008: 45).

CATs’ locally-produced content retains the relevance of information designed, first of all by village members, to inform themselves about the events happening in their villages. It is not surprising that any event aired on the towers and the names of the people involved in the event are familiar to all village members. In addition, both the source and the person announcing from the towers are all known to the rest of the village members who are targeted to receive the information. This invites in the relevance that is cited in the above quote. In addition, the local

content-producer and the entire local communication system is likely conscious of the cultural beliefs and behaviour in the community.

The locality of information was stressed by one informant saying that “CAT news is local and so it is in the dialect used within the village” (Godfrey Kibuuka, Manager Broadcasting at the Ministry of ICT, interview, 20 August 2014). The advantage with this is that all the village members can understand the information. Radio may do this too but sometimes it uses experts who explain complex ideas in the official language (English in Uganda’s case) (Carpentier, 2001: 210). Such experts are “an obstruction to people-centred processes” (Manyozo, 2010: 266) and they embed an agenda in the news with aims of maintaining their power. Community radio too use local experts (like model farmers) who use local languages but this hierarchy of credibility (Atton and Wickenden, 2005), which assumes that influential people are the ones who are asked to participate in radio programmes, goes against the idea of voice for all because influence reduces the trust people have for media (Meyen and Schwer, 2007). Having the same community members talking to the rest of the community, instead of the random approach used by CATs where everyone can take information, reduces the participatory idea to a mere representative approach used in mainstream media where the journalist represents the public. In Uganda, this additional challenge for community radio is a positive attribute for CATs. Everyone who has an issue to say will take it to the towers whether or not that person is an expert farmer, an unemployed community member, or something else. Under circumstance, CATs facilitate the perception of radio as a medium for ‘foreign news’, bearing in mind that the towers redefine the meaning of “local” to mean only one village in which everyone is an information stakeholder. Both districts have radio stations located within their boundaries. For example, Mukono district has three stations (Bob FM, Radio Dunamis and Kyaggwe FM) while Masaka has six (Radio Buddu, Radio Equator, Best FM, Masaka FM, Buladde FM and Impact FM). The co-existence of radio and CATs also implies that each channel is important in its own right for a certain kind of information (Semujju, 2016b) but above all, it emphasises the locality of CATs.

Since locality of radio is too wide, some community members find themselves listening to content from other districts because radio would never commercially survive by serving only one village (Semujju, 2016a). This entices the community therefore to maintain radio for “external”

content and take on CATs to know about their own villages. The fact that media in Uganda neglect local issues has been raised by the public, through demanding more programming in local languages (Chibita and Kibombo, 2013: iv). The high dependency on CATs therefore comes from the fact that the towers fill the vacuum created by mainstream media.

Another perspective of locality is that the CAT information comes from a channel that is run by a village member. Being run by one of their community members is an added advantage of the validation of the channel by the community, something that makes them feel powerful (Manyozo, 2007). Theories of power suggest that having power “increases the tendency to approach and decreases the tendency to inhibit” (Anderson and Berdahl, 2002:1362). By considering themselves powerful for having a platform among them, the community members develop a need to communicate but if they have no platform among them, they withdraw back and go along with their ordinary life, leaving the powerful who have means to tell them (the village members) what reality is (Fuchs, 2010). If it is the local member who runs the platform, as the case is in CATs, the tower becomes easy to approach and the feeling that ‘if one of us can communicate, I can communicate too’ develops. Due to the commodification of information at multiple layers of society like community, town, city, globe, marginalised people have to use the available (affordable) technology to reprise the communication skills that have kept them surviving for a long time (Morris and Meadows, 2003). Village members in that case are able to define their own reality and negotiate and interpret life on their own terms. Having a community member managing a channel makes the community feel like the presenter is actually “one of them” (Meadows *et al.*, 2007: 28).

Additionally, being local also helps to challenge the western media paradigm of reporting conflict and scandals (Shamsuddin, 1987). This challenge is important because common Western news values, such as conflict, oddity, prominence, and several others (Kisuke, 2004; Alina, 2013) when applied to Africa, leave many events and issues untouched. Values like prominence isolate the community members who are not famous even when such people have something to say. The way mainstream media assimilate western news values in covering communities is by going to the two communities and covering conflict (whenever there is one), prominence (whenever a prominent person goes to the community) or whenever communities face natural

disasters. Even then, the report is always about such passing events and not the village. If not the above, then the two communities receive information about celebrities, gossip and news from other areas around Uganda through radio and TV mostly. Since media are supposed to be a mirror in which society is reflected (Nassanga, 2008), communities always receive images of other communities in their mirror from mainstream media. CAT news reverses such a “foreign” influence and localizes content to suit the village interests and this increases dependency.

### *Affordability*

On the other hand, the popularity of CATs can be argued from a financial point of view (affordability). Other media like Television for example, require that, first of all, one buys a TV set. The amount needed to buy one TV set is equivalent to the amount that could purchase over 90 small radio sets in Uganda (Davis Kiwala, TV and Radio set retailer in Kampala, interview, 17 August 2015). The current price for a 32 inch digital TV set is \$ 343(for the Hisense brand) which is the cheapest, and \$ 386 for the Sony brand, which is the most expensive on the market (Davis Kiwala, TV and Radio set retailer in Kampala, interview, 17 August 2015). Radio on the other hand, apart from the fact that several mobile phone brands have FM stations, costs about \$4 (this price is for a radio set as small as a mobile phone). Since June 2015, the government switched broadcasting (TV first) from analogue to digital and so people who own TV sets had to buy digital TV sets or keep their old TV sets and buy digital set-up boxes. Each of the two options costs more than most of the respondents earn a month (between \$29 and \$40) as data indicates in Chapter 5, figures that are still better than Uganda’s minimum wage which stands at shs 6000 (\$1.71) a month (Nassaka, 2015). No wonder the switch-over from analogue to digital has been criticised by prominent African scholars noting that switching African countries to digital technology, when the continent still suffers from challenges of radio and TV access, is producer-oriented (Berger, 2010; Banda, 2010). The main argument raised by the above critics is that the West is using Africa as a market for its digital products. Within the areas where data was collected, the digital switch-over only affects the 45 people who said they watch TV every day in the study’s sample as the majority of the respondents listen to CATs and other more affordable channels.

From the above profile of self-employed blue collar workers who own mostly small scale retail shops or hawking business, the idea of depending on a platform that is cheap to use is logical.

For example, the choice of maintaining a communal well as a source of water means that people are trying to avoid expenses they cannot afford of buying water from another person's compound or having water in each individual's house. Such people are good candidates for a communication platform that takes their financial status into consideration while at the same time gives them information that is useful (Nyombi Thembo, State Minister for ICT, interview, 24 August 2014). Among Ugandan media users, this implies that the level of income determines choice of channel. The broad assumption of why there is a move from radio, a cheap communication channel (Ojebode, 2008) to even a cheaper one (CAT) is that people try to minimise expenses that come with information access (Price-Davies and Tacchi, 2001). The "Omni-presence" of CAT information links the concept of affordability to access since community members access information from inside their residences or places of work, provided their places of work are within the boundaries of the village in which a CAT is located. This access for everyone links CATs to the second participatory communication location described in Chapter 3 where the development idea (CAT) is bottom-up and grassroot-run (see Freire, 2001; Mhlanga, 2015). The first participatory location, which includes donors or top-down support to the local communication efforts (Mefalopulos, 2008), and the third where participation is aided by digital media (Castells, 2012) are not used by the two communities under study in relation to the towers. Generally however, CATs fit under the notion of participatory communication by promoting cultural identity (Servaes, 1996) and social mobilisation (Escobar, 2006).

The concept of CATs as an affordable communication avenue was confirmed using Chi-square analysis in chapter 5. The findings suggest that income status, and not location (rural or semi-urban), is responsible for increasing the level of individual dependency on CATs. To put this finding into perspective, the following comment about radio amidst the poor in the developing nations is crucial.

For much of the developing nations, especially in Southern Africa, without access to electricity, telephones, internet and television, radio is the only reliable, affordable, pervasive and extensive avenue for information and knowledge exchange that the majority of poor citizens can afford. (Manyozo, 2007: 11).

Manyozo's argument is valid in Southern Africa where radio responds well to the communication needs of the poor people who lack access to electricity, and several ICTs like TV and phones. However, in less privileged economies like Uganda, where there is even less access, even radio fails to live up to the expectation of providing local information to the village people at no cost (Semujju, 2014). CATs therefore do for Ugandan villages what radio in the above comment does for the poor citizens in Southern Africa.

Affordability can be explained using the MSD assumptions given in Chapter 3 above. Since "MSD relations occur when individuals find themselves in ambiguity like structural alienation, poverty, conflict, illiteracy, confusion (Ball-Rokeach, 1998: 15), community members who find themselves without enough money to afford other media resort to CATs for free access to local information in order for them to fulfill the sole goal of understanding. Additionally, lack of local information could be an alienation that community members connect to CATs to avoid.

#### *Inclusivity*

Apart from locality and affordability above, a comparison of CATs to newspaper brings in the idea of inclusivity (as opposed to elite news which excludes some village members) as an explanation for CATs dependency. The newspaper, besides demanding that a person pays at least more than half a dollar every day for 30 days a month, gives access to news mainly to elites (Shoemaker and Reese, 1996; Mpoza, 2009). It requires that one knows how to read and since some people in the sample are primary and secondary school drop outs (29 and 43 people respectively), this also is not an option. Only 5 respondents had post-secondary qualifications in form of a certificate, diploma or degree (See Chapter 5). The national education figures from the census show that 40 percent of Ugandans dropped out of school at different stages while 19.3 percent (7 million Ugandans) have never been to school (UBOS, 2014). CATs therefore remain the communication platform of choice for people in marginalised areas. This is why this study suggests that literacy/illiteracy relates well with the channel that people depend on for information.

Literacy also relates with complexity, in that if an idea (in this case a communication channel) is complex, the rate at which people accept to use it will be low (Rogers, 1995). Although Everett Rogers criticised his own diffusion of innovations model as Western (Singhal and Obregon,

2004; Manyozo, 2010) in that the model explained how innovations spread in the Global North, the low education levels in Uganda (see Chapter 1 and the demographic data at the beginning of this chapter) and the low penetration of ICTs cannot be a coincidence. Using the MSD theory assumptions, illiteracy (and or semi-illiteracy) can be cited as one factor that increases dependency (Ball-Rokeach, 1985) on channels that do not require one to know how to read. Additionally, the three participatory communication locations cited above indicate that local communication efforts tend to use a language that members of the same community understand in addition to relevance of information (Servaes and Lie, 2013; Chiumbu, 2010). This is reflected in the figures by the latest census noting that seven million Ugandan adults have never been to school (UBOS, 2014). Communities therefore adapt to a media channel that, in the case of CATs, will accommodate their level of education in terms of operationalisation and content. The relevance of the MSD theory to this study manifests by using the semi-illiteracy in which most people in the areas of Nassuuti and Nyendo find themselves to explain why community members depend on CATs every day. Lack of education, together with poverty, is a structural alienation noted in the MSD theory that entices some community members to depend on CATs.

The other idea that data reveals is that rural communities depend on communication platforms more than the semi-urban communities. In Mukono for example, although individuals listened to CATs every day, they do not match their counterparts in Masaka (there is a difference of 10 percent). Economic level of the respondents (as identified above) helps to explain the gap in listenership. Although research on CATs is very minimal, studies on media usage help to account for the above differences between the rural and semi-urban districts. First of all, while “media usage patterns and preferences are not homogeneous” (Croucher *et al.*, 2009: 44), the common factors that explain usage of media are education and income level. Croucher *et al.* (2009) made this conclusion while investigating how French-Muslims used media. The people who had a low income level with low education tended to use more ethnic media than their counterparts. The study noted above that location of a CAT does not determine how much individuals depend on CATs. The Chi-square data therefore points to a conclusion that both areas (rural and semi-urban) have individuals who are economically underprivileged. The more challenges of income persist, the more community members will depend on a certain media for solutions or because it

is the most affordable or most relevant. To reduce the costs of information access therefore, in addition to getting local information, the individuals listen to CATs.

To support this conclusion, data (Table 5.3) indicates that those respondents that are in a financially poorer state (earning below \$14) than the rest of the community, do not listen often to CATs or other media. Only 5 percent of them listen every day. The nature of jobs these people do can be used to explain why they have no time to listen to CATs. For example, if someone spends a lot of time in the garden, information on a CAT may pass when he/she is away. Those who are financially better than the first category, earning between \$14 - \$28, have a higher dependency than the first category to an extent that about 42.5 percent of them listen to CATs every day. The highest number of listeners under the everyday category is 52.5 percent and these people earn above \$28 dollars a month.

Variations in jobs would also help to explain the differences in usage between rural and semi-urban CATs. Most people in the semi-urban area do the type of work that may make them mobile most times and this makes them miss out on CAT information. Methodologically though, these differences could be explained by the fact that sampling for this study was based on willingness to participate and random-walk sampling but not education or economic status. Additionally, the scale that was used to determine the respondents' income (see Appendix 1) is not based on how much exactly people in those areas earn because majority of the respondents do not work in the formal sector to receive a monthly salary. The study instead estimated how much they would be "earning" from all possible sources of cash and created a scale with the lowest amount being \$14 and the highest being \$28 and above. The reality in the areas where data was collected is that some people survive on food from the garden. But they can obtain some cash for example by selling a basket of beans to get transport fee to attend a burial of a community member who died or to solve another problem that may have arisen. This kind of income would be hard to quantify and later used to make major conclusions about CAT listenership.

However, the MSD theory explains that the more people find themselves in a compromising position, in this case the position of poverty, illiteracy, lack of local (village) information, the

more they will listen to and trust CATs (Ball-Rokeach and Jung, 2009). The only difference between theory and data is that the definition of “a compromising position” differs as already noted above. Therefore, the poorer the area, the more CATs will be a useful communication platform to appeal to the community members because of their ability to concentrate on local problems affecting the community at no cost. This has also been supported by the literature that was reviewed in Chapter 2, indicating that outside Uganda, CATs have been used by developing communities in the Philippines (Dagron, 2001) to receive farming information, Thailand (Tabing, 2000) for farming and health information, and Ghana (Chapman *et al.*, 2003) for the extension of agricultural programmes. The common content factor among other countries outside Uganda is agriculture, although in Uganda CATs include several other subjects. Due to the fact that in all the accounts of the three countries above, the scope of the studies (Dagron, 2001; Tabing, 2000; Chapman *et al.*, 2003) is not specifically to detail how CATs work, future comparative studies of CATs across cultures are therefore necessary.

On the issue of trust, the minimal studies in Uganda still indicate “a level of distrust for the truthfulness of the content of many of the broadcast media” (Chibita and Kibombo, 2013: iv). Findings on trust (Figure 5.11) do not differ much from the data on listenership (Figure 5.10). The rural (Masaka district) respondents listened to and trusted CATs more than the semi-urban respondents and the differences in the demographics above are responsible for this variation in trust as well (see Chapter 5). Trust of a CAT can be explained based on community media concepts of locality and inclusiveness (Forde *et al.*, 2003) because data indicates that the order of usage (listenership) and trust is highest in CATs, followed by radio, then television and then newspapers (See Chapter 5). Among the community media characteristics that CATs have, which can be used to explain why some community members trust the towers, are community ownership (the towers are non-government communication channels), community participation and community access (Mtimde *et al.*, 1998; Ali and Conrad, 2015). On the other hand, trust also relates to how connected individuals are to the message given. Information about the village can be trusted because it is from the village members themselves.

The understanding of trust in CAT information is still speculative as the academic attention given to the towers is still low. Trust, however, has been investigated in mainstream media. In

news media, trust is based on four factors including: “selectivity of topics”, “selectivity of facts”, “accuracy of depictions” and “journalistic assessment” (Kohring and Matthes, 2007: 232). These help to understand whether or not readers trust news media. Both questionnaire data and data from the key informant interviews point to the fact that CAT topics and facts come from the audience. What lowers a channel’s credibility has also been noted as having inconsistencies in the same or various sets (stories) of information (Meyen and Schwer, 2007). However, for CATs, community members can simply walk by and witness/observe the events the tower announces thus increasing the credibility via the tower’s focus on local context. In addition, it is usually the community members who take this information to the towers. Other channels that do not attract this level of verifiability were trusted less as it is possible for them to lie and exaggerate information.

Apart from the above factors that explain the high CAT dependency, such dependency has theoretical implications too. The sustainability of the media depends on the tripartite relationship between the media, society and the individual as the MSD theory notes. The MSD theory notes that there is a symmetrical relationship between the media and the society whereby media depend on the society to provide security in terms of stability, finance (advertising), policy, legal security, and others (Ball-Rokeach *et al.*, 1990; Cheng and Lo, 2012). Media therefore reciprocate by providing a platform for articulation of the issues for society. However, CAT dependency relations differ from the theory’s hypothesis above. The symmetry of CATs is instead more with the individual than society (note society to include government, advertisers, and several other stakeholders with resources that media need to survive) (Ball-Rokeach *et al.*, 1990). The MSD relations between the individual and CATs are symmetrical while the MSD relations between CATs and society (explained in Chapter 3) are asymmetrical. This means that it is the individual who provides CATs with resources for sustainability. Government representatives, like the local council chairman, the police and the district leaders rely on CATs whenever they need the local people to know about a government’s plan. This differs from radio and other media where government provides policy, legal resources, adverts, and commentators for media sustainability. The CATs-government relations are devoid of such resources. CATs provide a platform for government information at no cost. Instead, it is the individual who sustains CATs with information and money, which is also contrary to the MSD theory

assumption that the contribution of individuals is indirect (Ball-Rokeach and Jung, 2009). Most importantly for this study, as noted in Chapters 1, 2 and 3, the MSD theory was not created to explain dependency relations in small media. It was created to explain the tripartite relationship between mainstream media, society and the individual (see Chapter 3). However, without the MSD theory, dependency relations in small media may not be explained at all for lack of a small media theory that explains how individuals depend on alternative or small media.

There is need, therefore, for new theoretical articulations to accommodate the CATs dependency relations (addressed in Chapter 7). Additionally, the data (from both the questionnaires and key informants) that shows community members taking information to the CATs implies that the individuals have power over what information goes on a CAT. Such local media then become the channels that can empower the local person to manage and own his/her communication initiative and decide what information is to be narrowcast and what information is irrelevant for development of the village (Musubika, 2008). Such an initiative in the Global North (and some countries in the Global South) is led by interactive “mobile instant messaging systems (via Whatsapp or Facebook Messenger)” (Abeele *et al.*, 2016) which offer communicative affordances (Haciyakupoglu and Zhang, 2015) for social development. However, even in the Global North, “cost is a factor influencing instant messaging application use” (Bailey *et al.*, 2016: 1235). Among the sample communities for this study, digital media are not a luxury that individuals can afford.

In relation to the traditional media in Uganda, locality, affordability and inclusivity above are not provided as CATs do to the communities. Traditional media instead try to strengthen their relations with government and other big society stakeholders like advertisers and celebrities (Lukanda, 2011) as theorised by the MSD macro relations (Power, 1995; Li, 2013). The individual power is also evident from the fact that people choose the subject and what channel to discuss that subject from (Williams and Labonte, 2007). This is in comparison with the radio, TV and newspaper arrangement where the communities wait to receive whatever the communication/media experts put out.

This study suggests that the high CAT dependency has implications for communication for development (discussed in Chapter 3) practice too. The communities understand community media as including smaller channels like CATs. Previously, the community radios existent in the country were run using the politics of numbers. On the website of one community radio (Kagadi-Kibaale Community Radio), it is indicated that the radio serves 1.8 million listeners. The website indicates where all the listeners are, including various districts in Uganda (Uganda has 112 districts) and some places out of Uganda (since the radio is located in south west Uganda near the Rwandese and Congolese borders) (Lukanda, 2011; Nassanga, 2013). All the 1.8 million listeners receive the same information collected from within the vicinity of the radio because there are no funds to gather information from all the three countries. While community media are theorised as an alternative to mainstream media because they serve “specific communities” and are “small-scale” (Carpentier et al., 2008: 354), the Ugandan example above violates the principles on which community radio should be established. This is because the information that is gathered around the station (since there are no funds to gather information from all the three countries) is of no specific use to the village person whose events have not been covered by the community radio.

### **Analysing Data for Question Two: How do CATs depend on the individual resources?**

The MSD theory suggests that media must help the individual to achieve the goals of understanding, orientation and play (Ball-Rokeach and DeFleur, 1976; Westgate, 2008; Lee, 2012; Li, 2013) for them (media) to gain acceptance. As the data presented in Chapter 5 suggests, the main goal that CATs fulfill is understanding. From the MSD theory, “understanding goals are achieved when facts about an external event are required” (Maxian, 2014: 284). The goal of understand is explained from the social and personal points of view (Ball-Rokeach and Jung, 2009; Jung *et al.*, 2012). The social view of the understanding goal is when a community member surveys the world around him/her (Tai and Sun, 2007). The intention is to understand what is happening in the person’s surroundings. The personal view of the understanding goal, on the other hand, relates to connecting to media for the community member’s own self-reflection (Jung *et al.*, 2012). The CATs, even within the goal of understanding itself, relate well with the social view because they mainly announce what is happening in the village. Due to the lack of entertainment programming, the towers do not help

the individuals to fulfill their play goals. The only case closer to entertainment is when the towers play a song. However, the song that they play, locally called *Walumbe Zzaaya* (literally translated as ‘Death that takes’) (both towers play that same song) is a local song that personifies death by presenting it as a bad person who is out to claim innocent lives. At both towers, the presenters said that this song mainly is used as an introduction and a warning to the village that someone is dead (Semujju, 2016b). Immediately after that song, the death of a village member will be narrowcast. All responses in the questionnaires also confirmed this fact saying that whenever the CATs open with that song, everyone stands still and listens because the village knows that a community member has died.

Therefore, the main goal that helps the CATs to attract the individual (increase the dependency discussed in relation to research question one) is understanding. This has implications for both MSD theory and CATs theory. It shows that the MSD theory does not explain CATs adequately and so creates a gap for independent theories to explain CAT dependency relations. Internet studies in the MSD tradition have also defied the MSD articulations to create their own goals as “information, communication, entertainment and news” (Patwardhan and Yang, 2003; Melton and Reynolds, 2007: 127), “communication/entertainment; expression/participation; and information/research” (Jung *et al.*, 2012: 969), and “information, entertainment, and interpersonal connection” (Sun *et al.*, 2008).

Because of the enormous opportunities afforded by the internet, but also because of the intricate and ever-evolving constraints inherent to the internet, the sub-field of alternative and community media has, in my view, been over-emphasising the role and importance of the internet to the detriment of other media formats that remain highly relevant in the contemporary communication-saturated and polymedia environment in which we live. I could refer here to the remaining importance of print cultures – whether through text, flyers, pamphlets or the visual imagery present in street art, posters, stickers and buttons. Likewise, audio, radio and film still play very important roles as alternative media in their own right. I would thus like to advocate for more research that focuses on the remaining importance of non-internet-mediated media for the production and distribution of alternative – counter-hegemonic – content. (Cammaerts, 2016: 2 -3).

Cammaerts' note above is relevant to this study in a way that it supports conceptualising communication platforms using a cultural-centered approach. While the internet is very ubiquitous in several countries, and indeed in some parts of the capital of Uganda, millions of people still do not have access to the internet or the gadgets that enable internet in Uganda. However, these internetless people have their own ways of sending and receiving information. One of these ways (CATs) is under investigation in this study. For CATs, there is need for scrutiny to know more about the only goal (of understanding) they fulfill and above all, suggest new assumptions to explain CAT dependency relations (provided in Chapter 7). Most importantly, the dependency of community members needs to be looked at not only as coming from structural factors (presence of a CAT) but also as a result of a combination of “contextual factors (social environment)” that the individuals live in (Tai and Sun, 2007: 990). The contextual reasons for depending on the towers or the existing factors that increase dependency (Ho *et al.*, 2015) on CATs, among the rural and semi-urban communities sampled by this study, are mainly locality, affordability and low education (inclusivity) levels (discussed above). Due to the intervention of such factors, and by providing individuals with information on what is happening in their community and the chance to determine what they want to hear on CATs (since it is the individuals themselves who take this information to CATs), the CATs are able to survive and get a higher dependency compared to the mainstream media channels accessed in the area.

The timing of the narrowcast also is used as a technique for survival. Whenever the tower starts to narrowcast, it means there is an important message for the community. The timing even signifies more importance if the CAT is switched on at a time when it should not be. This implies emergency and most times it might be danger. The local information therefore has the potential to mobilise the individuals (Chapman *et al.*, 2003) to participate in the protection of their own area because development cannot be achieved when a village has insecurity.

The data in the previous chapter generated three processes, from the second thematic area, that CATs use to increase individual dependency. These include gathering, processing and disseminating of information, as addressed below in details.

### *Information gathering*

Understanding is aided by the processes of information gathering, which is done by community members taking information to the towers, through mobile phones, direct contact between community members and the presenter away from the tower, and finally through opinions generated by the presenter about the issues he sees, by the virtue that he lives in the same community.

The local approach to information gathering, where community members gather their own news without professional help from journalists or any other influence that ordinarily handles news is proof of participation taking place within the second location of the participatory communication theory (Freire, 2001; Mhlanga, 2015) detailed in Chapter 3. This kind of community engagement promotes empowerment when community members interpret their socio-cultural life through their own local skills and efforts (Cox, 2014). Such local skills are not new to marginalised communities because the communities have been using them for centuries to survive (Morris and Meadows, 2003). This only changed when information became commercialised and mainstream establishments took the skills of information gathering over and made them commercial by professionalising them, rendering any further community information gathering efforts unprofessional (Nassanga, 2008). As a multi-layered process, empowerment starts when the individual realises what he needs to do (Williams and Labonte, 2007), which grows from the individual consciousness to groups and eventually to the entire community. This was exemplified in the data by cases of individuals who go to the tower to report accidents of fellow community members even when the deceased is not a relative of the person taking information.

The fact that community members are willing, but mostly are able to act as journalists in their own community, to decide what information should be taken to the towers, informs the fact that local people have the power and the potential to communicate (Melkote and Steeves, 2001; Thomas, 2015). This comes with the biggest advantage of local people getting space to exhibit their own culture (Mboti, 2014) instead of having professional journalists making money out of the local content by exhibiting it in front of the entire nation using conventional media that is for sale. The moment profit maximization is closed out of the window, community members are able

to mediate between local issues or information without a rush and without having to worry about limited space due to competition. This retains quality of information as it promotes originality in information gathering.

The combination between information channels and mobile phones in conventional media promotes a new form of journalism called MOJO or mobile journalism (Marymont, 2006; Quinn, 2009; Nassanga and Semujju, 2015) which helps the journalists especially reporters in the field to be able to report or work on their material and submit at anytime from anywhere. In other community media, like community radio, new media can facilitate dialogue between the stations and the communities (Chiumbu, 2010; Bosch, 2014). Yet on the side of the audience, the combination of a mobile phone and radio, especially through call-in programmes, facilitates three major roles of “patronage, politics and performance” (Stremlau *et al.*, 2015: 1510), where “patronage” deals with promotion of the sociology of the community, “politics”, for building political careers through getting known on air, and “performance”, which includes mostly connecting with others.

For CATs, this combination helps especially in terms of life-threatening situations like emergencies (Olivia Nakanwagi, Masaka District Information Officer, interview, 19 July 2014). Such emergencies include thieves breaking into a neighbour’s house. In a way, CATs and ICTs are linked to security and protection of the community more than anything else. There are still variations in usage of a mobile phone between local communities and national or international communities. In the Global North for example, “users prefer text messages instead of physical appointments” (Ley *et al.*, 2013: 816). Due to education and economic factors, the rural and semi-urban community members prefer voice service (Nassanga *et al.*, 2013), despite the fact that texting is cheaper than calling. By the virtue that mobile phone usage was only linked to emergencies and other very rare cases, it means the majority of the community members may not be able to afford mobile phone services in the process of information gathering.

Nevertheless, if this emergency was to be reported on radio or TV, it might not get through because radio and TV handle data in big volumes. For instance, one study has found that one community radio in Uganda receives over 60 call-ins a day, which create phone jam (Semujju,

2012). Such a situation can be risky to the lives of people who might have been saved by the announcement of the emergency. The other important idea is that CATs allow the community member who is within the community to call the presenter who also lives within the community. This means that the presenter is well aware of the geographical terrain of whatever emergency he is narrowcasting to the people. On radio or TV, the presenter might not be aware of what area has a problem, since information comes from hundreds of villages. In addition, mainstream media broadcast this information to the rest of the country, sending it to people in all possible corners, rendering credence to the term broadcasting (Hartley *et al.*, 2002). While that is happening, a community member may miss the information because he/she is listening to another channel that does not have the same information. This is possible because Uganda has 275 licenced radio stations (253 already on air) and all broadcast at the same time. Most importantly, mobile phones in CATs liberate crisis communication from the influence of corporations and governments, two entities that always want to maintain their image by sugarcoating reality (Ewart and Dekker, 2013).

### *Information Processing*

In order to help the community achieve the goal of understanding, local information processing is done. Literature on community first of all notes that the Nassuti and Nyendo communities are geographical communities (Tonnie, 1887b) that are devoid of virtual activities (Abfalter *et al.*, 2012; Pan *et al.*, 2014). The presence of ICTs in the “newsroom” is limited to very rudimentary machines used for dissemination like amplifiers and microphones. Using pen and a paper to process information therefore fits within the community media profile of the type of media that rely mostly on donations and handouts from well-wishers (Ali and Conrad, 2015; Gustafsson, 2016). As long as the written information is legible, there is no need yet for complex machinery that mainstream media use which tends to be very expensive to buy and maintain. Using the basic tools of information gathering (pen and paper) means the CATs respond to access, which is a very crucial characteristic of community media (Tabing, 2000). To provide access all the time, CATs remain within their financial ability because stretching finances to buy computers would mean stopping to narrowcast, since there is no money for computers, or looking for sponsors who might take away the local-centred ways of information processing (Dutta, 2011). There is no doubt about the potential of ICT to African newsrooms (Nassanga and Semujju, 2015;

Nassanga *et al.*, 2013; Manyozo *et al.*, 2013). However, for channels that deal with information that is gathered by a few community members, processing can be done without complex media machines. Self-processing of information, like information gathering, is another way through which local people can make a contribution to the country's general communication system as other types of community media like body mapping would have participants do (Govender, 2014). In grassroots comics as a form of community media, local people can be involved "to develop ideas, messages and direction for their respective comics" (Dicks, 2011: 64).

The information processing done by the community members in Nassuuti and Nyendo communities helps to avoid what Nyasha Mboti (2014: 475) calls the "glass case effect" in which the owner of the information resources or the community events is exhibited by an outsider who takes on the role of an omniscient narrator to the rest of the world, instead of the community person being the exhibitor him/herself. Mboti's image above of the community events or resources being caged in a glass by an outsider for the rest of the world to see helps to explain information processing by the communities understudy. The journalist previously was the exhibitor of the Nassuuti and Nyendo events and he/she exhibited these events whenever it was assumed that the events would attract an audience for that journalist's news outlet. What happens in the community instead is that the community members exhibit their own information (this requires an understanding of information as a resource) in a way they want to be represented, and in a way that benefits the community instead of benefiting the journalist or the media owner.

#### *Information Dissemination*

The third information resource, dissemination, also increases dependency on CATs. Among the theories of community media is the fact that such media serve the community to promote access, community management, and community participation (Carpentier *et al.*, 2008; Bailey *et al.*, 2008). The data already noted that CATs are managed by a member of the community, while community participation happens at the three levels of information resources: gathering, processing, and dissemination. To increase the MSD theory notion of dependency (Ball-Rokeach and DeFleur, 1976, Ball-Rokeach, 2014), and the development communication concept of access (Mtimde *et al.* 1998: 22; Lewis and Booth, 1998; Bosch, 2014b), CATs narrowcast at specific times of the day in the morning and in the evening. More people access this information since it

fits within its own time slot without interrupting radio and other media news. By the time information is disseminated, the community is free and ready to listen. One informant noted that “CATs are not a threat to the district because they are switched on for a very short time and they signal importance” (James Nsimbe, Mukono District Legal Officer, interview, 12 August 2014).

Another dissemination aspect that helps CATs to attract attention is in the nature of the disseminated message and the relevance of that message to the community. The community has activities that it considers very important for its survival for example, village meetings, which include updates on security, farming, togetherness, local criminal and civil justice system (where the village chairperson and his committee preside over village misunderstandings, and several other crucial community programmes (Tabing, 2000; Gumucio-Dagron, 2001; Chapman *et al.*, 2003). What makes CATs survive within the communities is the fact that all those village programmes are given priority in terms of letting the community know when and where the next village meeting will convene. This is local information which community members get interested in more than the information on radio and other media that may have nothing to do with the community (Wanyeki, 2000). The other aspect of the relevance of the disseminated information comes from understanding what the position of radio is, ideally thought to be for the development of the Global South. Because radio was able to circumvent the lack of electricity problem, since it was powered by batteries, and could be carried everywhere, especially for farmers who spent hours in the gardens, and cheap (Ojebode, 2008), it positioned itself in the academia as the champion of development among the media. Overtime, challenges have been identified, even within community radio, like over reliance on short-term donor support (Mezghanni, 2014), failure to get a special licence from several African governments (Kivikuru, 2006; Musubika, 2008) and a host of other challenges. In reaction to the challenges, radio has become overly commercial to an extent that even some community radios invite in commercialism in order to survive the competition created by digital technologies (Nassanga *et al.*, 2013). In the end, radio gives entertainment content. To balance the space for local/village content, CATs find themselves filling in a gap.

For radio to pay attention to such village programmes mentioned above, it would have to use analyses from experts, jingles, advertisements, magazine programs or even live talk-shows

(Ojebode, 2008). All this costs money to produce and broadcast. The same programmes, for which CATs do not have to spend on production, help the towers to attract the community members to listen and participate in the gathering and dissemination of information. Community participation in programmes that are aimed at improving community standards creates debate and dialogue on how the community can best approach a problem at hand (Figueroa, 2002). Since the community participates in generating CAT content, the individuals identify what information is desirable for the community, while paying some money for such information helps to allow the community to sustain its own communication channel (Servaes and Lie, 2013). In community radio, this space is covered by donor funding which tends to be for a short-term (Mezghanni, 2014). For CATs, a mention of the big problems is always made at no fee. For example, the top killer disease in both districts is malaria (See Chapter 1) which can easily be fought by informing the individuals in the community about what to do to prevent sickness. Such action points include sleeping in a mosquito net and what to do if one finds him/herself sick with the disease (Nakiwala, 2016). Therefore, CATs alert the community during the regular narrowcasts about a forthcoming health programme.

However, what needs to be studied by future CAT studies is whether or not, in the long run, CATs can make people take action on government or community programmes. Theories of cognitive processes of communication “or cognitive or psychological approaches to how people process mediated messages” (Lang, 2013: 17) have long argued that the selective processes (exposure, retention, perception) play a role in how people deal with information (Fourie, 2007). People may decide to remember only that information which is in line with their beliefs and attitudes (Dutta-Bergman, 2006). Such theories explain in general that communication systems have an influence on people’s thinking and that is why such systems influence people by “informing, enabling, motivating and guiding” them (Bandura, 2001: 265). Asking a family on a CAT to take a pregnant wife to the hospital may meet resistance from a belief that traditional birth attendants do a better job than hospitals. Besides, although such assumptions of communication systems influencing the audience are based on social cognitive or learning theories (Bandura, 1977), it is not easy to “definitely attribute a causal role to media” (Harris and Stanborn, 2014:31). This is because the social cognitive research tradition was applied to programmes like HIV/AIDS holistically without contextual definitions (Airhihenbuwa and

Obregon, 2000). Instead, this study suggests that future research on CATs needs to focus on how to deal with existing beliefs and attitudes to avoid cognitive dissonance (Baran and Davis, 2003) if CATs are to improve people's standards of living.

Finally, the dissemination of CAT information redefines the concept of news from the conventional media understanding of the same to the community meaning. In CATs, news means events or emergencies that are "localised or community-specific" (Meadows *et al.*, 2007: 2). Events become news because a community member has brought them forward to the CAT. In traditional media, such events would have to meet the criteria for oddity, prominence, and conflict for them to be considered as news (Cushion *et al.*, 2014). This is on top of the vertical structures that end with a reporter at the bottom who decides what events become news using the above news values (Alasuutari *et al.*, 2013). The redefinition of news by CATs therefore has to be understood through the structural lens. It is true that ideally community media should have a horizontal structure that favours the labour of unskilled community members (Carpentier *et al.*, 2008; Carpentier, 2016). The advantage of such a local approach to the meaning and gathering of news is that it brings back the communicative power to the local people since they decide what is important for their own community (Downing, 2016). The kind of news that comes from such a community information system is therefore counter-hegemonic without influence of the most powerful or the richest people within community (Cammaerts, 2016; Atton and Forde, 2016).

### **Analysing Data for Question Three: CAT opportunities and challenges**

The following section discusses the opportunities and challenges of CATs as generated from the third objective of the study. Opportunities and challenges were the two main themes that came out of the data set for the third research question. The section therefore begins with the opportunities created by CATs, followed by the challenges.

#### *Opportunities*

Several opportunities were identified in the data including the idea that CATs are used to mobilise communities for development. As Chapter 1 shows, the districts in which the study was conducted still suffer from health, education, social and economic problems. Their political economy is derived almost solely from farming. The five-year development plans for both

districts indicate that 8 percent of the people in Mukono district and 4.17 percent in Masaka have no toilet facilities on top of a high dropout rate for primary school pupils where only 48 percent of girls and 55 percent of boys who enroll in primary school finish (Mukono District Development Plan, 2010; Masaka District Development Plan, 2011).

### Mobilisation

CATs have the potential to mobilise the community on several issues, for example population growth. Population growth is a very serious issue that the Ugandan government is trying to address. This has led to projections from the national population body suggesting that Uganda's population is heading towards 47 million people in the next 25 years (UBOS, 2014). CATs can effectively communicate issues of fertility and how this can affect the local person down at the communities, something that has been done already by having district communication officers announcing government programmes through CATs (Olivia Nakanwagi, Masaka District Information Officer, interview, 19 July 2014; Betty Naluwoza, Mukono District Community Development Officer, Interview, 12 August, 2014). However, the mobilisation and information functions above can be problematic for CAT presenters since they are not highly trained people in that subject. In fact one of the presenters said he had studied up to primary school and was not well versed with writing English (Joseph Mugerwa, Presenter, *Voice of Nyendo*, interview, 9 July 2014). While community media pride themselves in using volunteers and community experience where education might not be a requirement (Atton, 2001), the real issue here is the fact that Uganda's population is on the increase even amidst several CATs and all other communication platforms. In terms of behavioural change, the role of information and communication has worked for Uganda before when in the early 2000s, the country reduced its HIV/AIDS infections in an effort referred to as a very compelling global HIV/AIDS prevention approach (Green *et al.*, 2006; Herman, 2008; Tumushabe, 2006). The President as a result was recognised by the Africa-America Institute (AAI) for leading this effort in 2003 (Nakazibwe, 2003). Mostly, information and communication sources promoted the ABC approach (Abstinence, Be faithful, or Use a condom), while the President used various media to emphasise early voluntary testing and counseling (Herman, 2008; Tumushabe, 2006). This, among other methods, included using HIV/AIDS experts. There is an opportunity that CATs should collaborate with experts from the government on different issues like population either for training or to get the experts to explain the issues in a language that local people understand. Since CATs are a quick mobilising tool, the

first location of participatory communication (noted in Chapter 3), where an external partner works with the local people on a development initiative (Mefalopulos, 2008), should be adopted if bigger development challenges are to be tackled. Otherwise, as the situation is currently, CATs mobilise well on issues for which the community can find its own local solutions without external help.

The problem under the expert issue is that as mainstream media are doing, the symmetrical relationship between media and society dictates that media attain resources from society (like revenue, expert knowledge, etc.) while society expects space and time from mainstream media in return (Westgate, 2008). This relationship leads to influence of the media channels either by advertisers or the government itself (Herman and Chomsky, 1988). As a matter of fact, Herman and Chomsky (1988) developed their propaganda model from that relationship, in order to explain how government and big business end up influencing media content (McQuail, 2006). Besides fearing the influence, dependency on a channel increases if people find themselves in an ambiguous or scary situation (Ball-Rokeach and Jung, 2009). We cannot tell for sure what would happen if CATs succeeded in convincing the community to abandon certain behaviours at a particular time and whether or not the community would stick to new behaviours if a new threat (like decline in a person's financial status) came along the way.

#### Cheap to run

CATs help the communities to fight problems by providing a cheap platform through which such issues get to be mentioned. This creation of voice and the discussion of the problems from a local context (Tacchi and Waisbord, 2015) leads to action. The private ownership of community information systems does not take away the fact that communities can still reap communicative benefits from the towers. In some community media, for example, although communities do not have “managerial ownership”, “they share the ownership of the station through access” (Manyozo, 2009: 4). Irrespective of the Marxist logic that such an individual possesses power over others and he might misuse that power, CATs promote participatory communication (Dagron, 2001). Studies on community radio however have noted that individualising information sources might lead to centrality of power relations at lower levels of community (Cornwall, 2008; Waisbord, 2008), and variations in meaning and models of the community radio idea among different communities (Manyozo, 2009). Similar fears can be raised about

CATs being that the current arrangement is that they are owned by a single individual. This individual, who also is the presenter, receives information from the community and decides which information goes on air. This mainly is explained by the fact that CATs remain affordable if they are run by just a single individual.

CATs are economical for a variety of reasons. For example, they are inexpensive to establish and operate since they fit in a very small space, use one worker who is also the owner, and do not require so much equipment. There is an incentive to being affordable. It means that almost anyone can afford to start a CAT and the community can maintain it (Semujju, 2016). The idea of whether or not to access information then becomes a choice and it is no longer conditioned on having batteries, electricity, clear signal, and radio/TV set, as it is in radio and TV. The negative effect from NGO short-term financing of community media can also be avoided (Mezghanni, 2014). In the end, availability of free information increases access and if there is access to information, then local people can be given an opportunity to decide whether or not they want to participate. Participation leads to self-actualisation through action (Huesca, 2002). However, the MSD theory explains that because of the “differences in media functionality”, individual dependency on various media types does not occur at the same rate or even at the same time (Hu and Zhang, 2014). If the crisis in question is out of the village, then dependency on mainstream media will increase while dependency on CATs will decrease. On the other hand, if the crisis is in the village, people will abandon mainstream media and listen to the CATs. Most people in the sampled villages, in one way or another, have connections to outside communities, or even out of Uganda. Some of them operate businesses that require them to buy stock from as far as the capital. Others have relatives in different parts of the country. Others want to make a connection between the policies being made by government and how these policies will influence their community. All these issues are discussed by other media apart from CATs. This is where the complementarity of radio comes in, as a channel that communicates the above “out-of-the-community” aspects.

CATs, being within the economic means of the community, help the community to initiate the communication process instead of just waiting for the community to give feedback on information that came from an unknown area (Thomas, 2015). Since the owners of the CATs and

the people who bring information are all members of the same community, CATs are a good example of people owning their own communication process and discussing all the issues from their own context (Quarry and Ramirez, 2009). This ownership, as Randal Pinket and Richard O'Bryant (2003) note, builds, empowers and creates self-sufficiency among the members of the community. However, the idea that the community members who have money pay and those who do not have do not pay, should be explored by further CAT studies. It promotes hierarchies in the community, where eventually the haves end up having the communicative rights than their counterparts (Atton and Wickenden, 2005). There is need to know if both categories of people have the same communicative rights.

The other disincentive to being an easily affordable communication platform is that no one scrutinises who should start a CAT. In such a way, whoever starts a CAT decides what content he receives from the community and what content will never be heard. Not every topic is developmental for communities. In fact, some information can stir hatred and conflict among members in the communities. The infamous example of Radio Mille Collines (RTML) (Cammaerts, 2009) in Rwanda proved what irresponsible media content can do to destabilise communities. There should be some guarantee that whoever manages a CAT, ensures against certain practices. There is no check point for how long the person starting a tower has been living in the village, whether or not he subscribes to the village values and tradition and how he intends to help the community by starting a CAT. The problem here can come from the fact that Uganda has 52 dialects and each dialect represents a separate set of culture (Gakwandi, 1999). For example, staple food can vary from region to region in Uganda. Where people in central Uganda enjoy eating grasshoppers, people in the Northern and Eastern Uganda detest them and instead eat wild poultry, along various types of food. If anyone can start a CAT, how will a new person from a different region advise on diet and how it impacts health, without being influenced by prior knowledge about the same issues? The selective processes (exposure, perception, retention) have already been found responsible as a mediating factor among soap opera audiences on diet and several other issues (Dutta-Bergman, 2007; Baran and Davis, 2010). What would the case be among CAT audiences not only on diet but on several other issues? While some of these questions are beyond the scope of this study, future CAT research should try to answer.

The local solution on who starts a tower currently is that whoever wants to start reports to the local authorities first. Both tower presenters reported that they approached the village chairpersons informing them of their intention, after which they started narrowcasting. There was no licence, agreement or documentation required. On one hand, licencing implies control (Zhang, 2009) but most positively, it implies that government can revoke it and so the practitioner has to prove that the reasons for which he/she got a licence are still available while the reasons for which the licence would be revoked are not (Newton *et al.*, 2004). As some policy makers pointed out, CATs can easily fall prey to some people who can use them to incite violence (Godfrey Kibuuka, Manager Broadcasting at the Ministry of ICT, interview, 20 August 2014; Paul Mukasa, Content Manager, Uganda Communications Commission, interview, 15 August, 2014). On the other hand, however, individuals relate with the towers when managing information or news and therefore are not intimidated by a communication system located within their society. In such a way, they are empowered to manage their local communication issues with the available resources (Tsarwe, 2015). Being run by one of their community members is an added advantage of the validation of the channel by the community, something that makes them feel powerful (Manyozo, 2007) as already noted above.

### *Challenges*

Without a licence to operate as the law demands, CATs are considered illegal structures by several policy makers (Paul Mukasa, Content Manager, Uganda Communications Commission, interview, 15 August, 2014, 2014; James Nsimbe, Mukono District Legal Officer, interview, 12 August 2014). The implication of being declared illegal is the fact that some CATs are under fear of government action (John Ssendago, Chairman Local Council One, Nyendo Village, interview, 8 July 2014). This pending closure can impede further innovations in CATs. The policy makers believe that getting a licence is one way of ensuring accountability (Paul Mukasa, Content Manager, Uganda Communications Commission, interview, 15 August, 2014). What makes the fear grow further is the fact that the Ugandan government has a history of closing bigger and more powerful media than CATs as the case was in 2010 when CBS FM, Ssuubi FM, Radio Two, and Radio Sapientia, were shutdown (Lumu, 2010). This is another reason why CATs avoid political content, in addition to fear that government will shut them down for having no licence. While research on CATs is minimal to an extent that studies on CAT licencing are not

easy to find, the issue of licencing in other community media, especially community radio has been well noted. In some countries, community media lack a special licence of operation and this subjects them to paying high licence fees like commercial media even when the community media are not profit-oriented (Kivikuru, 2006; Wegoye, 2011; Kuipers, 2010). Since CATs are not formally licenced, there is need to study how they are held accountable in different cultures.

The declaration of CATs as illegal denies community members freedom of expression, which is a right protected by Article 19 of the Universal Declaration of Human Rights (UDHR), article 10 of the International Covenant on Civil and Political Rights (ICCPR), and several other instruments, as well as the Ugandan constitution (article 29). The law provides for the freedom to seek, receive and impart information for everyone. On top of the government denial of the freedom to speak and listen, the declaration of illegitimacy of CATs is not “demonstrably justifiable in a free and democratic society” as the legitimate limitation on free expression demands in the Constitution of Uganda (article 43c). On the other hand however, the law also protects the rights of other people in the enjoyment of one person’s rights. Government has a responsibility to protect other people’s rights from violations created by CATs, like noise. However, the logic of closing a CAT because one person complained violates the rule by the majority. Although participatory communication invites in the democratisation process by liberating opinions and communication systems (Melkote, 2003; Servaes, 2008; Cornwall, 2008), how such local communication efforts are handled need to be special in order not to slide back into the top-down communication approach in which the government determined both the information channels and the messages (Rogers, 1995; Wilkins, 2003).

CATs have no code of ethics. As one of the communications Commission informant said, “The government currently does not have a plan for CATs, apart from closing them down whenever there is a complaint” (Paul Mukasa, Content Manager, Uganda Communications Commission, interview, 15 August, 2014). Ethical concerns have been raised in academic circles when in early 2000s radio stations aired live talk-shows in which all people (including non-journalists) participated live or using mobile phones. The ordinary people who did not understand journalism ethics could not be held responsible, if they said some unethical statements on radio for personal gains (Nassanga, 2008). Similarly, if CATs narrowcast wrong information, there is no way their

operators could be held accountable using a media and communication checklist since they are not registered to do that service. This lack of accountability may cause irresponsible communication on the side of the CATs.

However, such lack of government interest in CATs can be connected to commercialism. In 2011, Ugandan media made sh97b (\$28m), divided between print, radio and TV (Synovate, 2011). The coverage given to this amount helps to put the figure into context because such figures are rarely publicised in Uganda due to an existing no-research culture in several sectors. The amount then indicated higher profits than the usual media income. By refusing to acknowledge the local communication efforts like CATs, the government proves that the role of communication is to make revenue and platforms that cannot raise revenue should be sidelined. Since government is responsible for regulating all communication within the state, CATs still have to sensitise the right stakeholders like the parliamentary representatives, to lobby government for proper regulation or for special status as a local communication platform. Mainstream media lobbying powers should be borrowed for CATs. An example of such lobby in mainstream media is from the 2006 case Andrew Mujuni Mwenda and Another versus the Attorney General (case number 2 of 2005), in which the plaintiff succeeded in convincing the Constitutional court to scrap sections of the law of sedition from the penal code as they were inconsistent with the constitution. Other lobbyists include Human Rights Network for Journalists of Uganda (HRNJ-U), Uganda Human Rights Network, and several others. Unfortunately, CAT workers do not have such lobbying powers. Therefore, they cannot lobby for regulation or discuss any other issues that may seem crucial for their survival, something that leaves them susceptible to several challenges.

The other side of lack of regulation is lack of coordination and failure to agree on a particular mechanism of operation. This brings in the issue of ethics again because if CATs do not understand what is right and what is wrong for a particular community, the benefits of participatory communication may be lost and witch-hunting or character assassination may ensue in the community (Nassanga, 2008). The process of free entry and exist, like a free market economy, may not be the best idea for CATs bearing in mind that they raise a certain amount of noise. This was the major problem cited by almost all key informants who participated in the

study, when asked about the main problem of CATs (apart from the two presenters who also double as owners and the survey respondents). If anyone is free to start a CAT, there will not be control over the noise and this may instead turn out to be uncomfortable for the community. The other idea about noise is a human right idea in that noise violates human rights.

In other studies about narrowcasting, such unsolicited messages may cause psychological discomfort (Nair, 2007) since anyone within reach becomes a target whether or not the person wants to receive the information (Albanese, 2005; Bella, 2005). The solution so far is that the communities that have CATs regulate them using local village committees and as Chapter 1 indicated, some villages (in Luwero district) convene and spell out rules for CATs to follow (Luwaga, 2012). This is based on the idea that it is better to live with the noise for a specified amount of time in a day than living without information at all. Each CAT in the above example is given time for narrowcasting and it is up to the community to specify for how long. CATs therefore are answerable to the community and not anyone else (Bakalu, 2014).

In view of the above challenges, this study notes that other platforms that are available have challenges too. For example, previous studies about radio indicate that not everyone had access to radio and that not everyone participates in radio (Semujju, 2013). In community radio specifically, for example Mama FM in Uganda, challenges like lack of participation, on top of poor accessibility and sustainability, have been cited (Musubika, 2008). Therefore, CATs have an edge over community radio in Uganda in a way that they (CATs) can operate without relying on NGOs with agendas. The other fundamental issue that challenges CATs, although it is a challenge that has been raised from radio studies, is whether or not mere exposure to radio (or CATs in this case) without understanding whether or not the community recalls anything the channel said, it is enough to say that a channel can create changes in people's lives (Starkey, 2002). More studies are necessary therefore to understand issues of regulation of CATs, audience recall and several others.

### **CATs and the Law**

The major objective of the study was to investigate the level of individual dependency on CATs. However, during data collection, the issue of CATs and the law came up often during the key informant interviews and this enticed the study to comment on the status of CATs in relation to

the law. One key informant referred to the towers as “a misuse of a loud speaker, which used to be held by one person who walked around announcing local information” (Nyombi Thembo, State Minister for ICT, interview, 24 August 2014), while another said the towers are an “illegal disruptive innovation”. Coming from a policy maker at the level of a minister, the above arguments can be a starting point to drafting some legal or policy guidelines for CAT operations.

Others were concerned that such an important asset has no law to regulate its operations since UCC instead uses another law when closing CATs. The UCC informant in-charge of media content on this matter advised that it is not true that CATs have no law because the current UCC Act (2013) is inclusive enough to enclose in CATs (Paul Mukasa, Content Manager, Uganda Communications Commission, interview, 15 August, 2014). He concluded therefore that CATs are broadcasters according to the law, which means that they are regulated by the law that regulates other broadcasters. However, all broadcasters in the country, by law, have to be licenced and must make an application to government before they start broadcasting, something that CATs do not do.

The Mukono District Legal Officer said of CATs that “they have some kind of unwritten code within the community, which may be unacceptable if you move to another community” (James Nsimbe, Mukono District Legal Officer, interview, 12 August 2014). He said that in Mukono District, the CATs are regulated using the National Environment Act, which stipulates how much noise decibels should be acceptable in a community, the Physical Planning Act, which highlights on where and how construction should be demarcated (this was relevant because CATs erect permanent structures for the horn speakers), and then the UCC Act (2013). The legal officer however said that in practice, the CATs are not a threat to the district.

This lack of coordination between the leaders denies CATs a chance for proper regulation and instead provides arbitrary closure. The communications Commission does not have a plan to lobby for a law for CATs. This is on top of the fact that the towers do not have a policy. However, the regulation debate or lack thereof should be looked at from another perspective where the dominant class tries to silence the marginalised voices from articulating their challenges as this can lead to a disruption of the current social and political order which is

beneficial to the ruling class (Dutta, 2011). Among the techniques used include unfair regulation that silences any counter-hegemonic voices. As noted in Chapter 1, this regulation trick is sometimes used by the Ugandan government to close radio stations that say things that government does not like. The community regulation approach therefore, cited to be used by some districts in Uganda, is better than the government regulation which is most times conditional.

### **Conclusion**

This chapter analysed the findings presented in Chapter 5 into three sections following the three research questions: The first section showed that the level of individual dependency on CATs is higher than that of radio, TV, and newspapers, which were the most used traditional media platforms among the sampled communities. The Chapter attributed such a dependency to locality, affordability and inclusivity. The second section identified understanding as the goal fulfilled by CATs, and called for new theories to explain CAT dependency relations. Finally, the third section analysed the opportunities and challenging of using CATs, including among the opportunities that CATs are used to mobilise communities for a common good, are not expensive to run, among other opportunities. On the other side, the challenges noted above include that CATs have no licence, which puts them on a collision path with the regulators, while having a free entry and exist behaviour for CATs was also noted as a challenge. The chapter highlighted on the issue of the legality of CATs, calling for government intervention to regulate CATs.

Several implications of the findings are noted including the fact that CATs redefine the concept of news to mean local events happening in the village and the fact that CATs redefine “community” by serving one village. The other major implication is that although radio is a medium that gives information that comes from other villages, its complementarity is vital to fill the gap that CATs leave when they concentrate on local (village) information. The participatory communication theory was used above to explain the major themes of the study like the high dependency on CATs and the opportunities and challenges faced by the CATs. Most importantly, the theory helps this study to locate CATs within the scholarship of communication for social change and to present the towers as a possible research area under development communication. However, the biggest theoretical implication is that since only one goal of

understanding is observed for CATs, the MSD theory loses some of its explanatory power but creates a gap for new CAT explanations, which are addressed in the next chapter.

## **CHAPTER SEVEN**

### **NEW DIRECTIONS**

#### **Introduction**

The need for this chapter is created by the fact that in this study, CATs are explained by (i) the Media System Dependency theory (Hindman, 2004; Westgate, 2008; Ball-Rokeach and Jung, 2009) for lack of an independent theory that explains dependency relations in small media like CATs, and yet CATs and several of such small media differ in form, structure and content from mainstream media, and (ii) two existing differing communication studies models. The two models, the transmission or the top-down model (Flensburg, 2009; Wendland, 2013) and the interpretive or the bottom-up model (Carey, 1989; McQuail, 2006; Craig, 2007) are the foundation on which development communication (media) theory is built. This chapter therefore seeks to i) explain communication as it takes place in small media like CATs, based on the field data presented in Chapter 5, and ii) suggest an explanation and a model that best illustrates how the process of development communication occurs in some of the small media that function like CATs, including flyers, pamphlets, stickers, street art, posters (Cammaerts, 2016), blackboard newspapers, wall newspapers (Tabing, 2000), community theatre (Wanyeki, 2000), audio listening groups (Manyozo, 2009) and several others. In order to accomplish the above objectives, the chapter is divided into two main parts. The first part of this chapter discusses the lack of theory and suggests new directions for CAT theory and practice. The second part suggests a model to operationalise the CAT dependency relations identified in the first part.

#### **Theorising CATs (small media) communication**

The current chapter uses the deductive approach to suggest new directions as a result of the inconsistencies between the MSD theory assumptions that operationalised the study and the actual data that was collected. This is because the deductive strategy “sets out to test whether data is consistent with prior assumptions, theories, or hypotheses identified or constructed by an investigator” (Thomas, 2006: 238).

Since the inception of the Media System Dependency (MSD) theory in the 1970s (Ball-Rokeach and DeFleur, 1976) to explain the dependency relations between media, society and the individual, several developments have occurred in the media and communication field, most of

which emanating from changes in technology. Whenever new developments emerged, there was a theoretical need to accommodate the changes in society, media and the individual. The dependency relations explained in 1976 for example, were based on major media in existence, like radio and television. In the 1990s, the internet, as a new medium, attracted academic attention that led to new dimensions of the MSD theory, for example, dimensions that explored dependency relations online. To explain internet dependency relations for example, Padmini Patwardhan and Jin Yang (2003) observe that internet dependency relations differ from the media goals of understanding, orientation, and play.

Instead, Patwardhan and Yang's study identifies the goals of internet dependency relations as information, communication, entertainment and news. Other studies articulate internet dependency relations goals as "communication/entertainment; expression/participation; and information/research" (Jung *et al.*, 2012: 969), and "information, entertainment, and interpersonal connection" (Sun *et al.*, 2008: 412). From those internet goals, the above studies conclude that instead of MSD theory, there should be Internet Dependency Relations theory (Melton and Reynolds, 2007). After 30 years of the existence of the MSD theory and the emergence of the internet, "[d]ependency relationships that exist among the aggregate media system need to be refined as well as those relationships with a specific medium such as the Internet" (Melton and Reynolds, 2007: 127). Measuring Internet Dependency Relations became a strong strand of MSD research and not so long ago, Terik Elaujali's (2014) internet dependency relations study concluded that the level of individual dependency on internet was higher than any other media among postgraduate students in one Libyan university.

Therefore, borrowing from the MSD theory (Ball-Rokeach and DeFleur, 1976; Lowrey, 2004; Hindman, 2004; Westgate, 2008), which explains media dependency relations goals as understanding, orientation, and play, and inspired by the above internet studies (Patwardhan and Yang, 2003; Jung *et al.*, 2012; Melton and Reynolds, 2007; Sun *et al.*, 2008; Elaujali, 2014), this study introduces Small Media System Dependency (SMSD) relations to explain the dependency relations between the social system and small/alternative media (like CATs) on one hand and the individual and small/alternative media on the other.

As noted in Chapter 5 and 6, this study finds that unlike under MSD relations where the relationship between media and society is symmetrical, the relationship between CATs (and several other small or even social media) and the society is asymmetrical. The government does not provide major resources for CATs, like the legal and policy resources that it provides for example for radio, and TV under MSD relations. Other typical major stakeholders to media/communication houses like corporations are also very much silent under CATs because the towers do not reach a mass national audience, something that would introduce and facilitate corporate competition. On the other hand, despite having no connection to government, especially as a major society stakeholder according to the MSD theory, CATs support government programmes by narrowcasting when different districts activities, like mass immunisation, take place. This, therefore, is the first tenet in theorising Small Media System Dependency (SMSD) relations: the relationship between small/alternative media like CATs and society is asymmetrical.

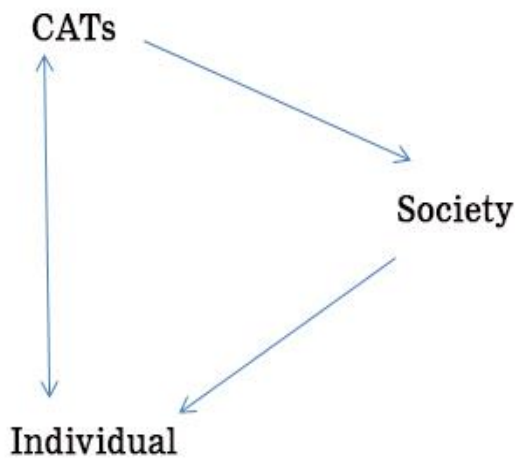
In a reversal of the MSD theory, the relationship between CATs and the individual is symmetrical. The individual provides CATs with money and information while the CATs provide the individual with a local platform on which to narrowcast information that is necessary for the stability of the community. The two cannot exist independently since each is a process that completes the other. The individual activities complete CATs' operations and give the towers a claim that they are a small media platform while the towers provide individuals with information for both personal and community stability and development. The second tenet of the theorised SMSD relations is therefore that the relationship between CATs and the individual is symmetrical.

Additionally, the MSD theory suggests that the individual is keen on fulfilling three goals of understanding, orientation and play. Already the internet studies highlighted above (Patwardhan and Yang, 2003; Melton and Reynolds, 2007; Sun et al. 2008; Jung et al. 2012) have suggested that not all communication platforms obey this set of goals. In fact the internet dependency goals change from the known individual goals under media (understanding, orientation and play) to information, communication, entertainment and news, especially among university students. While entertainment cuts across as a goal for individuals for both traditional media and the

internet, it is not reflected in this study's findings for CATs. Instead, the data reveals that there is only one individual goal that the community members seek to fulfill from CATs, which is the goal of understanding. As noted in Chapter 3, understanding is concerned with knowing about an individual's surrounding and about the individual him/herself (Lowrey, 2004). Individuals depend on CATs for information about their community. The third SMSD relations tenet from the above argument therefore is that individuals depend on small media/CATs to fulfill the goal of understanding.

Although differences exist between MSD theory and the proposed SMSD relations set out in this chapter, some similarities exist between the two relations. For example, as the MSD theory suggests, as more people find themselves in distress, the more dependency relations will increase (Jung *et al.*, 2012; Westgate, 2008). Individual dependency on CATs too increases, especially if the towers are announcing a problem in the community or, mostly if the individuals hear a song that means one of the community members is dead.

The CAT dependency relations can be otherwise articulated using the following illustration.



*Figure 7.1: The tripartite relationship between the individual, CATs and Society as shown in the above SMSD model created by this study.*

In the above illustration, the tripartite relationship between the individual, CATs and society is demonstrated. Society according to MSD theory includes government, corporations and other powerful stakeholders, which are separate from the audience (made up of individual). Ball-Rokeach (1985: 485) makes this distinction by noting that “mass communication...involves complex relationships between large sets of interacting variables that are only crudely designated by the terms “media”, “audience”, “society””. CATs facilitate society in its business while society does not directly facilitate CATs in their narrowcasting. However, society facilitates the individual (the audience) as noted by the MSD theory. In return, the individual facilitates the CATs while CATs provide a platform for the individual.

Apart from the tenets, the SMSD relations suggested in this chapter have the following strengths. The relations explain how small media bring back the idea of relevance in information dissemination from the mainstream media idea of mass culture to simple village events. Instead of producing and disseminating cultures or /reflections/information from other settings like other villages or countries for the masses to consume, the SMSD theory explains how small media produce and disseminate information for the isolated villages with an aim of only informing the people in those villages. To use the critical theory argument, such information that is produced for the minority retains quality and is devoid of exaggeration or hyperbole, which under other media bring in more masses (Adorno and Horkheimer, 1994; Fuchs, 2010). The new explanation therefore helps to situate CATs and other small media in the socio-cultural paradigm on one hand since their behaviour, like information processing, takes a bottom-up approach by using the community member as the in-charge of the information (Manyozo, 2009; Mboti, 2014). On the other hand, CATs can also be theorised as socio-psychological to account for the fact that some information that is processed comes from the top players like government and NGOs (Gaviria, 1996; Tabing, 2000). As a matter of fact, the CATs in Asia were established by the Food and Agricultural Organisation and the United Nations Development Programme in the 1990s. When the NGOs pulled out, the governments took over the responsibility.

The socio-cultural tradition studies communication artifacts from the bottom going up in order to get meaning “contextualised in socio-cultural terms” (Siapera, 2010: 70). The approach explains a communication process that is not linear and one where power is distributed at several stages

(as it is with individuals under CATs), especially the receiver stage. Attention is put mostly on how communication artifacts are negotiated or/renegotiated and inculcated within social groups. The production and reproduction of culture stands at the centre stage of this tradition (Craig, 2007; 2016). Under the approach, inter-subjective negotiation of meaning shapes and reshapes culture or ways of life/behaviour. For example, in the participatory communication examples cited above, where community members take part in information processes, like Body Mapping (Govender, 2014) and grassroots comics (Dicks, 2011), meaning is created inter-subjectively in a way that each person can interpret an issue from his/her own perspective as opposed to the top-down “experts know it all” approach.

The meaning people share using various means of communication has the power to revolutionise how those very people or people somewhere else behave. Such mediatisation of information influences “the ways our lives are organised and on the ways in which we comprehend and relate to one another and to ourselves” (du Gay *et al.*, 1997: 1). For CATs, meaning is inter-subjective in a way that each individual has a perspective, as opposed to having a unified objective understanding of an issue (like what makes news) as it is in conventional media. This objective understanding of meaning in media, for example, uses news values to arrive at a general understanding of news (Doudaki and Spyridou, 2015). CATs do not have such a yardstick to communication. By allowing community members to communicate their personally negotiated meaning without telling them what news should be, CATs fulfill the requirements for a socio-cultural approach.

The other side of CATs is the socio-psychological approach to communication which studies the “effects of media on the individual and small groups” (Siapera, 2010: 61; Baran and Davis, 2010), bearing in mind that the transmission of information has effects on both the individual and small groups. This approach investigates the influence of information that moves following the transmission model from sender down to the audience. Communication is seen here as “a linear process, beginning with a source transmitting a message via a channel to a receiver” (Siapera, 2010: 61; Baran, 2013). This one-way model became the frame through which mass communication research, dominated by effects studies, was observed (Perloff, 2013). This development has been summarised well by Ann Lang (2013:13) who notes that

our field has a basic belief in technological determinism, “a conceptualization of technology as an agent for change in society, making this a fundamental assumption of mass communication research... If our focus is on effects, this implies (in concert with a belief in change) a view of humans and societies as internally stable and even resistant to change. I would argue that this implies that a fundamental assumption in the current paradigm of mass communication research is that society and people are, by nature, stable. In other words, people and societies have an equilibrium at which they function most efficiently, external agents of change serve to disequilibrate the human, or the society, and bring it to a new state of equilibrium and mass communication is such an agent.

CATs are the agents that may destabilise whatever unwanted equilibrium in which the community may find itself. The government uses them for this purpose. Communication under the dominant paradigm has been addressed by considering the power of the media that transmitted the messages, until when the shift to mediators or condensers of media power were identified. Media therefore, and how their power to influence the individual was mediated, and the conditions of mediation, were at the centre-stage of the tradition.

There were mainly four types of media effects: knowledge, attitudes, opinions, and behaviour (Lazarsfield, 1948), or five: behavioural, attitudinal, cognitive, emotional and physiological (Bryant and Zillman, 1994), or three: cognitive, emotional and excitative (Valkenburg and Peter, 2013), or three but with different names: cognitive, Affective and Behavioural (Moon, 2013). The above studies show the various ways in which communication that travels from the sender to the receiver supposedly affects the audience. In CATs for example, which also promote communication from the government, local leaders, and NGOs (these are famous especially for their health programs like HIV/AIDS, Malaria, and others), such research might investigate how the message affects the audience and the type of effects. This study locates CATs under the socio-psychological tradition because CATs provide for the dissemination of information from the government and NGOs to the community for positive effects. The overriding assumption for this kind of information dissemination is that CATs can create an effect/change among community members on the issues in question for example HIV/AIDS, malaria, education, and

several others. Government and NGOs therefore design information that they (experts) think will create the intended effect. However, this relationship is strictly informational (announcements). It does not include any adverts, regulation, experts for comment, and other resources government provides for conventional media.

The other strength of the proposed SMSD relations presented in this chapter is that it can be applied to explain individual relations among various small communication platforms like CATs. Without the new SMSD relations, micro and macro small media dependency relations that are not internet-based remain unexplained. This study attempted to use the traditional MSD theory since there was no theory for CATs or small media dependency relations but some of the tenets of the MSD theory were not applicable to CATs as noted in the previous chapters (3 and 6). On top of that, the new model is for transmission of information on one hand, as it explains communication under CATs as a top-down process, and interpretive or people-centred on the other hand, since it also reveals that CATs give the local people an avenue to start the communication process. The transmission side shows a communication process that happens from the government and local leaders (who represent the government at village and district level). This linear view of information distribution understands media or communication platforms as agents of change (Quarry and Ramirez, 2009) through which communities can get information that will change their attitude to develop empathy (Servaes and Lie, 2013) and a need for change (McClelland, 1966; Melkote and Steeves, 2001). The people-centred aspect (Dutta, 2011) depicts communication that utilises local knowledge and experience to handle community affairs. The CAT side that explains this is the fact that community members gather, process and disseminate their own news without having studied the newsroom definition of what news should be. In a way, the suggested SMSD relations described here bridge the gap between the top-down and the bottom-up models.

However, the SMSD relations face the challenge of being limited only to small scale communication platforms in practice that are not mass-based. Around the world, these are generally oriented towards uplifting marginalised communities (Manyozo, 2012; Deuze, 2007; Mano and Mukhongo, 2016), especially in the less developed communities. In so doing, communication processes in mega cities of the world are excluded. Apart from blackboard

newspapers in Asia (Tabing, 2000), community theatre in Kenya (Wanyeki, 2000), audio listening groups, wall newspapers, and other small media elsewhere in the world, the SMSD framework is limited to explaining small /alternative media. It is the general framework suggested by this study to explain small/alternative/community/radical media dependency relations, a gap that was existing prior to this study. The SMSD relations described here therefore are best suited to explain how communities depend on community/alternative media, and the dependency relations between government, small media, and the individual. The “dependency” in alternative/small media had not received a lot of academic attention. Future research can break down the type of media in question. While this study answers how people depend on CATs and the level of that dependency, another could use the SMSD framework to explain how communities depend on community audio listening groups, community theatre, cave painting, grassroots comics, body mapping and several other participatory communication initiatives that have already been identified in several parts of the world.

For the relevance of the proposed SMSD relations to the media and communication field, the theory can be used to explain and describe small media further so that development programmes are implemented using such platforms. Explaining CATs or other small media can also help to inform government, development partners, and several other stakeholders who work for community development that if community perspectives are to be liberated and heard, small media need to be given priority as formidable communication platforms that can ably facilitate development (Cammaerts, 2009; 2016; Downing, 2016). Finally, the suggested SMSD relations create new knowledge about CATs and other small media and add on the media and communication information available about Ugandan media.

*Beyond CATs: Situating CATs in the broader media and communication field*

Communication is explained using mainly the transmission (Shannon and Weaver, 1949; Rogers, 1995) and the interpretive models (Carey, 1989). Unlike the media and internet MSD studies discussed above that are based on either the transmission or the interpretive model, data in Chapter 5 fails to support a one-model explanation for CATs. Data presented in Chapter 5 and 6 indicates that CATs have both the elements of the transmission and the interpretive models. This study therefore introduces what is herein called the Uniform Model to be applied to development communication with the above proposed SMSD relations on one hand, but most importantly, to

go beyond SMSD relations and situate CATs (or small media) in the broader communication field. To explain why this study chooses the name Uniform Model, there is need to explain the two existing models (the transmission and the interpretive models).

Traditionally, the social sciences viewed communication as the transmission of information from the sender to the receiver. Several communication scholars (Dominick, 1999; Baran and Davis, 2003, McQuail, 2006; Baran, 2013) cite the above definition of the process of communication. However, the definition is attributed to Harold Lasswell's (1948) communication model. Lasswell's transmission model<sup>10</sup> of communication is presented in form of questions which explain the communication process (Baran, 2013:5).

“Who?

Says what?

Through which channel?

To whom?

With what effect?”

Using Lasswell's formulation above, the answer to the first question “who?” is typically a journalist or his/her source who is sometimes a government official, or an expert. The answer to the second question determines what “who” is to communicate and it therefore relates to a content analysis. Typically, the use of experts and authorities dictated and still dictates the source of information while the journalist presides over the process as the moderator and one who decides who the experts are. The channel to be used is mainstream media, which is expensive to maintain and so the answers to the above questions must be able to attract a wide mass audience in order to attract revenue from corporations that want to sell products and services to a big audience. A media analysis is thus important to understand this part of the communication process. The big audience is the answer to the question “to whom” that can be investigated via an audience analysis. Lasswell was particularly concerned with the last question regarding effects and through effects analysis, research has produced ways of studying how the top manufactures “facts” to bend the effects in its favour (Baran and Davis, 2010).

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<sup>10</sup> Lasswell's communication model is devoid of illustrations. It is in question form instead.

The above process was mainly understood as one that explained communication as a one-way process with specified roles for everyone who was strategically placed at a particular stage of the communication process. The target was always to have effects among the members of the audience. “One way communication is understood to mean the dissemination and distribution of information and entertainment from a single source to multiple recipients” (Fourie, 2013: 101). Pieter Fourie’s emphasis of information and entertainment, which differs from some scholars’ (Lazarsfeld, 1948; McQuail and Windahl, 1993; Flensburg, 2009; Wendland, 2013) generic usage of the phrase “dissemination of the message”, denotes purpose of the one way communication strategy, which is to attract as many consumers of the media product as possible, for high profit realisation. This was the same view expressed in the Mathematical Model by two Bell Telephone corporation engineers, Claude Shannon and Warren Weaver in 1949. To rid the model of the criticism of linearity of the communication process, Melvin DeFleur (1970) revised it (the Mathematical Model) to include feedback and to highlight the fact that feedback maintains reciprocity in the communication process (McQuail and Windahl, 1993). The reciprocity was also emphasised by Osgood and Schramm (Schramm, 1954) in the circular model, which implied that the encoder interprets both the thoughts that become a message for transmission and the sound waves that come from the other side (Schramm, 1954; McQuail and Windahl, 1993; Baran and Davis, 2010). These were attempts to reverse the communication process from the transmission mode of the technical definition of Shannon and Weaver, which sought to explain how telephone signals would better be transmitted (McQuail and Windahl, 1993). Nevertheless, the transmission view of the communication process spearheaded the theoretical view point of media and communication studies which takes the socio-psychological approach to communication.

It was easy for communication and media research to adopt the Shannon and Weaver model or the Lasswell model because of the effects that had been theorised using the magic bullet theory, based on early radio and cinema propaganda research (Baran and Davis, 2010). For a general definition, communication is seen here as “a linear process, beginning with a source transmitting a message via a channel to a receiver” (Siapera, 2010: 61). The communication process of CATs has the linear model because sources of information in this respect vary from government

officials to NGOs that work for the development of the community. In such a way, CATs share the linear model explained above as used in mainstream media (transmission of information).

However, what is not accounted for by the linear model under CATs is the fact that as well as the information from government and NGOs, the audience generates the “news” that the towers narrowcast. The presenter, unlike the journalist or announcer in mainstream media, does not have to go out to source for local information. The community members walk to the tower and give the presenter what the community will hear.

Due to the advent of the Information Communication Technology (ICT), some scholars (McQuail, 2006: 38-39; Straubhaar and Larose 2002: 386) recognise the fact that the audience can now determine the communication process due to the fact that ICT has reversed the agenda-setting role to the audience. This ICT model informs a participatory model that is common in countries where the digital divide is not so wide. For example, Carpentier (2007) notes six Belgian radio stations using the internet to share common community media interests. Several examples of the convergence between ICT and community media in Europe (Deuze, 2007) and Africa (Manyozo *et al.*, 2012; Chiumbu and Ligaga, 2013) have been noted. Apart from ICT helping journalists in their daily work, the audience also uses ICT for interactivity and feedback. “The development of information technology has created interactivity in mass communication” (Fourie (2013: 102). This implies that the audience has a channel to use for commenting on the issues of the day. What is of a serious concern to this study is the fact that ICT still creates a digital divide in several countries in sub-Saharan Africa while the nature of interaction that uses ICT only affords a few members of the community to comment on daily events as opposed to handing the community the ability to manage their local information (Banda, 2006). Apart from the discrimination brought about by income inequality, this ICT model as applied in community media does not differ from the one used by the commercial media channels. Feedback in mainstream media exists in form of letters and phone calls to the station (Fourie, 2013). Social network sites like Facebook and Twitter, which provide a quick and personal response to ideas that were previously solely handled by professional journalists, were not reported to be used by so many people during this study. To rule out the possibility for citizen journalism, as Chapter 5 indicates, 94 respondents said they have no access to the internet.

Therefore, to explain the CAT element of community members doing what journalists do in conventional media, the socio-cultural approach (which understands communication starting with various stages of power structure at lower levels) to media and communication has to be applied. The approach explains a communication process that is not linear, but rather dialogic and one where power is distributed at several stages, including the receiver stage. The receiver, as it is with CATs, can be anyone located in the community, including the announcer, the community member, the district representatives, and the local leaders. Any of these people has the power to be at any stage of the CAT communication process.

The problem with the two-way or participatory communication paradigm is that it tries to negate the usefulness of the linear model by noting that redistribution of communication power is the best way to uplift communities out of poverty (Huesca, 2002; Bessette, 2004; Servaes, 2008). However, there have been cases in Uganda, as this study noted in the previous chapters, where the community members did not participate because of the other concerns in their lives that must take priority, such as looking for food to feed their families, looking for their children's school fees, working for long hours in the garden, and several others. While the participatory approach itself has succeeded in several parts of the world like India (Singh *et al.*, 2010), Malawi (Mhagama, 2015), Mali and Mozambique (Manyozo *et al.*, 2012; Nassanga *et al.*, 2013), the solutions to contexts that have non-participating communities are not so many, although those unique contexts still have participatory media (specifically community radio for Uganda). This lack of contextual sensitivity (Quarry and Ramirez, 2009) is one of the reasons that impede development within small communities. Building on Quarry and Ramirez's idea above, this study argues that to be "context-conscious", there is need to not only identify participatory media, but also to understand whether or not there is ability in the communities to participate and above all, which community media can make participation a reality. This of course means carefully studying the underlying community challenges brought about by income inequality. The practice of CATs and indeed several other small media around the world like blackboard and wall newspapers create this context consciousness.

CATs therefore use both models and each is relevant in its own right. The linear model can be applied when local leaders communicate to the community. Just because information flows from the local defense secretary about the new crime police report, or information about security from the police, does not mean that the community will not pay attention. This is why this study argues that both models are represented in the communities where data was collected and that CATs are the channels that facilitate them (the models). Before the proposed Uniform Model is explained, it must be acknowledged that this study believes that no one model of the two existing models currently is without challenges. The implementation of the dominant one-way model led to manipulation of the Global South (Singhal and Obregon, 2004; Waisbord, 2008) as Chapter 4 noted previously. On the other hand, the bottom-up approach was created in response to the lack of agency afforded to marginalised peoples (often in the Global South) so that they could own their development process (Mefalopulos, 2008; Cornwall, 2008). Due to the challenges from both sides, this study argues that the way CATs work, and indeed several small media, could help to uplift Ugandan rural and semi-urban communities by combining both the transmission and the interpretive approaches.

### **Introducing the Uniform Model of Small Media Communication**

A model is “a set of interrelated guesses about how the world and the people in it operate” (Trenholm, 1991: 240). Others have noted that a model is a theoretical construct which enables policy-makers to predict what might happen in the future (Branston and Stafford, 2010: 289). For a less ambiguous description, which also helps to inform the suggestions made in this study, a definition created more than 50 years ago is more appropriate. Models are “structures of symbols and rules designed to correspond to the relevant points of an existing structure or process (Deutsch, 1952: 356). The model that is suggested below from this study’s data represents the process of development communication as it happens in small media like CATs. From the history of communication models, it is apparent that several scholars focused on developing models that explain a particular communication attribute. For instance, there are models explaining the process of oral communication (Peterson, 1955), models that describe written communication in relation to advertising (Stern, 1994), models explaining only the situations or the environment in which communication takes place (Davis, 1974), models that explain “communication for participatory development” (Kincaid and Figueroa, 2010), and several

others. The models that attempted to be generic were overly criticised and in some occasions revised. For example, the Shannon-Weaver linear model (noted above) that explained the “communication process” was revised by DeFleur in 1970. This chapter specifically suggests the Uniform Model to explain the communication for development process as it happens in small media.

The Uniform Model of small scale communication suggests that communication for development conforms to one major principle: sending and receiving messages expecting results, regardless of the source of this information. Whether this communication is one-way (from a powerful source) or bottom-up (generated by the community member), the sender expects a response from the message’s intended audience (regardless of where communication came from, the intention is to bring social change). There are no big promises made from each side, apart from the uniform intention of reaching out/informing the community. This uniformity of intention is what explains the name Uniform Model. Under conventional media, there are several functions which include: surveillance, entertainment, information, education, and several others (Fourie, 2013). The receiver then responds depending on what function he/she finds relevant, a fact that has been supported for over 40 years by the Uses and Gratification theory (Katz *et al.*, 1974; Ruggiero, 2000). The MSD theory as stated in Chapter 4 summarises these functions in terms of goals: understanding, orientation and play. This study has found that in CATs, the only goal facilitated by both sides is understanding. Under CATs, both the leaders and the community members send messages. Therefore, there is uniformity of function as opposed to traditional media where the main sender is located at the top, leave for the developments in new and social media that give power especially to the western audience now<sup>11</sup> (Castells, 2012; Chiumbu, 2012).

Apart from uniformity of function (sending), there is uniformity of intention. Appealing only to the goal of understanding, there are no intentions to entertain, or fulfill other functions that mainstream media fulfill. Most importantly, the target of the information is also the same. It is the community. Mainstream media, on the other hand, communicate to attract various

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<sup>11</sup> This power varies from community to community due to the digital divide.

stakeholders like the government, the advertisers and the listeners. To do this, the media divide their audiences

by place (as in the case of local media); by people (as when a medium is characterized by an appeal to a certain age group, gender, political belief or income category); by the particular type of medium or channel involved...by time (as when one speaks of daytime or primetime audience). (McQuail, 2006: 396).

Other major differences in conventional media are on the basis of active and passive audiences, where the former is “individualistic, "impervious to influence," rational, and selective” while the latter is “conformist, gullible, anomic, vulnerable, victims” (Biocca, 1988: 51). The process of communication in CATs is dependent on the view that the community needs the information to act or live a better life. Anyone from the top or bottom can communicate to the community. CAT audiences are uniform because the sender (whether a community member or government/NGO) does not pay attention to the above audience classification because members of the geographical community work in communion with others (Tonnie, 1887b; Bond, 2013). This implies that sharing resources, including information resources, and burdens, is a foundation on which a physical community must stand to survive and thrive (Tilman, 2004). The other reason that would inspire uniformity is the fact that the audience classifications above noted by McQuail (2010) are inspired by commercial interests that seek to maximize profits by sending specific product information to specific audience categories (Priestman, 2004).

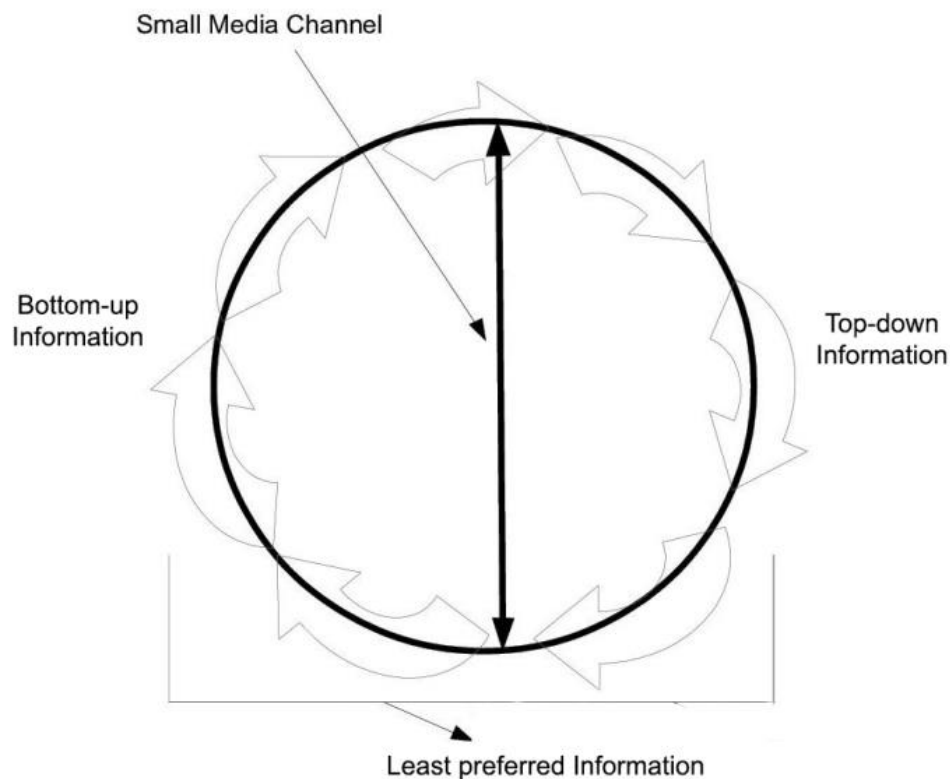
What differs between the top and the bottom sources is the type of information communicated. The NGO, government or village chairperson may communicate new government programmes hoping that the individual will react positively. The community member may, on the other hand, thank the community for services rendered or inform the community of the untimely death of a loved one. Like the government or the NGO communicator, the community member who says thank you to the community also expects a reaction or an effect from the intended audience of the message. He/she needs the community to know that he/she is grateful for the support given. This promotes the togetherness explained in Chapter 2 which binds the African communities together (Onyedinma and Kanayo, 2013).

Combining the two parallel sides (top-down and bottom-up), the Uniform Model argues that the top-down sources, for example government or other stakeholders at national or district level and elites that deal with local problems, communicate their needs and desires to the community (Lwanga, interview, 21 July 2014) while the community members on the other hand, communicate their own issues sometimes irrespective of the communication from the government or NGOs. What makes CATs unique therefore is that most of the time the information the community members bring to the towers is not directly related to what Government communicates. CATs therefore are not just a feedback loop (Ngunjiri, 1998: 446). They instead represent communal ownership of information sources where any community member can get a chance to be heard or an opportunity to interpret and play centre stage in the community news cycle (Bessette, 2004; Tacchi and Lennie, 2014).

The collective action amongst community (Figuroa *et al.*, 2002; Kincaid and Figuroa, 2008) that the CATs help facilitate, explains the bottom-up side of the Uniform Model, which is generated by community members assigning themselves responsibilities of caring for the other in times of emergencies. Although such collective action in CATs comes from voluntary efforts instead of a well-organised community leadership (established by the community members themselves), assigning responsibility among each other (Figuroa and Kincaid, 2010), the fact that community members are conscious enough to send/take information to CATs, is very crucial considering the fact that participation has been noted to be suffering from self-exclusion in some parts of the world (Cornwall, 2008).

The bottom-up source can also initiate the communication process by having demands of what they think should be done among themselves to solve a certain kind of problem. These demands are not directed towards top-sources: government, NGOs, or other stakeholders at national or district level and elites. The demands are instead directed towards fellow community members who have not yet been part of a community mechanism, like alerting others when there is trouble through the CATs, informing the rest of the community about the pupils who are loitering around in school uniforms instead of being in class, and any other mechanism, that is helping other

members of the same community. Therefore, both sides co-exist since each communicates information with its own objectives for the same community.



*Figure 7.2: An illustration of the Uniform Model of small media communication suggested first by this study.*

The figure above shows that communication has continuity from either the top or the bottom. While the intention is uniform, each side has a separate set of goals. However, there are no audience categories as seen above from Denis McQuail's (2006) classification. There is just community as a unit. From either side, information is processed to be helpful. It must be crucial and of interest to a particular community served by a CAT. This vital information is presented as either different events happening over time, or as several attributes belonging to one event happening in the community, for example education, health, security, and others. This

information in the model is referred to as Top-down and Bottom-up information and it has a circular motion in and out of the tower, from both sides to the community. Information that fails to qualify as community-specific is labeled as “Least Preferred Information”. This is information that concerns entertainment or information talking about other villages and if community members want to access this information, they tune in to other media channels such as radio, TV and newspapers (see Figure 5.10 for findings on media usage). As data in Chapter 5 indicates, the least preferred information has a lower dependency than the local information and this is brought about by the high dependency on CATs.

The information that comes from government, NGOs, or other stakeholders at national or district level and elites is what is labeled as “Top-down Information”. This happens whenever any of the above stakeholders delivers information at the CAT for the community. On the other hand, information that comes from the members of the community, including the CAT presenter, is what is labeled on the model as “Bottom-up Information”. All the activities of the community are communicated through the left arrows going up around the circle. The arrows signify the position of the messages as communicated by various stake holders. On the model, the top-down side is represented by the arrows that take the flow of information down the circle on the right while the bottom-up is represented by information that goes up the circle on the left. The nature of information/communication from both the top and the bottom is local information otherwise, it loses credibility and gets pushed under the least preferred information. In the middle of the model is an arrow that points to both directions. This signifies the small media channel that is at the centre-stage of the communication process. The channel sends out information for both the “top” communicators like NGOs, government (police, local district leaders, etc.) and the individual community members. The arrow signifies uniformity of intension to communicate and the fact that communication is not dominated by the top or the bottom.

For a change, instead of having the expert journalist to preside over the information sources, CATs have a community member who mediates between two different sources of information, which are, as the MSD theory notes (Westgate, 2008), the society (government, district leaders, NGOs, and other elites) on one hand, and the community on the other. The responsibility of the community members therefore is to sustain their CATs, which sustainability the study noted

above is based on the way the towers serve the community. Government on the other hand, has a duty to provide the kind of information that it gives to the community through CATs. When using traditional media channels, this responsibility quite often gets covered by allegiance to commercial entities (McManus, 2009). The advantage of the Uniform Model is that it describes a channel that is used by all stakeholders in the development process.

### *Influence of the Transactional Model*

To work the pitfalls of the transmission (Shannon and Weaver, 1949) and the interpretive (Carey, 1989) models, the Transactional model (Barnlund, 1970; Foulger, 2004) has been raised to explain a situation where all communicators can be both consumers and receivers of information. Transactional models takes communication beyond the interpretive model by suggesting that each communicating power has the same level of influence over both the message and the other end of the communication line (Wilmot, 1987; Frymier, 2005). The transactional models suggest that for example, in a community, the community member who receives information will have the same communicative power and means as the original sender to fit into the communication process (Foulger, 2004). However, the Transactional model too has been noted as best suited for face-to-face interactions of interpersonal communication and has been accused of assuming equality among the communicating parties (Foulger, 2004). Although the ability to explain a communication process where each party can communicate without waiting to take turns as it is with feedback (Wood, 2006) is what makes the Transactional model better than the transmission and interpretive models, its limitations above need to be addressed. The Uniform Model as suggested in this study is influenced by the Transactional model by addressing the challenges of “assumed equality” and moving the communication process of the Transactional model beyond face-to-face interactions by describing a platform that serves a community of around 500 people. Additionally, the Uniform model explains the power (control) problem and how it exists alongside the local communication efforts. The Uniform Model represents a communication environment where both the top and the bottom have an opportunity to be heard.

There is need for a certain level of unity between the mandate given to government to provide information to every citizen and the need and mechanism established by the community to communicate. This can be done by each side providing feedback about the other side’s communication and suggestions on possible way forward. However, the suggested model shows

that communication from either source can be valued and beneficial in a communication circuit like community. Therefore, more ground research from other cultures is necessary to build this line of enquiry with more evidence. The expert previously undermined the relevance of indigenous knowledge, local people's attitudes and perception about social change. This is why several participatory/or community efforts have warned against expert intervention in the communication process (Wanyeki, 2000; Atton, 2003; Servaes, 2008). The data analysed in this study shows that experts under CATs initiate their own communication process while the community members also communicate their own information. The object of the communication is what brings these two sources together, to interact on the same platform.

It is hoped that this study adds to development communication scholarship by illustrating a practical relationship between projects using the transmission approach and the participatory ones. The choice of sides can be traced in the writings of some of cultural studies luminaries like Keyan Tomaselli (2001: 44) who have argued against the transmission model, referring to the model and its complementary parts as tyrannical. Even as Tomaselli cites disarticulation in the post-modern cultural studies, he finds solace in the fact that the branch has "freed the field from the tyranny of quantitative methods and a deterministic positivism". In contrast, Tomaselli's contemporaries have argued that in the midst of the excitement over the bottom-up model, communication in reality is still applied using a 'diffusionist perspective' (Waisbord, 2008: 506; Servaes, 2016), on top of giving examples of countries, like the Asian Tigers, that have developed due to the top-down approach (Tang, 1998). Although we may claim, based on the existing models, that information moves from the top to the bottom, meaning production may be intercepted at various stages (Michaels, 1990; Oosthuysen, 1997). The Teleported text model notes that text creates meaning far from the intended meaning at different stages of the production, transmission, social, public and reception circles (Michaels, 1990). However, the Teleported Text model may not adequately explain information flow beyond meaning production in TV especially since it deals with "cybernetic interface between humans and machines" (Michaels, 1990: 9). While the above scholars are used here to show theoretical gaps in the field, the new model suggested here comes from the need to bridge some gaps existing in the field of development communication acknowledged by some scholars saying that "within development communication, gaps remain in theory and practice" (Cardey *et al.*, 2013: 288). This also means

adopting CATs/small media as viable communication tools and change agents. The Uniform Model of small scale media communication explains the interests of each separate model where everyone has the ability and access to initiate the communication process instead of just waiting for the other side to communicate in order to give feedback.

#### *Limitation of the Uniform Model*

There is a need to establish if the major two conflicting models can work together elsewhere in the world. If the model is inapplicable elsewhere, then the uniqueness of Uganda's situation should be used to further understand variations in development and communication tools.

#### **Conclusion**

The Uniform Model of small scale communication is a model that this study hopes can contribute to the scholarship of the challenges of the existing media and communication models (noted in several chapters above) in explaining the communication process and guiding development communication practice. The communication process considered in this proposed model is specific to small scale media relevant to marginalised community contexts. Since the data from which the model comes was collected in Uganda, other cultures should apply both the SMSD framework and the Uniform Model to see whether or not the two proposals are applicable to those settings.

## **CHAPTER EIGHT**

### **SUMMARY AND CONCLUSIONS**

#### **Introduction**

Therefore, this last chapter summarises the thesis by highlighting the major structural and thematic parts that helped to fulfill the objectives of the study. After this summary, the main conclusions from the study are given based on the findings. It is the conclusions that mark the end of the thesis, leading to the final conclusion.

#### **Summary**

This thesis has eight chapters in total, including the current chapter. Each chapter focuses on presenting elements that contribute to the general theme which was expressed in the title of the thesis: “Community Media Narrowcasting in Uganda: An Assessment of Community Audio Towers”. For example, Chapter one presented the background of Uganda in order to introduce the readers to the geographical and socio-political set-up of the communities using CATs. Since Uganda is not the only country using CATs, the background was intended to contextualise the CATs from those used across the world, especially in Malaysia, the Philippines, Thailand (Gumucio-Dagron, 2001), and other countries. The CATs had been used in Uganda too in the colonial times. Although the application of the towers then was different from what this study describes, the background helped to iron all these issues out and comment on the differences between the CATs used by the colonial masters and the CATs described by this study. This part was also intended to show the knowledge that is available about CATs in Uganda including how authorities deal with the towers and how listeners understand the towers.

The CATs history in Uganda was presented in three phases. The first explained the CATs structure, the second presented content, while the third presented CAT form. The structure included CAT regulatory framework, policy, and ownership, indicating that the Ugandan government uses conventional media laws to manage CATs. Briefly, a few points to take from Chapter One are as thus: The main law used whenever government is dealing with CATs is the Uganda Communications Commission (UCC) Act created in 2013, which mainly manages broadcasting, and an environmental law which forbids noise that goes above a certain level. The CAT ownership is mainly private and male-dominated. In some instances where CATs have been closed-off in certain districts in Uganda, there have been actions taken by residents and

their local leaders to ensure that CATs come back to narrowcast whenever they are closed-off. Some of the solutions to government threats come from local village meetings which agree that CATs should be given a certain time to narrowcast in a day, each at a different time to avoid noise. The CAT content is mainly local, only presented at particular times unless if it is an emergency, while the CAT form or technology is mostly rudimentary using horn speakers, a microphone and an amplifier.

The rationale for this study was based on the fact that there are studies that investigated individual dependency on both traditional media (Westgate, 2008; Ball-Rokeach and Jung, 2009) and the internet (Patwardhan and Yang, 2003; Lee, 2012; Li, 2013) but studies investigating the same dependency in small media, and especially CATs, in which this study was interested, were minimal. The missing link was the level of individual dependency on CATs, which this thesis attempted to provide.

With the above mission of understanding the individual dependency on CATs, the study generated the following objectives from the Media System Dependency (MSD) theory (Ball-Rokeach, 1985:485). The first objective was to examine the level of individual dependency on CATs for which the chapter noted that data from individual listeners was collected. The second objective was to understand how CATs depend on the individual resources and data from key informants was collected to fulfill this objective. The last objective was to find out the opportunities created and challenges faced by the individual-CAT relations. This was fulfilled by collecting data from key informants working at the towers and several other communication specialists in Uganda, plus the CAT listeners. It is worth noting that CATs are a community media and so were explained by the participatory communication theory (Wilkins, 2003; Servaes, 2008) in the study. However, since the study was interested in understanding how people depend on CATs, the MSD theory, which is a media effects theory, was used as it was articulated in 1976 specifically to explain how media, the individual, and government/advertisers depend on each other.

Since the application of a media effects theory to an investigation of a community media was made necessary as explained above, quantitative research methodology (survey research) was also called for because studies (Ball-Rokeach *et al.*, 1990; Hindman, 2004; Westgate, 2008) that investigate media system dependency relations have used that tradition. In addition, the qualitative research method (key informant interviews), which operationalises most participatory communication research, was used in this study too to account for the interpretive nature of the CATs.

*The study made the following findings*

For the first research question, the level of individual dependency on CATs was established to be higher than the individual dependency on other channels (Mean= 4.78; SD = .46 on a scale of 5). The study noted that i) people in rural areas depend more on, not only CATs but, mainstream media platforms as well than those in semi-urban communities, ii) the dependency on CATs is higher than that of radio, TV and newspapers in both rural and semi-urban communities, iii) CATs in both rural and semi-urban communities are the only platforms depended on every day. The participatory communication theory and community media literature were used to suggest locality, affordability and inclusivity as reasons responsible for the above CAT dependency.

The second research question was debated in terms of the goals the CATs help the individuals to fulfill. The study noted that CATs fulfill the community goal of understanding to enable them to be used by individuals every day in comparison with mainstream media. This conclusion was based on the MSD theory which was used throughout the study to explain the methods and interpret the findings. For example, CAT information processing is simple, one that becomes of community presenters who are semi-literate. There is no complexity of technology and therefore the operation of CATs becomes exceedingly cheap. By not requiring so many gadgets to process information, the towers maintain a relationship with the communities, which is devoid of corporations. Additionally, the processes of information gathering and dissemination were noted in the thesis to be equally local and affordable.

The third research question identified that the information role is played by granting the individuals an opportunity to participate in the communication process and this increases the communities' self-actualisation as people decide what information to narrowcast. The other

opportunity noted was that people are empowered not by attaining extra resources or special skills from an expert but by deciding and creating their own interpretation of news (Deuze, 2007). CATs are used to mobilise the communities for development and to rally people against common problems. They are affordable and cheap to run as they use very cheap technology. However, the study noted some challenges facing CATs including lack of a clear legal stand and lack of policy. The towers use cheap old technology while the presenters do not have a trade union that can help them discuss the issues affecting them. CATs are not regulated so they are erected without proper planning, in addition to the presenters not having any formal skills of information dissemination.

#### *Previously unknown areas*

Measuring the MSD theoretical assumptions against the data helped this study to suggest new assumptions for CAT dependency relations. However, due to the limitation of theorising CATs, the inductive method was important too in a way that conclusions about theory and method of CATs were reached as data were analysed. This study suggested Small Media System Dependency (SMSD) relations to explain dependency relations in small media like CATs. This suggestion would be able to accommodate both micro and macro small media/CAT dependency relations. The following tenets of the suggested SMSD relations were created from data:

- The relationship between small/alternative media like CATs and society is asymmetrical.
- The relationship between CATs and the individual is symmetrical.
- Individuals depend on small media/CATs to fulfill the goal of understanding.

To operationalise the SMSD relations suggested above, the study also proposed the Uniform Model of small media and communication platforms.

#### **Conclusions**

Among the major conclusions from the above study include the fact that Uganda is one of the countries in which several community members lack access to mainstream media outlets because

such outlets are not affordable by all people. In order of preference, the two communities under study access radio, TV and newspapers respectively. Due to the expense involved in consuming the above channels and the generic type of information disseminated, more individuals access CATs every day compared to the above mainstream channels.

The study also concludes that CATs can help to redefine the notion of community. Throughout this study, in order to separate the circumference of the area served by geographical community radios, which is called community, from that served by CATs, the word village was used in some instances so that the meaning of a platform that only serves one village can be articulated in regards to CAT. The community served by community radio in Uganda is multiple times larger than the village served by CATs. In comparison, the study noted Kagadi-Kibaale Community Radio to be serving 1.8 million people while an estimate of a typical CAT community, although there are no official figures, could be about 500 people maximum, spread across one village. This community radio practice of combining several districts under the term community can be termed as ‘community grouping’ and needs to be studied by future CATs research to see if differences in the articulation of the term community could contribute to a definition of CATs as a type of community media different from community radio.

On the broader media and communication scene, some conclusions can be made too. CATs are complementary to the existing media that do not give space to local events and emergencies. The moment such village information gets considered to be commercially non-viable, the mainstream media tends to neglect it. However, there is information that CATs too do not give to the respondents and yet such information helps the individuals to fulfill some goals. This information is accessed through radio.

In addition to the above, the study also implies that small channels like CATs, which do not show potential for taxes, although local people choose to use them, do not attract government attention. Even when it comes to communicating bigger central government programmes, CATs have no place. The bigger government programmes, for example, reading of the national budget, national holiday celebrations, and several others, are communicated using radio, TV, and newspapers, to the entire nation. While several community members miss such major

programmes due to reasons like timing and the technical jargon used, it does not mean that the local people do not need to understand this information. Radio and CATs under circumstances should work together to reinforce the relevance of information in peoples' lives. CATs can try to make the radio information local enough for the local person to understand issues of the budget. The designers of the national big events can alternatively consult the government representatives at district level and some NGOs that are already using CATs to reach out to local communities and understand how CATs can disseminate other government information.

In terms of journalism studies, CATs create a different explanation of what news is. The concept of news therefore should be understood not from a hegemonic Western meaning of conflict but from an inter-subjective community perspective. The communities do not worry about defining what news is, as much as actually making sure that the events get a platform in order to benefit the community. News is not determined by the journalists, the government, the NGO, or any other outside entity. News is determined by any member of the community upon seeing something happening in the village. Above all, news has to be relevant and local instead of being bizarre or full of conflict.

Finally, the study established that there is no political will in favour of locally-managed small communication channels. CATs in Uganda are not recognised by the major information and communication stakeholders like government and NGOs. Some sections of government and some NGOs may use CATs to send information to the communities but none has lobbied for policy and law to regulate CATs. Other media are well facilitated in that regard. In relation to community radio, government supports it as evidenced by the presence of a provision for community broadcasting in the Uganda Broadcasting Policy (2004) which also calls for a special licence for community broadcasting (Uganda Broadcasting Policy, 2004). As for NGOs, they provide financial support. The financial support for community radio in Uganda came from "the International Development Research Centre (IDRC), International Telecommunication Union (ITU) and UNESCO" (Mayanja, 2001:108) to foster communication for development in the 1990s. Some of the radios were located within village telecentres around the country, like the Nakaseke and Buwama telecentres (Mwesige, 2004). CATs do not have such regulatory and financial support.

### **Areas for further Research**

The following areas are highlighted for further research. For a descriptive role that the current study took, several of the concepts that it identifies need to attract attention as areas for further research. For instance, more studies should be carried out to understand whether or not CATs can create an impact in Uganda and several other cultures. Government and other stakeholders need to commission studies about CATs to help them make informed choices about CATs, for example in the area of law and policy.

Apart from that general understanding of the towers, the new ideas suggested here in this study need scholarly attention. The study has identified SMSD relations to explain a unique relationship between small media (CATs), society and the individual. This suggestion comes as a solution to the challenge of having no appropriate explanation for how individuals and society depend on small media. However, the proposed SMSD relations operationalised in the Uniform Model should be tested within several communities that have CATs and several other small media in order for it to be validly used as a guide that explains small media dependency relations.

Alongside the SMSD relations, this study has also suggested that the process of communication under CATs deviates from the two major known communication approaches (top-down and bottom-up) to create a flow that unites both the rival models above. The study has called this unity of method the Uniform Model. Since the Uniform Model has been suggested here for the first time, there is need to understand more about how this model is applied in other socio-cultural settings than the ones from which it is born (rural and semi-urban communities in Uganda). By understanding the conditions, it will help other parts of the world that use small media to see if such media can be explained by the same model.

As one key informant from government advised, there is also need for government to understand how many CATs are in the country and where they are located. This baseline survey can help the government in planning for CATs. Providing CAT statistics will be beneficial not only in planning but also for academic purposes. Another area for further research can be borrowed from

the MSD theory. The theory suggests that media dependency increases when there is a crisis. This could be studied alongside what happens to SMSD relations during everyday life or still from the MSD theory, what happens to small media during a contentious issue. Answering these questions will also help to separate the two theories where MSD will remain a theory that explains conventional mass media while SMSD theory remains a second-level theory that explains what relations happen in small media.

For the CATs' legal aspect, the study noted that without a licence and special recognition as vital community communication platforms, the government closes the towers whenever there are complaints from individuals. However, this was also noted to be happening in the city but not in the communities from where data was collected. The law that government uses to regulate broadcast media is the same law that key informants at the regulatory body said they use to regulate CATs. However, an insight was given on how other districts in Uganda regulate CATs within the communities which includes agreeing upon the time of narrowcasting and giving each tower a narrowcasting slot instead of having all of them narrowcasting at once. All these issues need more scholarly attention.

## **CONCLUSION**

This study set out to investigate the level of individual dependency on CATs in Uganda and used the rural and semi-urban communities to achieve this objective. With the questionnaire and key informant interview data, the study found that the level of individual dependency on CATs is higher than that of the three media types that are accessed in the communities where data was collected. This was explained in the study using the Media System Dependency theory assumption that the more people find themselves with challenges, the more they resort to media to make sense of those challenges. The communities in this case used CATs more than the other media types to solve a bad situation of lack of access to local information. This was attributed to mainly the CAT ability to give local information, affordability and inclusivity.

For sustainability, CATs have to gather, process and disseminate information that the communities consider desirable. Such information has to be from within the village. In return,

the community members support the towers with money, information, and protection from government clamp down. The government does not provide the resources like laws, policy or experts, which the MSD theory suggests government provides to conventional media. In terms of the opportunities that CATs create, they help the local people to access information at no cost while being with simple technology makes the CATs easy to run. However, the challenges of noise and having no licence are major and they hinder the smooth running of the towers.

Most importantly for the future of CAT research, this study has made the following suggestions: One is the introduction of the Small Media System Dependency (SMSD) relations to explain how individuals relate with small media/CATs. The second is the Uniform Model to explain how information and communication in CATs and small media is done from the top to the bottom and from the bottom to the top. Both ideas need to be subjected to academic scrutiny to be applicable in cultures other than the two Ugandan communities.

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## APPENDICES

### Appendix 1: Questionnaire

Interviewer name: .....

Date of interview: .....

Starting time: .....

Finishing time: .....

District: .....

Community: .....

#### Socio-demographical questions

1. Gender 

Male	1
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Female	2
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2. How old are you?

3. Are you the head of this household? 

No	0
----	---

Yes	1
-----	---

4. How many people live in this household?  Adults (18<sup>+</sup>)  Children/youths

5. How many children do you have?

6. What is your marital status? (tick one only)

Single	1
Married and/or live with partner	2
Divorced and/or separated	3

Widowed	4
Refused to answer	998
Don't know	999

7. Are you able to read and write? (tick one only) 

No	0
----	---

Only a few words (eg your name)	1
---------------------------------	---

Yes	2
-----	---

8. Which is the highest level of education you have completed? (tick one only)

[Interviewer: DO NOT read options. Code from answer]

No formal schooling	1
Informal schooling only (including religious schooling)	2
Some primary schooling	3
Primary school completed	4
Some secondary school / high school	5
Secondary school / high school completed	6
Post-secondary qualifications, other than university e.g. a diploma or degree from a technical or college	7
Some university	8
University completed	9
Post-graduate	10
Refused to answer	998
Don't know	999

**9. What is your work status?** (tick one only)

Employed full time	1	Unemployed	5
Employed part-time	2	Student	6
Self-employed	3	Refused to answer	998
Retired / pensioner	4	Don't know	999

**10. Are you presently looking for a job?**  
(even if you are employed)

No	0	Yes	1
----	---	-----	---

**11. Do you have a regular source of income?**

No	0	Yes	1
----	---	-----	---

**12. What is your monthly income?** \_\_\_\_\_

**Below shs 50,000,**

**Between shs50,000 – 100,000,**

**Above shs100,000**

**13. What is your main occupation?** (tick one only)

No occupation	0	Peasant/Subsistence farming	5
Professional / manager/ executive	1	Other (please specify) _____	998
Other white collar	2	_____	
Blue collar	3		

Farm/business owner	4	Refused to answer	999
---------------------	---	-------------------	-----

14. Apart from Luganda, is there any other language spoken in the household? If yes, which one: \_\_\_\_\_

No	0	Yes	1
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15. What languages do you speak well? [Interviewer: List all languages mentioned.]

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16. In general, how do you rate your living conditions compared to those of other Ugandans? (tick one only)

Much worse	1
Worse	2
Same	3
Better	4
Much better	5
Refused to answer	998
Don't know	999

17. Where is your main source of water for household use located? (tick one only)

Inside the house	1
Inside the compound	2
Somewhere in the village	3
Nearby Village	4
Refused to answer	998
Don't know	999

18. Do you have to pay for using water from this source?

No	0	Sometimes	1	Yes	2
----	---	-----------	---	-----	---

19. Does the house have electricity?

No	0	Yes	1
----	---	-----	---

**20. If yes, what type of electricity?**

**21. What do you use electricity for? (tick one or more)**

Lighting	1
Cooking	2
Charging Phone	3
Radio	4
Computer	5
TV	6
Others	7
Refused to answer	998
Don't know	999

**22. Which of these Information Communication Technologies do you personally own (tick one or more), and where do you power it from (tick one or more)?**

	Own	Where do you charge from? (tick one or more)				
Radio	1	Home electricity	batteries	Neighbor friend/family home	Public place (free)	Public place (charged)
Television	2	Home electricity	batteries	Neighbor friend/family home	Public place (free)	Public place (charged)
PC	3	Home electricity	batteries	Neighbor friend/family home	Public place (free)	Public place (charged)
Laptop	4	Home electricity	batteries	Neighbor friend/family home	Public place (free)	Public place (charged)
Mobile phone	5	Home electricity	batteries	Neighbor friend/family home	Public place (free)	Public place (charged)
Printer	6	Home electricity	batteries	Neighbor friend/family home	Public place (free)	Public place (charged)
Smart Phone	7	Home electricity	batteries	Neighbor friend/family home	Public place (free)	Public place (charged)

iPad	8	Home electricity	batteries	Neighbor friend/family home	Public place (free)	Public place (charged)
Fax	9	Home electricity	batteries	Neighbor friend/family home	Public place (free)	Public place (charged)

**CATs access, and usage trust**

**23. Where do you have access to the following from?** (tick one or more per column)

	Radio	CATs	Internet	Computer	Printer	Scanner	Landline	Photocopy
No access	0	0	0	0	0	0	0	0
At home	1	1	1	1	1	1	1	1
Cybercafe	2	2	2	2	2	2	2	2
Public Place	3	3	3	3	3	3	3	3
Telecenter	4	4	4	4	4	4	4	4
School	5	5	5	5	5	5	5	5
Work	6	6	6	6	6	6	6	6
Friend/family house	7	7	7	7	7	7	7	7
Other (please specify)	8	8	8	8	8	8	8	8
Refused to answer	998	998	998	998	998	998	998	998
Don't know	999	999	999	999	999	999	999	999

**24. How often do you use the following channels?** (tick one per row)

	Never	A few times a year	Less than once a month	A few times a month	A few times a week	Every day	RA	DK
CATs	1	2	3	4	5	6	998	999
State radio	1	2	3	4	5	6	998	999
Commercial radio	1	2	3	4	5	6	998	999
Commercial TV	1	2	3	4	5	6	998	999
State TV	1	2	3	4	5	6	998	999
Read a newspaper	1	2	3	4	5	6	998	999

Use a PC	1	2	3	4	5	6	998	999
Use a Laptop	1	2	3	4	5	6	998	999
Use a CD	1	2	3	4	5	6	998	999
International TV	1	2	3	4	5	6	998	999
Browse the Internet	1	2	3	4	5	6	998	999
	Never	A few times a year	Less than once a month	A few times a month	A few times a week	Every day	NA	DK
Send/receive fax	1	2	3	4	5	6	998	999
Make/receive a call on private landline	1	2	3	4	5	6	998	999
Make/receive a call on phone kiosk	1	2	3	4	5	6	998	999
Make/receive a call on mobile phone	1	2	3	4	5	6	998	999
Make/receive a call over the internet	1	2	3	4	5	6	998	999
Send/receive SMS	1	2	3	4	5	6	998	999
Send/receive email	1	2	3	4	5	6	998	999
Access chat rooms	1	2	3	4	5	6	998	999
Access social network pages	1	2	3	4	5	6	998	999
Access personal website/webpage	1	2	3	4	5	6	998	999
Access blogs	1	2	3	4	5	6	998	999

**25. How often do you get news and information from the following sources? (tick one per row)**

	Never	A few times a year	Less than once a month	A few times a month	A few times a week	Every day	NA	DK
CATs	1	2	3	4	5	6	998	999
State radio	1	2	3	4	5	6	998	999
Commercial radio	1	2	3	4	5	6	998	999
State TV	1	2	3	4	5	6	998	999
Commercial TV	1	2	3	4	5	6	998	999

Newspapers	1	2	3	4	5	6	998	999
Internet	1	2	3	4	5	6	998	999
International TV	1	2	3	4	5	6	998	999
Friends/family	1	2	3	4	5	6	998	999
Other	1	2	3	4	5	6	998	999

**26. How much do you trust in the following sources of news and information, on a scale from 1 (Don't trust at all) to 5 (Trust a lot)? (tick one per row)**

	Don't trust at all	Don't trust	Don't trust nor distrust	Trust	Trust a lot	NA	DK
CATs	1	2	3	4	5	998	999
State radio	1	2	3	4	5	998	999
Commercial radio	1	2	3	4	5	998	999
Commercial TV	1	2	3	4	5	998	999
State TV	1	2	3	4	5	998	999
Newspapers	1	2	3	4	5	998	999
Internet	1	2	3	4	5	998	999
Public notices	1	2	3	4	5	998	999
Church/mosque	1	2	3	4	5	998	999
Community meetings	1	2	3	4	5	998	999
Family	1	2	3	4	5	998	999
Close friends	1	2	3	4	5	998	999
International TV	1	2	3	4	5	998	999
Major companies	1	2	3	4	5	998	999

**27. In future, what platform would like to access/use for news and Information? (tick one or more)**

Radio	1
CATs	2
MP3 player	3
Computer	4
Mobile phone	5
Internet	6
Other (please specify)	7

Refused to answer	998
Don't know	999

**CAT equipment, ownership and usage**

**28. Where do you usually listen to the CATs from** (tick one or more)?

[Interviewer: if respondent answers do not listen to the radio, jump to question 50]

Don't listen to CATs	0	In the car (while passing by)	4
At home	1	Other (please specify)	5
Near the tower's compound	2	Refused to answer	998
At work	3	Don't know	999

**29. When was the last time you listened to a CAT?** (tick one only)

Today	1
Yesterday	2
2 days ago	3
More than 2 days to one week ago	4
One week-one month ago	5
More than one month ago	6
Refused to answer	998
Don't know	999

**30. The last time, where did you listen to the CAT from?** (tick one only)

At home (household)	1	
At neighbor's home	2	
At work	3	
In the car	4	
Other (please specify)	5	_____
Refused to answer	998	
Don't know	999	

**31. How many people from your household listen to the CATs?**

**32. Who encourages others to listen?** (tick one or more)

You	1
Father and/or mother	2
Husband/wife	3
Children	4
Everyone	5
Other (please specify)	_____
Refused to answer	998
Don't know	999

**33. Who discourages others from listening?** (tick one or more)

You	1
Father and/or mother	2
Husband/wife	3
Children	4
Everyone	5
Other (please specify)	_____
Refused to answer	998
Don't know	999

**34. What kind of programmes do you usually listen to on the CATs?** (tick one or more)

Music	1	Weather	8
News	2	Cooking	9
Religious	3	Drama	10
Sport	4	Discussion & Talk	11
Documentaries	5	Other (please specify)	12
Comedy	6	Refused to answer	998
Special announcements	7	Don't know	999

\_\_\_\_\_

**35. Which of the following are your main reasons for listening to CATs?** (tick one or more per station, max.3)

The channel is useful to me	1
Local information / local news	2

Programs not available elsewhere / I hear something that I don't hear anywhere else	3
Non-commercial sound	4
They play/ support local artists	5
Local voices / local personalities	6
They give an independent voice / not owned by big business or government	7
Locals can air their views / easy local access	8
I hear people like me talking on the tower / local people	9
Programs in other languages	10
Other reasons (please specify)	11
_____	
Refused to answer	998
Don't know	999

**36. Compared to a year ago, are you listening to the CATs: (tick one only per CAT)**

less	1
about the same	2
more	3
Refused to answer	998
Don't know	999

**CATs usage and access**

**37. Do you know the name of the CAT you listen to?**

No	0	Yes	1
----	---	-----	---

**38. If yes, which one? \_\_\_\_\_**

**39. Does this community participate in the CATs?**

No	0	Yes	1
----	---	-----	---

**If yes, ask 40**

**40. How does this community participate in the CAT?**

(tick one or more)

They have a seat on towers boards (management)	1
Contribute financially	2
Participate in programmes (over the phone, email or SMS or walk-in)	3
Making suggestions or comments	4

(phone, email, SMS)	
Other (please specify)	5
Refused to answer	998
Don't know	999

**41. Which programmes do you listen to most on the CAT (names or genres)?**

1: \_\_\_\_\_

2: \_\_\_\_\_

3: \_\_\_\_\_

**42. Which kind of programmes would you like this CAT to bring?**

1: \_\_\_\_\_

2: \_\_\_\_\_

3: \_\_\_\_\_

**43. Are there any benefits brought by the CAT to your community?**

1: \_\_\_\_\_

2: \_\_\_\_\_

3: \_\_\_\_\_

**44. What challenges do you face while listening to the CAT?**

**45. How do you solve those problems?**

## **Appendix 2: Interview Guide for Information/Communication Officers**

### **Technical Information**

Name of the Interviewer.....

Key Informant .....

Position .....

Date: .....

District ..... Region: .....

### **Professionalization**

What is a community Audio Tower according to you?

What advantages do CATs add to Uganda's communication industry?

What problems do they front for the communication industry and the community?

What minimum educational standard would you recommend for a tower presenter?

How well do CATs serve the different interests of society?

To what extent do the towers exercise ethical provisions of fairness, balance and impartiality?

### **Policy Intervention**

How many CATs do you have under your jurisdiction?

How are the towers affected by registration and licencing of communication platforms?

What legal or policy framework do you use to regulate CATs?

Should there be laws on who can own CATs as a means of promoting pluralistic media?

What future plan does the government/district have for CATs?

### **Appendix 3: KII Guide for CAT Presenters**

#### **Technical Information**

Name of the Interviewer.....  
Interviewee .....  
Name of CAT working for .....  
Position .....  
Date: .....  
Town/Village .....  
District ..... Region: .....  
Level of education.....  
Type of degree (or any other media training).....  
How did you get this job?.....

#### **CATs Dependency and Continuity**

What programmes do you give your audience?

What are the goals of your programmes?

What values do you follow in your programming?

How does the CAT benefit from the community members that listen to it?

What do you think will happen if people stop using CATs?

#### **Challenges**

What technical advantages do you get by using CATs?

What technical challenges do you face at work?

How do you deal with these challenges?

## **Appendix 4: KII Guide for Tower Proprietors**

### **Technical Information**

Name of the Interviewer.....

Interviewee .....

Name of CAT owned .....

Designation .....

Date: .....

Town/Village .....

District ..... Region: .....

Level of education.....

Type of degree (or any other media training).....

### **Values and Goals**

Why did you start a CAT?

How long did you take to implement the whole idea of starting a CAT?

What challenges do you face as a manager?

What do you think will happen if people stop using CATs?

### **On CATs Technology**

What technology do you use at CATs?

How did you get that technology?

What communication body in Uganda do you or have you dealt with in using this technology?

What is the most important gadget at the tower?

What gadget do you desperately hope to buy that can make narrowcasting better?

How has this technology helped the community?

## Appendix 5: Informed Consent

### Informed consent – permission to interview.

*Please note that this document is produced in duplicate – one copy to be kept by the respondent, and one copy to be retained by the researcher.*

PhD Candidate	Mr. Brian Robert Semujju	+256772965038 +256702965038	briansemujju@gmail.com
Department	Centre for Culture and Media in Society (CCMS)	+27-31-2602505	
Institution	University of KwaZulu-Natal (UKZN)	Howard College Campus, Masizi Kunene Ave, Glenwood, Durban, South Africa.	
Supervisor	Dr. Lauren Dyll-Myklebust	+27-31-2602298	<a href="mailto:dyll@ukzn.ac.za">dyll@ukzn.ac.za</a>
Chair, UKZN Human Sciences Research Committee	Dr Shenuka Singh	+27-31-2608591	<a href="mailto:singshen@ukzn.ac.za">singshen@ukzn.ac.za</a>
<i>Please do not hesitate to contact any of the above persons, should you want further information on this research, or should you want to discuss any aspect of the interview process.</i>			

### Dear Sir/Madam,

My name is Brian Semujju, a PhD student at the Centre for Communication, Media and Society, University of KwaZulu-Natal. I am writing this letter to ask you to voluntarily participate in the study (titled above) that intends to investigate the level of audience dependency on community audio towers (CATs). The main purpose of this research is to help me get a PhD but the research will also improve our understanding of the connection between audiences and CATs. Please note that the university will store the findings of this research for verification for a five-year period.

### Signed consent

- Do you feel you have been given sufficient information about the research to enable you to decide whether or not to participate in the research?

Yes

No

Have you had an opportunity to ask questions about the research?	<input type="checkbox"/> No	<input type="checkbox"/>
• Do you understand that your participation is voluntary, and that you are free to withdraw at any time, without giving a reason, and without penalty?	<input type="checkbox"/> No	<input type="checkbox"/>
• Are you willing to take part in the research?	<input type="checkbox"/> No	<input type="checkbox"/>
• Are you aware that the interview/focus group may be audio recorded?	<input type="checkbox"/> No	<input type="checkbox"/>
• Will you allow the research team to use anonymized quotes in presentations and publications?	<input type="checkbox"/> No	<input type="checkbox"/>
• Will you allow the anonymized data to be archived, to enable follow-up research, and training future researchers?	<input type="checkbox"/> No	<input type="checkbox"/>
• Do you understand that this research is purely academic and that its findings will be published as a thesis and also published in academic journals?	<input type="checkbox"/> No	<input type="checkbox"/>
<b>* By signing this form, I consent that I have duly read and understood its content.</b>		
_____	_____	_____
<b>Name of Participant</b>	<b>Signature</b>	<b>Date</b>
_____	_____	_____
<b>Name of Researcher</b>	<b>Signature</b>	<b>Date</b>

## Appendix 5 -1: Luganda Informed Consent

<b>Luganda Informed consent – permission to interview.</b> <i>Endagaano eno ekubibwa ku mpapula bbiri. Omuyizi atwaalako lumu, naawe akulekerako lumu.</i>			
Omuyizi	Brian Robert Semujju	+256772965038 +256702965038	briansemujju@gmail.com
Ettabi mw'agwa	Centre for Culture and Media in Society (CCMS)	+27-31-2602505	
Ettendekero	University of KwaZulu-Natal (UKZN)	Howard College Campus, Masizi Kunene Ave, Glenwood, Durban, South Africa.	
Omusomesa	Dr. Lauren Dyll-Myklebust	+27-31-2602298	<a href="mailto:dyll@ukzn.ac.za">dyll@ukzn.ac.za</a>
Ssentebe w'akakiiko k'ebiyokunonyerera	Dr Shenuka Singh	+27-31-2608591	<a href="mailto:singshen@ukzn.ac.za">singshen@ukzn.ac.za</a>
<i>Kozesa endagiriro ezo waggulu bwoba nga olina kyoyagala okumanya oba ng'olina kyeweemulugunyaamu.</i>			

### Ssebo oba Nnyabo,

Nkulamusizza nnyo nyini ddala. Amanyanga nze Brian Semujju, omuyizi wa Yunivasite ya Kwazulu Natal mukitongole kyebayita Centre for Communication, Media and Society. Nkuwandiikidde nga nkusaba weetabe mukunonyerera kuno okukwata kubizindaalo ebiri mubitundu byaffe. Okunonyerera kuno kujja kunnyamba okufuna diguli yange eyokusatu ngakwotadde nokuyamba abasomi abalala okwetegereza n'okumanya engeri ebizindaalo bino gyebiweerezamu abantu. Munnange era kimanye nti ebinaava mu kunonyerera kuno bigenda kuterekebwa yunivasite okumala ebbanga lya myaka etaano nga byekenneenyebwa.

### Nkusaba n'obuwombeefu oddemu ebibuuzo bino wammanga:

<ul style="list-style-type: none"> <li>• Bakunonyonyodde bulungi ebigererwa by'okunonyerera kuno okukusobozesa okusalawo oba oyagala okugwetabamu?</li> </ul>	<b>Yee</b> <input type="checkbox"/> <b>Nedda</b> <input type="checkbox"/>
Bakuwadde omukisa okubaako nekyobuuzo?	<input type="checkbox"/> <b>Nedda</b> <input type="checkbox"/>

<ul style="list-style-type: none"> <li>Era bakunnyonyodde nti okwetabamu sikwabuwaze, nti bwolaba nga kisaanidde osobola okwekyusa kuba tewali kabi kajja kukutuukako?</li> </ul>	<input type="checkbox"/> Nedda <input type="checkbox"/>	
<ul style="list-style-type: none"> <li>Okuva lwotegedde ebyo waggulu okyayagala okwetaba mukunoonyereza kuono?</li> </ul>	<input type="checkbox"/> Nedda <input type="checkbox"/>	
<ul style="list-style-type: none"> <li>Okitegeddeko nti amaloboozi gaakukwatibwa kukatambi?</li> </ul>	<input type="checkbox"/> Nedda <input type="checkbox"/>	
<p>Okkiriza ebirowoozo byo okukozesebwa yonna gyebigenda ng'amannya go bagajjeemu?</p>	<input type="checkbox"/> Nedda <input type="checkbox"/>	
<ul style="list-style-type: none"> <li>Era okkiriza ebirowoozo ebyo okuterekebwa abayizi abaliija mumaaso nabo babiyigireko?</li> </ul>	<input type="checkbox"/> Nedda <input type="checkbox"/>	
<ul style="list-style-type: none"> <li>Okitegeddeko nti era okunoonyereza kuno kukwata kubyanjigiriza byokka so ssi byanfuna oba byabufuzi nti era ebinavaamu bijja kufulumizibwa mubutabo obwensi yonna obufulumya ebyokunoonyereza?</li> </ul>	<input type="checkbox"/> Nedda <input type="checkbox"/>	
<p><b>* Okussaako omukono kitegeeza okkirizza okwetaba mu kunoonyereza kuno.</b></p>		
<hr/> <p>Elinnya Lyo z'omwezi</p>	<hr/> <p>Ekinkumu</p>	<hr/> <p>Ennaku</p>
<hr/> <p>Elinnya ly'omuyizi</p>	<hr/> <p>Ekinkumu</p>	<hr/> <p>Ennaku z'omwezi</p>

## Appendix 6: Gatekeeping pass from *Voice of Nyendo* CAT


To the Attention of Mr. Brian Semujju

Dear Mr. Semujju,

We have received your request to come and research about our community audio tower operating here in Masaka. The research assistant has informed us that you will be doing interviews and observation. This letter intends to inform you that we will be very glad to assist you in anyway we can on your study and therefore expecting you anytime. This letter also should act as proof that we (you and I) have an understanding to that effect.

Let me know if you need anything else in due course regarding the research.

Yours sincerely

Name: Mugerwa Joseph Date: 18<sup>th</sup> MARCH 2014  
Contact: 0758455930 

**Appendix 7: Gatekeeping pass from Nassuuti FM**

**Ref: Proof of Acceptance**

Dear Brian Semujju,

My name is Luwanga Henry and I work as Presenter here at a community audio tower in Mukono. This is to inform you that we have accepted to be interviewed for your PhD research and would like to contribute to it in anyway we can. Whenever you are ready, just come down here and do your business. I hope to see you soon.

Name  
Tower manager/announcer  
Contact +256 784091422  
+256 752091422  
Nassuuti mukono  
Uganda

**Appendix 8: Gatekeeping pass from Mukono District Information Office**

Mr. Brian Semujju  
University of Kwazulu Natal  
Durban,  
South Africa

Date... 22nd/05/14

To: Community Development Officer/Information Office

Through

The Town Clerk, Mukono Municipal Council

Re: To the Attention of Mr. Semujju

Dear Mr. Brian Semujju,  
The CDO/Information office has received your request to come and interview the Information Officer for your PhD research on Community Audio Towers. This is to say that we have accepted your request and waiting for you.

*Betty*  
Makwasa Betty  
Tel: 0774873413  
E-mail: makwasa@yaboo

SENIOR COMMUNITY DEVELOPMENT OFFICER  
MUKONO MUNICIPAL COUNCIL  
DATE 22nd/05/14  
SIGN *Betty*

## Appendix 9: Gatekeeping pass from the Masaka District Information Office



THE REPUBLIC OF UGANDA

*District Information Office*

### **MASAKA DISTRICT LOCAL GOVERNMENT**

---

*Our Ref: CR/211/1*

*Your Ref:*

P.O. Box 634 Masaka

E-mail; [info@masaka.go.ug](mailto:info@masaka.go.ug).

Website; [Http://www.masaka.go.ug](http://www.masaka.go.ug)

**Date:** May 20, 2014

Mr. Brian Semujju  
University of Kwazulu Natal  
Durban,  
**South Africa**

Dear Sir

#### **REQUEST FOR AN INTERVIEW**

The Masaka District Information Office has received your request for an interview with the District Information Officer for your PhD research on Community Audio Towers.

This is to inform you that your request has been accepted and awaiting your arrival.

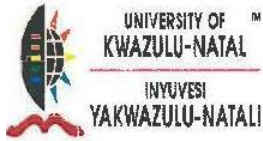
Yours faithfully,

Olivia Nakanwagi

**Ag. DISTRICT INFORMATION OFFICER**

File

## Appendix 10: Research Clearance from UKZN



30 May 2014

Mr Brian Robert Semuji (214581303)  
School of Applied Human Sciences – CCMS  
Howard College Campus

Protocol reference number: HSS/DS08/014D  
Project title: The changing community media in Uganda from broadcasting to narrowcasting: Audiences and community Audio Towers

Dear Mr Semuji,

### Full Approval – Expedited Application

In response to your application dated 27 May 2014, the Humanities & Social Sciences Research Ethics Committee has considered the abovementioned application and the protocol have been granted **FULL APPROVAL**.

Any alteration/s to the approved research protocol i.e. Questionnaire/interview Schedule, Informed Consent Form, Title of the Project, Location of the Study, Research Approach and Methods must be reviewed and approved through the amendment/modification prior to its implementation. In case you have further queries, please quote the above reference number.

**PLEASE NOTE:** Research data should be securely stored in the discipline/department for a period of 5 years.

The ethical clearance certificate is only valid for a period of 3 years from the date of issue. Thereafter Recertification must be applied for on an annual basis.

I take this opportunity of wishing you everything of the best with your study.

Yours faithfully,

Dr Shenuka Singh (Chair)

/ms

Cc Supervisor: Dr Lauren Dyll-Myklebust  
Cc Academic Leader Research: Prof D McCracken  
Cc School Administrator: Ms Aukle Iuthull

---

Humanities & Social Sciences Research Ethics Committee  
Dr Shenuka Singh (Chair)  
Westville Campus, Govan Mbeki Building  
Postal Address: Private Bag X64001, Durban 4000  
Telephone: +27 (0) 31 260 3587/83504557 Facsimile: +27 (0) 31 260 4608 Email: [ximbpp@ukzn.ac.za](mailto:ximbpp@ukzn.ac.za) / [enymem@ukzn.ac.za](mailto:enymem@ukzn.ac.za) / [mohano@ukzn.ac.za](mailto:mohano@ukzn.ac.za)  
Website: [www.ukzn.ac.za](http://www.ukzn.ac.za)

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*Photo A.1: Voice of Nyendo CAT and its neighbourhood. (Photo by Brian Semujju, July 2014).*



*Photo A.2: The two amplifiers and a microphone used by the Voice of Nyendo CAT. (Photo by Brian Semujju, July 2014).*



*Photo A.3: The Nassuuti FM CAT presenter shortly before narrowcasting. (Photo by Brian Semujju, July 2014).*



*Photo A.4: Other CAT structures in the country take on a form like the one below for Voice of Kasana (Luweero district -central Uganda). (Photo by Brian Semujju, July 2014).*