

**COMMUNICATING AGRICULTURAL INFORMATION USING ELECTRONIC  
MEDIA: THE CASE OF “*SHAMBA SHAPE UP*” PROGRAMME ON CITIZEN  
TELEVISION IN KENYA**

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for the Degree of Master of Arts in Journalism and Mass Communication of Egerton  
University**

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## DECLARATION AND RECOMMENDATION

The work contained in this thesis is my original work and has not been submitted to any other university for academic purposes.

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## APPROVAL

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## **DEDICATION**

This thesis is dedicated to my parents Francis Chumo (RIP Dad) and Mum Grace Chumo, my wife, Claire and our lovely children Shantel cherono and Ryan Kimutai, brothers and sisters. I love you all.

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## **ABSTRACT**

Communicating agricultural information to farmers is critical in improving productivity. To ensure increase in agricultural productivity, agricultural information must be communicated to farmers in a way that is effective and affordable. The aim of this study was to assess the effectiveness of television programmes in communicating agricultural information using ‘Shamba Shape Up’ (SSU), an agricultural programme produced by Mediae Company and aired on Citizen Television in Kenya as a case study. Although Shamba Shape Up presents a variety of agricultural topics, little is known about their effectiveness. The objectives of the study were to: establish the communicative needs that led to the development of the SSU programme; identify the programming strategies that guide the production of the SSU programme; assess the effectiveness of the SSU programme in communicating agricultural information to farmers. The study was guided by the Social Cognitive theory which argues that people learn through observation by modelling or copying what they see on television. Modelling happens in two ways: through imitation in that people replicate an observed behaviour; through identification, where observers do not copy exactly what they see but make a more generalized but related response. The study collected information from the producer and presenters of the SSU programme as well as from the farmers purposively sampled in Uasin Gishu County. The interview and observation methods were used to collect primary data, while secondary data was collected from documents and text messages received from viewers of the SSU programme. The data was analyzed and presented using text, tables and pictures. Farmers find agricultural information aired through the SSU programme to be useful and could copy or modify the same to suit their farming activities. This agrees with the tenet of the Social Cognitive theory which argues that people learn through observation by modelling or copying what they see on television. The findings are beneficial to television producers in packaging agricultural programmes for their audiences. Farmers on the other hand will benefit from well-packaged, informative and educative agricultural programmes. Study is also beneficial to the Department of Literature, Languages and linguistics of Egerton University as well as other scholars who may need to study the use of television programmes in communicating agricultural information. The study found out that the SSU programme is effective in communicating agricultural information to Kenyan farmers.

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## **ABBREVIATIONS / ACRONYMS**

|               |  |
|---------------|--|
| <b>AECF</b>   | Africa Enterprise Challenge Fund                   |
| <b>AGRA</b>   | Alliance for a Green Revolution in Africa          |
| <b>ASK</b>    | Agricultural Society of Kenya                      |
| <b>BBC</b>    | British Broadcasting Corporation                   |
| <b>CAK</b>    | Communications Authority of Kenya                  |
| <b>DFID</b>   | Department for International Development (UK)      |
| <b>FAO</b>    | Food and Agricultural Organization                 |
| <b>FF</b>     | Featured Farmer (on SSU programme)                 |
| <b>FNF</b>    | Farmer not Featured (on SSU programme)             |
| <b>GDP</b>    | Gross Domestic Product                             |
| <b>GOK</b>    | Government of Kenya                                |
| <b>ICT's</b>  | Information, Communication Technologies            |
| <b>IFAD</b>   | International Fund for Agricultural Development    |
| <b>IFDC</b>   | International Fertilizer Development Centre        |
| <b>ITU</b>    | International Telecommunications Union             |
| <b>KARI</b>   | Kenya Agricultural Research Institute              |
| <b>KBC</b>    | Kenya Broadcasting Corporation                     |
| <b>KTN</b>    | Kenya Television Network                           |
| <b>KFC</b>    | Kenya Film Commission                              |
| <b>NMG</b>    | Nation Media Group                                 |
| <b>NTV</b>    | Nation Television                                  |
| <b>RMS</b>    | Royal Media Service                                |
| <b>SAYARE</b> | Sauti Ya Rehema                                    |
| <b>SSU</b>    | Shamba Shape Up                                    |
| <b>TV</b>     | Television   |
| <b>UOE</b>    | University of Eldoret                              |
| <b>USAID</b>  | United States Agency for International Development |

# CHAPTER ONE

## INTRODUCTION

### 1.1 Background to the Study

Food security is a critical factor for any country, more so for a country like Kenya with a rapidly growing population estimated at 40 million (GoK 2010) and shrinking arable land due to change in use for purposes like settlement. This means that the farming practices by Kenyan farmers should be changed with a view to enhancing yields and production.

Communicating agricultural information to farmers is critical in improving farm management and agricultural productivity. Communication of such information has traditionally been done using interpersonal communication through extension officers. The service entails a face to face interaction between the farmer and the extension officer. This interaction usually happens when an extension officer visits a farmer.

The agricultural extension service cannot be relied upon to fulfill this task on its own because of deficiencies of the service. Yahaya (2001) noted the deficiencies of interpersonal communication strategy which involves the use of extension officers. Such deficiencies may be due to factors like limited number, language barrier, poor communication strategies and personal bias. This has necessitated diversification of avenues for communicating agricultural information to farmers. The mass media (more so radio and television) is one of the avenues currently used to communicate agricultural information. This has made the broadcast media to be an important facilitator of agricultural development in Kenya.

The information on how to adopt best farming practices is with experts like agricultural extension officers and researchers. For the same information to reach a wider public, a medium that is both affordable and accessible to the public is required. The mass media is considered ideal for this purpose. This is because it has been seen as an effective communicator of information as well as a partner that interacts with agricultural sector practitioners and multidisciplinary professionals (Ssimbwa 2015). In this case, the electronic media (radio and television) has taken deliberate efforts to develop programmes that communicate agricultural information needed by farmers. Such information includes seed selection, pest control, soil fertility testing, animal husbandry, proper storage of harvests and marketing. Although radio has traditionally been used as a tool for communication and access of information by stakeholders (Nabusoba, 2014), television is gaining ground on the same. Television is considered ideal for this purpose because of its visual nature which makes it appropriate for

demonstrative purposes through a combination of audio and video. The ability to carry out demonstrations on television is a key aspect that enables farmers to see and learn good farming techniques.

The television industry in Kenya is growing rapidly. According to Njeru (2005), television broadcasting in Kenya started in 1962 with the first transmitting station being set up in a farmhouse in Limuru near Nairobi. The station had a transmitting radius of 15km. The station named Kenya Broadcasting Corporation (KBC) was modelled on the British Broadcasting Corporation (BBC). KBC remained a monopoly until 1990 when the first privately owned TV station, Kenya Television Network (KTN), was licensed to broadcast. It was soon followed by Citizen TV and Nation Television (later renamed NTV), SAYARE TV, Biblia Husema Broadcasting (BHB), K24, Kiss TV, and Family TV, among others.

Television stations were broadcasting on terrestrial analog format until October 2009 when digital transmission platform was piloted in the country. The intention was to achieve full digital switch-over by December 2012. This would have enabled the country to go ahead of the international deadline of June 2015 set by the International Telecommunications Union (ITU) in 2006 ([www.digitalkenya.go.ke](http://www.digitalkenya.go.ke)). Disputes over digital signal distribution licenses made the switch-over drag on till March 2015 when analog signals were officially switched off countrywide by the Communications Authority of Kenya (CAK).

The switch to digital transmission opened up the airwaves, enabling the establishment of many and varied TV stations which currently number over 62 ([www.digitalkenya.go.ke](http://www.digitalkenya.go.ke)). Some stations are broadcasting in vernacular languages, something that is new in the country. Such stations include Kass TV (Kalenjin), Inooro TV (Kikuyu), Ramogi TV (Dholuo) and Meru TV (Kimeru). This is broadening the television audience in Kenya. The new television stations have the potential to produce and air more local programmes and more so agricultural programmes. Digital signals have clear audio and video signals, making television viewing more enjoyable. Viewers can access the signals through digital-enabled television sets or with decoders like the Startimes, Go TV, Bamba TV, Zuku and DSTV ([www.digitalkenya.go.ke](http://www.digitalkenya.go.ke).) Clear digital television signals allow viewers to follow demonstrations that are carried out in agricultural programmes with ease. Communication of agricultural information in television programmes draws the interest of the audience because it is presented in clear and appropriate language. Television is therefore an important tool in informing the public.

The agricultural information communicated through television programmes influences agricultural activities, especially improving management and productivity. The information communicated through television has the potential to reach a bigger audience and the likelihood of being embraced than that communicated by extension agents. This is due to the trust that the audience has placed on the mass media as a source of information. Currently, there are numerous agricultural programmes aired by television stations in Kenya. They include *Kilimo Biashara* on K24 TV, *Shamba Shape Up* (SSU) on Citizen TV, *Seeds of Gold* on NTV and *Global Farming* on Kass TV. *Seeds of Gold* is produced in conjunction with Egerton University. The programme offers practical information on farming but appears to be limited by its use of English as the language of communication which disadvantages people with low literacy and comprehension of English ([www.gaealliance.org](http://www.gaealliance.org)). Global farming on Kass TV showcases successful farming ventures around the world. The farming activities are highly mechanized and therefore impracticable for small holder farmers in Kenya.

Despite the existence of these other agricultural programmes, the ‘Shamba Shape Up’ (SSU) programme on Citizen TV (owned by Royal Media Services, RMS) stands out hence its choice as a case study. The Shamba Shape Up programme is a thirty minute television agricultural programme that started airing on Citizen Television in 2012 in Kenya. It is the first agricultural make-over programme in the country (AECF, 2014). The programme is produced by the Mediae Company based in Nairobi, Kenya. The programme idea was conceived out of positive responses that were received every time an agricultural theme was presented in “*Tembea na Majira*” and “*Makutano Junction*” programmes.

The Shamba Shape up programme airs a variety of agricultural topics that include livestock rearing, crop growing, soil fertility testing and market information (AECF, 2014).

The production of the programme involves visiting a selected farmer and camping in their farm for three days before carrying out the shooting. This gives an opportunity for interaction between the farmer, the production team of Shamba Shape Up and agricultural experts. The visit enables them to identify challenges faced by the farmer and give possible solutions (AECF 2014). The visited farmer benefits from demonstrations carried out in the farm, while the filmed proceedings are beneficial to audiences watching the televised programme at home. The recorded programme is broadcast twice a week over the weekend in English and Kiswahili. The English version is aired at 1:30 pm on Saturday and the Kiswahili one is aired at the same time on Sunday. The programme started airing in Uganda and Tanzania in 2015 through Urban

TV and ITV respectively. Citizen television signals are also received in both Tanzania and Uganda thus the audiences in these countries can also watch the programme on the same channel at the same time as their Kenyan counterparts.

The Shamba Shape Up programme is produced through a partnership with sponsors that include agro-chemical industries private sector developers and international development agencies. The sponsors include Cooper Brands, International Fund for Agricultural Development (IFAD), International Fertilizer Development Centre (IFDC), Alliance for a Green Revolution in Africa (AGRA), the Africa Soil Health Consortium, Syngenta and United States Agency for International Development (USAID). There are also other short term sponsors who can sponsor a specific episode or topic under coverage. The sponsors and the source of any agricultural advice used in the programme are mentioned during the broadcast.

The researcher was motivated to carry out this study due to his passion for development communication. This passion was nurtured during the researcher's participation in a Food Security Fellowship at Oklahoma State University (USA) in 2011. The fellowship sought to catalyze communication between the media, policy makers' and community leaders with a view to increasing food security awareness in Kenya and Uganda. The researcher interned under two journalists with over thirty year's experience in agricultural communication in radio, television and online platforms. The researcher observed a close interaction between the journalist's, farmers and agricultural experts. It was observed that farmers in the United States of America rely on the media as a major source of agricultural information. Kenyan farmers on the other mostly obtained agricultural information from extension officers who are not easily accessible. Kenyan small holder farmers used traditional methods of farming which led to low production and yields. The researcher wanted to investigate how the mass media and more so television could be used to communicate agricultural information to Kenyan farmers.

It is against this backdrop that the researcher investigated the effectiveness of the SSU programme in communicating agricultural information to farmers.

## **1.2 Statement of the Problem**

Shamba Shape Up programme handles a variety of agricultural topics and commands a large viewership in Kenya (Citizen TV), Uganda (Urban TV) and Tanzania (ITV). However, little is known about the effectiveness of the programme in communicating agricultural information. Although studies have been done on the effectiveness of the media like radio in communicating agricultural information to farmers, minimal research has been done on the effectiveness of



television programmes. This study explored the effectiveness of the Shamba Shape Up television programme in communicating agricultural information to Kenyan farmers.

### **1.3 Aim and Objectives of the Study**

The aim of the study was to examine the effectiveness of Shamba Shape Up in communicating agricultural information to Kenyan farmers.

The general objective of the study was to assess the use of television in communicating agricultural information to farmers using the Shamba Shape Up programme as a case study.

The specific objectives of the study were to:

- (i) Establish the communicative needs that led to the development of the SSU.
- (ii) Identify the strategies that guide the production of the SSU programme.
- (iii) Assess the effectiveness of the SSU programme in communicating agricultural information to farmers.

### **1.4 Research Questions**

- (i) What communicative needs led to the development of the SSU programme?
- (ii) What strategies guide the production of the SSU programme?
- (iii) How effective is the SSU programme in communicating agricultural information to farmers?

### **1.5 Justification of the Study**

Communication of agricultural information is a key strategy in encouraging farmers to adopt methods that will increase agricultural production and consequently their income. Television programmes promoting the agricultural sector have increased in the recent past. However, their effectiveness has not been assessed. Furthermore, little research has been done in the area of television agricultural programming in Kenya. The findings of the study are beneficial in determining the effectiveness of television in communicating agricultural information to farmers. The findings will help television producers in producing agricultural programmes that are rich in information and communicate effectively to their audiences. Farmers will also benefit from well packaged and informative agricultural programmes. The findings of the study will be shared with Mediae Company and Citizen Television. Copies of the study will also be availed to the Egerton University library and NACOSTI. The researcher has also published research papers in refereed journals which will increase access to the results of the study.

### **1.6 Scope of the Study**

The study focused on the use of Shamba Shape Up programme on Citizen Television in communicating agricultural information to farmers in Kenya. Five farmers who have featured in the SSU programme as well as five others who have not featured in the programme were interviewed by the researcher. One producer and two presenters of the SSU programme were also involved in the study and were interviewed by the researcher. The researcher also sampled and analysed 25 text messages from viewers of SSU programme around the country which constituted the secondary data.

### **1.7 Limitation of the Study**

One featured farmer (FF 5) could not be reached for an interview despite repeated attempts by the researcher. This however, did not affect the results of the study since the researcher posed the same questions to the other featured farmers. The researcher also faced initial challenges from the SSU production team who were slow to grant interviews. They eventually granted the interviews and cooperated to the satisfaction of the researcher.

The results of the study may not be fully generalisable to other television agricultural programmes because of different programming formats.

## **1.8 Definition of Terms**

**Agricultural information** - Knowledge on various aspects of agriculture borne through research and/or experience.

**Agricultural Production**- Deals with how farmers combine land, water, commercial inputs, labour and their management skills into practices and systems that produce agricultural goods.

**Channel** – A medium through which a message is transmitted from the source to its intended audience.

**Communication** - A process by which participants create and share information with one another in order to reach a mutual understanding.

**Decoders** – A device that enables a television set to receive and decode digital television (DTV) signals

**Digital TV Transmission** – Refers to the transmission of audio and video content by digitally processed and multiplexed signals.

**Food security** – A situation where all people at all times have access to sufficient, safe and nutritious food to maintain healthy lives.

**Shamba Shape Up (SSU)** – An agricultural programme aired at 1:30 pm on Saturdays and Sundays by Citizen Television in Kenya.

**Television Content** – Refers to audio and video material communicated in a television programme.

## **CHAPTER TWO**

### **LITERATURE REVIEW AND THEORETICAL FRAMEWORK**

#### **2.1 Introduction**

This chapter reviewed the literature related to the study as well as the theoretical framework that guided the study. The literature reviewed focused on the following areas: television viewership in Kenya, the communicative needs that led to the use of mass media in communicating agricultural information to farmers, effectiveness of television in communicating agricultural information and the challenges faced by television producers in communicating agricultural information to farmers.

#### **2.2 Television viewership in Kenya**

Kenya has over 62 television stations available on digital format ([www.digitalkenya.go.ke](http://www.digitalkenya.go.ke)). According to KFC (2011), television viewing in Kenya is high with 59% of Kenyans watching television on a daily basis. This trend shows that television can be used effectively to communicate agricultural information to farmers.

According to Geopoll, as cited in Mediae (2015), audience ratings in Kenya show a spike in audience numbers at Citizen Television every time the SSU programme is on air. This is evident in figure 1 below for both Saturday and Sunday, which are the days in which the SSU programme is aired in English and Kiswahili respectively.

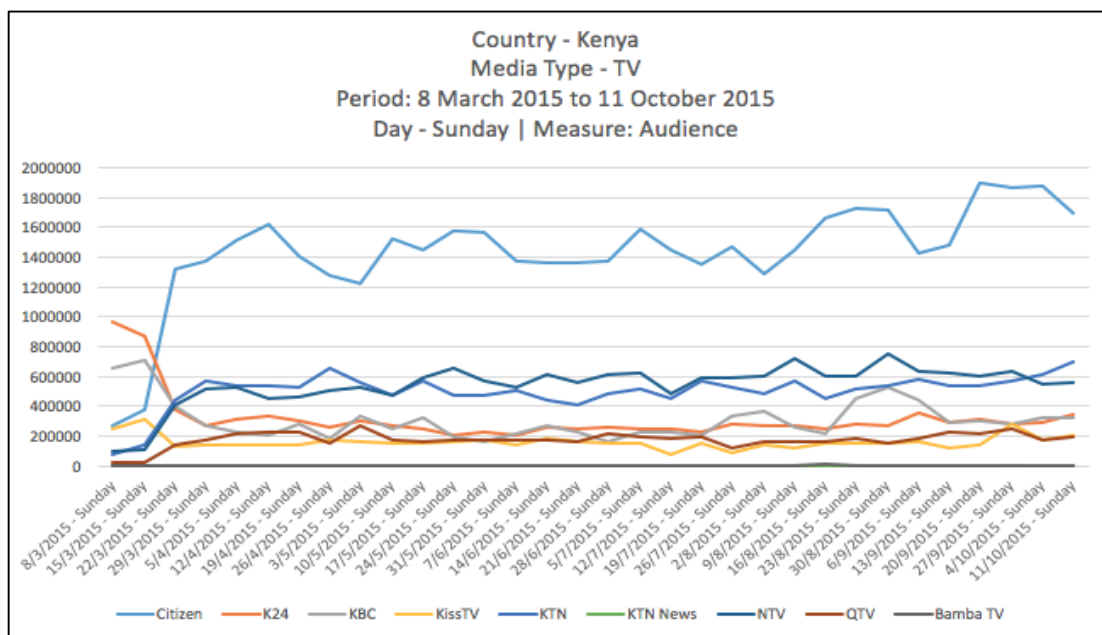
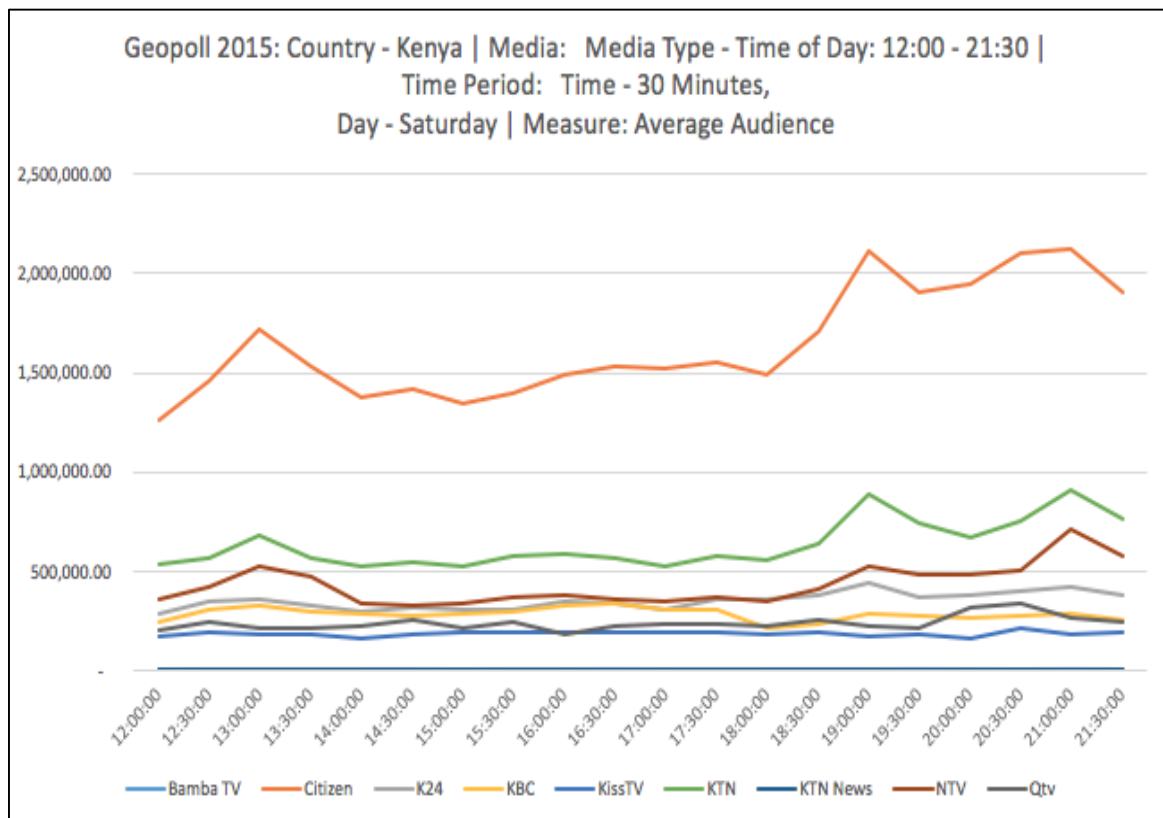


Figure 1: Audience ratings on Saturday and Sunday respectively.

Source: Mediae KAPS report, 2015

Television viewing in Kenya is popular and can be used to communicate agricultural information with success as shown in figure 1. Consequently, television producers have the opportunity to increase local content beyond the 60% minimum requirement by the

Communications Authority of Kenya (CAK) through development of programmes that communicate agricultural information.

### **2.3 Role of television in communicating agricultural information**

The mass media plays traditional roles of informing, educating and entertaining the audience. However, its role of communicating agricultural information is increasingly becoming important enabling empowerment of people, especially those in rural areas (Sithokozi & Onias, 2015). Such information from agricultural experts and researchers is important to farmers as it enables them to improve their farming practices. According to Ajani (2014), agriculture requires substantial knowledge transfer among farmers with regard to successful farming practices, new technologies, control of pests and disease outbreaks, and market information. It is therefore critical that such information reaches farmers who need it to make informed decisions about their farming practices. Kiplangat (1999) stated that knowledge and information are key ingredients for increasing agricultural production. Thus knowledge and information on best farming practices must be communicated to farmers to enable them improve on their production potential. This was confirmed in this study by FF2 in excerpt 25 who predicted an increase in maize production because of information he obtained from the SSU team and used it in his farm.

Nabusoba (2014) agrees that agricultural knowledge is significant for increased productivity. In her study she established that radio is the preferred medium for small scale farmers and extension experts in sharing agricultural innovations. She however recognized that radio agricultural programmes alone cannot bring about the change needed among the farming community and thus there was need to integrate participatory models to serve the rural farming communities effectively. She also recommended the use of multiple programming formats using different Information and Communication Technologies (ICT's) as well as building partnerships between media houses and agriculture sector practitioners. Such partnerships are beneficial in that media houses provide their expertise in communication while agriculture sector practitioners give their knowledge. According to Okello et al. (2011), ICT-based methods of information provision come from the realization that they can play a major role in communicating knowledge and information to rural farmers, as well as delivering education and training modules to farmers at low cost. This agrees with earlier recommendations by Shaik et al. (2004), who said that efforts should be made to incorporate ICTs in all endeavours related to agricultural development. Agricultural sector practitioners and experts should take

advantage of this realization by using ICTs and more so television to communicate the much needed agricultural information.

Agricultural information in the hands of experts and researchers cannot bring about the change needed in farming unless it is communicated to farmers. Kiplangat (1999) says that the key to increased agricultural production lies with a nation's ability to communicate relevant information to the farming community to facilitate effective adoption of the most effective and efficient production methods. In this case, the means of communicating such information should be readily available and accessible. Levi et al. (2014) stated that the use of ICT's like radio, television and mobile phones, can accelerate agricultural development by improving access to information and knowledge services. Ajani (2014) agrees with this thought in that the use of ICT's in agriculture has the potential to facilitate greater access to information that drives or supports knowledge sharing. Television agricultural programmes can play this role since television signals are now readily available and accessible through the digital platform in Kenya.

Munyua and Stilwell (2009) observed that poor access to agricultural information, weak institutional capacity and coordination, inadequate markets and market information are barriers that prevent farmers from attaining full agricultural production potential. This shows that agricultural information is not lacking but rather what is available is not accessible to farmers. This was confirmed in this study in excerpt 2 which led to the development of the SSU programme to communicate agricultural information to farmers. Weak institutional capacity and coordination could be brought about by inadequate funding to the extension service, leading to employment of a few officers who may not reach most farmers. Lack of reliable market information, for example, can make farmers fall into the hands of middlemen who can exploit them by offering low prices for their produce.

Rahul (2017) stresses that farmers need to improve, sustain, and diversify their farm enterprises in order to compete with high production at low input cost. This will make farming profitable while improving food security due to production of adequate food. This is in line with the sentiments of Wangu (2014) who said that access to and use of current information is critical not only for the financial success of farmers but also for supporting sustainable agricultural systems.

Radio has been the most used ICT tool to communicate agricultural information in the past. This was due to the good signal penetration that radio has in rural areas making it accessible to a large population who had receivers. According to Nabusoba (2014), radio is the preferred medium for small scale farmers and extension experts in sharing agricultural innovations. Mugwisi (2015) noted that radio is an inexpensive medium which enjoys a wide range of diffusion even among rural and less literate people who have access to fewer sources of information. Ajani (2014) attributed the popularity of radio to factors like its portability, low cost, and ease of use.

According to Nyareza and Archie (2012), radio is easier to attend to than print, and it is more accessible. Although radio appears to be popular, it cannot bring out the change needed in improving agriculture on its own. This was shown in this study where farmers cited multiple sources of agricultural information that include radio, television, farmer field days and exhibitions as shown in table 4.2. This appears to be the thinking behind Nabusoba (2014) recommendation on the use of multiple programming formats using different ICTs to communicate agricultural information. Other scholars like Ayubu et al. (2012) have explored the use of low cost mobile phone services to communicate agricultural information. This is done using text messages something that is currently used by the SSU programme. The use of text messages allows a two-way communication between the farmer and the production team of the SSU programme. Among the various ICTs, television stands out as a better alternative to radio. Television is the most appropriate medium because it can use sound, pictures and graphics for demonstrative purposes as confirmed in excerpts 5, 8 and 21. Television pictures and graphics helped to simplify what was being communicated to farmers through the SSU programme.

Lwoga et al (2011) argue that only a small amount of agricultural information reaches rural farmers despite the large body of knowledge that exists in research institutions, universities, public offices and libraries. They attribute this situation to weak linkages between research and extension. This clearly shows that although a lot of research findings on agriculture have been produced by various experts, communication of the same information to the farming community is inadequate. This was confirmed through the findings of this study in excerpt 2 where it was noted that farmers did not have a reliable source of agricultural information thus the need to establish the SSU programme. Television programme producers are best placed to repackage and communicate such information in a way that farmers can understand and use to make informed decisions.



According to Yahaya (2001), extension officers are not effective because of various challenges such as their limited number, which limits their availability to farmers. Communication challenges arise due to communication barriers like language and personal bias. This makes the use of television a better alternative. The language chosen in a television programme must be understood by majority of the audience. For example a programme that uses Kiswahili as its broadcasting language has a better chance of reaching many farmers as opposed to one that uses English. The establishment of various vernacular television stations in Kenya, like KassTV and Inooro TV, is another important development because agricultural information can now be communicated in local languages ([www.ca.go.ke](http://www.ca.go.ke)). Such TV stations have the ability to reach farmers with low literacy levels thus bridging the language barrier as recommended by the researcher in the recommendation section of this study.

Tucker, cited by Oladele (2013), says extension services are often prescriptive; extension agents (officers), believing that they know what is best, fail to focus sufficiently on their clients' needs. Although extension services are prescriptive out of necessity, this appears to allude to a situation where advice given to farmers is not sufficient in solving their farming challenges. This happens when extension officers give generalized advice without taking into consideration unique challenges faced by a particular farmer. Sometimes, farmers are dissatisfied with the frequency of interaction between them and extension officers. This phenomenon has been corroborated by various studies in different countries (Adomi et al. (2003) in Nigeria and Lwoga et al. (2011) in Tanzania). This creates a void in communication of agricultural information to farmers. The mass media, especially television is best placed to fill this void through airing agricultural programmes that are rich in agricultural information, which increases agricultural knowledge and influences farmer behaviour. Excerpt 24 confirms change in farmer behaviour after learning about biological control of the stalk borer moth. The farmer planted desmodium and nappier grass to aid in trapping the moth through the 'push-pull strategy.'

Nazari and Hassan (2011) said communicating new knowledge and technologies to rural farmers remains a promising strategy for increasing agricultural productivity. Communication of such information needs to be carried out in a way that is affordable with the ability to reach a wide audience.

Abdul et al (2012) stated that the media is one of the best tools for communicating information about new technologies and new innovations of agriculture among farmers as it is faster than personal contacts. Furthermore, television is better placed to perform this function because of its visual nature, which makes it easy for a farmer to understand and remember what they see on television programmes. This can be seen through the response of the producer in excerpt 8 where she explains that television pictures and graphics are suitable for explaining complex agricultural information. Demonstrations carried out in television agricultural programmes can also be fairly understood even by farmers with low literacy levels. Although extension officers can carry out demonstrations in farms, television has the advantage of showing such demonstrations to a large audience at the same time. In some instances, television agricultural programmes can show such demonstrations in a summarized manner during a specific period like land preparation, planting and weeding. Television programmes can also be repeated at different times to ensure a wider reach.

Kiplangat (1999) observed that rural development demands that rural people access information they need in forms they can understand. He further says that advances in telecommunications makes it easy to reach a large number of people affordably even in remote locations. This is true of television signals that can now penetrate even the most remote locations in Kenya with the advent of digital broadcasting. In order to access digital television signals, one must have a digital decoder or a digital-enabled television in order to access signals that are distributed via satellite. This has eliminated the need for expensive terrestrial repeater transmission sites, thus increasing access to television signals by farmers in remote locations. In this case, television agricultural programme producers must adopt the use of simple language that can be understood by most farmers. The production of a single topical television agricultural programme targeting sections of the farming community, for example, maize farmers can reach a large number of farmers affordably as opposed to face to face extension.

Communication of agricultural information using television is promising because of the advantages that television has over other mass media like radio and newspapers. According to Abubakar et al. (2009), television combines audio and video, which helps to create vivid impressions in the mind of a viewer. The audio and visual qualities of television products have greater impact which make them appropriate for demonstrative purposes. This makes it easy for agricultural specialists to explain complex ideas that would otherwise be impossible to do using other methods like face to face contacts or through radio. This can be done using graphics

which are suitable for showing things that can't be seen with the naked eye like the way plants take up nutrients from the soil. Graphics also simplify what is being explained in a television programme to enable a farmer carry out a task in the right way. This is well captured in excerpt 21 where graphics is used to explain the correct spacing between maize and beans planted in the same farm.

Buren (2000) stated that the popularity of television as an educational tool lies in its simplicity to the audience as people choose the simplest way to learn. This is because of the audience's ability to see and follow what goes on in the programme through the pictures being shown. The pictures are captivating and can help people with low literacy levels to follow the presentation with ease. This was confirmed in excerpt 28 where a farmer was happy with the way the SSU programme is presented in simplicity with localized stories which are inspiring. However, communication of agricultural information through television depends on the ability to attract viewers. Nazari and Hassan (2011) state that the success of agricultural development programmes largely depends on the nature and extent of use of mass media to attract viewers. Perhaps this explains the use of celebrities as presenters by the SSU programme. Mwombe et al (2014) stated that by using ICTs, agricultural innovations can be codified, repackaged to suit the target group and disseminated to a wide range of clientele quickly, cheaply and with minimal distortion. This is where producers of television agricultural programmes come in with their communication skills and package information in a language that can be understood by majority of the audience.

According to Wangu (2014), social media can also be used by farmers to seek agricultural information and provide feedback. Social media in this case can act as a monitoring tool for projects or topics undertaken. Feedback can also be given through short message service (SMS) or telephone calls. Feedback creates a two way communication process that is more effective because producers of television programmes would know the thinking of their audience; they thus can tailor their programmes to serve the needs of such audiences. In this case, producers of television agricultural programmes need to appreciate the fact that communication is an interactive process between them and farmers through sufficient feedback and provision of solutions to identified challenges through expert advice.

FAO (2001) equally acknowledges that television is an effective mass media tool in communicating with rural populations in developing countries. This shows that television can be used effectively to build the capacity of farmers. Abubakar et al. (2009), in their study on

the “Role Of Mass Media In Disseminating Agricultural Information ” concluded that the mass media is an efficient modern means of communication which possesses peculiar qualities of sound, pictures and practical method of demonstration. This elevates television as the best mass medium that can be used to communicate agricultural information to Kenyan farmers, thus improving their farming practices and consequently their production output.

This study therefore explored the effectiveness of television in communicating agricultural information to Kenyan farmers with Shamba Shape Up programme as a case study.

#### **2.4 Challenges of communicating agricultural information on television**

Using television to communicate agricultural information is not without challenges. According to Sithokozile and Onias (2015), media in Africa is faced with challenges of poor infrastructure, inadequate equipment as well as professionals who are experts in rural reporting. Poor infrastructure includes few power connections and signal distribution. Inadequate equipment hinders production of timely agricultural programmes that are rich in content. Media houses may prioritise the use of equipment to cover other events like politics instead of agricultural programmes which may be time consuming. Journalists in Kenya may not have agricultural communication training which may hinder their reporting on agricultural issues.

Abubakar et al.(2009) identified lack of power as a challenge in rural areas as well as feelings of irrelevance of some TV programmes to specific needs of farmers in some regions. Electric power is necessary in order to power television sets. Unmet specific needs of farmers in a region, is a significant challenge because it is almost impossible to address varied needs of farmers.

Tumsifu (2013) found out that, although farmers watch television on daily basis and are fairly literate, many of them stated that telecasted sessions have little agricultural information which is too general and thus adding little value to their knowledge. This is a critical point and there was need therefore to establish whether agricultural information communicated through SSU is relevant to the needs of Kenyan farmers. This study found out that agricultural information communicated through the SSU programme was beneficial to farmers as shown in excerpts 27, 30 and 32. This study therefore disagrees with the findings of Tumsifu (2013).

According to Mwombe et al. (2014), farmers with higher income are likely to use ICTs as sources of agricultural information. This means that farmers with low income may end up

missing out on agricultural information aired on television because they may prioritise other needs as opposed to purchasing television sets and paying subscription fees.

Sithokozile & Onias (2015) are of the view that since the media gets most of its revenue from advertising, sometimes they are forced to communicate information from advertisers that may not be relevant to specific farmer needs. In case the media fails to do so then they risk revenue loss through withheld advertising opportunities. This agrees with the findings of Rono (2013) who established that sponsors greatly influence the content of the programmes they sponsor which limits the amount of agricultural topics that can be presented in such programmes. In such cases, the sponsors insist that certain topics be covered like stalk borer disease in maize knowing that they have products that can be used to prevent or treat the disease.

In other instances, production and scheduling of programmes that fetch high revenue than agricultural programmes are favoured. According to Ndaghu and Taru (2012), editors and programme directors are more interested in producing programmes that are of high commercial value thereby gate-keeping most agricultural information. This results in presentation of few agricultural programmes which are not suitably scheduled to reach majority of farmers.

## **2.5 Theoretical framework**

This study was guided by the Social Cognitive Theory that was developed by Albert Bandura in 1977. The theory was previously known as Social Learning Theory and has its roots in psychology. The theory is widely used to explain behavior especially in today's highly mediated society. The theory has undergone improvements repeatedly by Bandura in 1986, 1997, 2001a, 2001b owing to advancements in its use in explaining mass media influence on individuals and society at large. The theory argues that people learn through observation by modelling or copying behaviours that they see on the mass media, especially television. Modelling happens in two ways: through imitation, in that people replicate an observed behavior and through identification, where observers do not copy exactly what they see but make a more generalized but related response.

Imitation and identification are products of three processes i.e. observational learning, inhibitory effects and disinhibitory effects. In observational learning, observers can acquire or learn new behaviours by simply seeing how those behaviours are performed. This explains why most people can fire a gun without formal training on the same because they have seen it done before on television. This is an important aspect in that farmers can acquire knowledge through

observation and imitation of demonstrations on best farming practices that are shown on television.

Inhibitory effects happen when one sees a model or movie character (in our case television character) suffer for an act of kindness. An example is a farmer who shares uncertified maize seeds with fellow farmers which leads to low maize yields instead of purchasing and planting certified seeds. The behavior of sharing and planting uncertified maize seed is therefore inhibited, meaning that it will not be copied. Disinhibitory effects take place when an observer sees a model or television character being rewarded for a prohibited or threatening behavior, thus increasing the likelihood of the observer performing that behaviour. An example is a potato farmer who uses too much fertilizer to increase yields (which increases sales) but the product may not be safe for human consumption. The behaviour of using too much fertilizer to increase yields will therefore be disinhibited, meaning that it can be copied. The researcher will however concentrate on the tenets of farmers learning new farming techniques by observation through modelling and identification. According to Bandura (2001b), Social Cognitive Theory affects personal and social change by mass communication.

Johnson (2016) identified several strengths of the Social Cognitive Theory. One of the strengths is that it easily handles inconsistencies in behavior thus one person can learn and imitate a behaviour while another person may opt to modify the observed behaviour. He also added that the theory is accurate and easy to understand while offering a chance to explain a large number of behaviours. The theory also gives an accurate picture creation and explanation of how a behaviour or task is learned. This is an important aspect in this study because of the chance of seeing how farmers have learned and used agricultural information communicated on the Shamba Shape Up programme.

The theory has received some criticisms. One of the main criticisms of Social Cognitive Theory is that it is not a unified theory in that the different aspects of the theory do not tie together to create a cohesive explanation of behavior (Johnson 2016). It has also been argued that not all social learning can be directly observed and this makes it difficult to quantify the effect that social cognition has on development. The study however concentrated on the fact that farmers can learn and imitate or modify agricultural information that they see on the Shamba Shape Up programme in their farming activities. The Social Cognitive Theory will help to show whether farmers have acquired agricultural knowledge by observing and imitating or modifying best farming practices as communicated on the Shamba Shape Up programme on Citizen Television in Kenya.

## **CHAPTER THREE**

### **RESEARCH METHODOLOGY**

#### **3.1 Introduction**

This chapter presents the research design, the study area, target population, sampling techniques, sample size, research instruments, data collection methods, data analysis, logistical and ethical considerations.

#### **3.2 Research design**

The study used a case study research design where the Shamba Shape Up (SSU) programme of Citizen TV was purposively sampled. According to Jwan and Ong'ondo (2011), a case study is an empirical enquiry that investigates a contemporary phenomenon or object within its real-life context. It focuses on smaller unit(s) of study from which inferences or generalizations can be made about a larger unit. The case study research design was appropriate for this study because SSU programme can represent other agricultural programmes aired by television stations in Kenya.

#### **3.3 Location of the Study**

The study areas were Nairobi and Uasin Gishu Counties in Kenya. The Mediae Company, which produces the SSU programme, is located in Nairobi County. Mediae Company offered access to the producer and presenters of the SSU programme as well as documentary material. Uasin Gishu County, located in the North Rift region of Kenya, is a rich agricultural area with the main farming activities being wheat, maize and bean growing, dairy farming, poultry-keeping and horticulture. This made it an appropriate area for this study because of the opportunity of interacting with farmers who engage in varied farming activities.

#### **3.4 Target population**

The target population was the production team of SSU programme which constituted of the producer and presenters, as well as farmers in Uasin Gishu County. The participants were categorized into three; the production team of the SSU programme, farmers who have featured in the programme and other farmers who have not featured in the programme but watch it on a regular basis. The age, gender and academic qualifications of farmers were put into consideration in order to see how these factors influence farmers' response to the SSU programme.

### **3.5 Sample and Sampling techniques**

The sample of the study comprised ten farmers, one producer and two presenters of SSU programme. The purposive sampling technique was used by the researcher to sample ten farmers: five who have featured in one or more episodes (through follow-ups) of the SSU programme and another five who have not featured in the programme but view it regularly. Thus a farmer who does not watch the programme was not chosen for the study. One producer and two presenters were also involved in the study. According to Jwan and Ong'ondo (2011), purposive sampling involves choosing a case because it illustrates some features or processes which a researcher is interested in. This means that the sample must have the required information and knowledge in the field under study. This being a case study, a small sample was chosen because of the need to study the SSU programme in detail. The researcher also used interviews with open-ended questions in collecting data. The interview method generates a lot of data thus the need for a small sample. The sample of the study possessed information that was beneficial to this study.

### **3.6 Data collection tools and instruments**

The tools that were used in collecting data for this study were interview schedules, observation schedule, audio recorders, notebook and documents (programmes and text messages). The interview schedule used had open-ended questions to enable the researcher to probe responses and ask follow-up questions. An audio recorder was used to record responses from interviewees. The researcher opted not to use a video recorder because of the cost implication and the ease in using an audio recorder. Some informants may not be comfortable if their responses are captured on camera. A notebook was used to record key information and follow-up questions. The researcher also observed the SSU programme as it was being aired during the period of study. Observation was also important as the researcher was interviewing the farmers in order to see first-hand what they were claiming to have learned from the SSU programme.

#### **3.6.1 The Interview**

The interview method was chosen because it is the most suitable method when a small number of respondents are involved in a study. According to Jwan and Ong'ondo (2011), the interview method is used when the people a researcher needs to get data from are available to talk to the researcher at length. Such people are usually crucial to the study and one cannot afford to lose any of them. Jwan and Ong'ondo (2011) attribute the importance of using interviews to the fact



that qualitative research deals with views, opinions, feelings et al and interviews allow participants to report their thoughts and experiences, thereby giving important insights. Data generated from interviews is thus considered very important. The interview method, however, has weaknesses if the researcher asks closed-ended questions that leave little room for explanation. Responses from informants can also be lost if one fails to keep a good record. In order to mitigate these challenges, the researcher used face to face interviews with open-ended questions. The responses from the participants in the study were recorded using an audio recorder. A note-book was also used to record key information and follow-up questions.

### 3.6.2 Documentary source analysis

This method entailed sampling and analysing feedback from viewers of the SSU programme. The information sampled were text messages received from series number 7, episode number 10 of the SSU programme. This was the last episode aired before the programme took a break for the season in July 2017. The choice of this episode ensured that the feedback sampled was up to date, thereby giving a clear picture of how the audiences were responding to agricultural information communicated through the SSU programme.

### 3.6.3 Observation

This method entailed the researcher watching the SSU programme during the study period. This enabled the researcher see how the SSU programme communicates agricultural information as well as the strategies used to attract and retain viewership during the transmission. It also involved the researcher observing what the farmers said they learned from the SSU programme, whether they have implemented it and any change noted in their ventures.

| Day and date | Topic | Programming strategies identified | Comments |
|--------------|-------|-----------------------------------|----------|
| Saturday     |       |                                   |          |
| Sunday       |       |                                   |          |

Figure 3.1: Observation schedule

Source: Researcher

### **3.7 Data analysis**

The qualitative data collected in form of audio was transcribed into text for ease of analysis. The researcher coded the responses thematically in line with the objectives of the study. The codes include agricultural information, television, graphics, pictures, communication. For ease of response analysis, farmers featured on SSU programme were assigned the code 'FF' and are therefore known as FF 1, FF 2, FF 3, FF 4 and FF 5. Farmers not featured on SSU on the other hand were assigned the code 'FNF' and are therefore known as FNF 1, FNF 2, FNF 3, FNF 4 and FNF 5. The presenters were identified as presenter 1 and presenter 2 with the producer remaining as such. The researcher coded the data in sub-themes as per the objectives of the study in order to determine its usefulness. The tenets of the Social Cognitive Theory helped in analyzing the data to show whether farmers have observed, copied or modified agricultural information that they see in the SSU programme. The results of the study are presented in the form of text, illustrations and tables.

### **3.8 Ethical considerations**

The researcher sought permission from the relevant authorities before embarking on the study. These authorities include the Graduate School of Egerton University, The Mediae Company Ltd, which is the producer of SSU programme, and the National Commission for Science, Technology and Innovation (NACOSTI). The researcher also reported to the County Commissioners' of Nairobi and Uasin Gishu Counties before embarking on the study as per the research permit conditions from NACOSTI. Participants in this study were informed that their participation was voluntary and the information they gave to the researcher would be kept confidential and used for the study only.

## CHAPTER FOUR

### RESULTS AND DISCUSSIONS

#### 4.1 Introduction

This chapter presents, analyzes and interprets data obtained. The findings are organized thematically in line with the objectives of the study. The findings therefore answer the following research questions: What communicative needs led to the development of the Shamba Shape Up programme? What programming strategies guide the production of the Shamba Shape Up programme? How effective is Shamba Shape Up programme in communicating agricultural information to farmers? The data was collected using face to face interviews from the production team of Shamba Shape Up programme and farmers in Uasin Gishu County as well as observation. Secondary data was collected from text messages received from viewers of the SSU programme. The study assessed the effectiveness of Shamba Shape Up (SSU) programme in communicating agricultural information to farmers.

#### 4.2 Background information of participants

The study focused on three categories of participants; the production team of SSU programme consisting of the producer and two presenters, farmers featured on SSU and farmers not featured on SSU. Farmers featured on the SSU programme were assigned the code ‘FF’ while those not featured were given the code ‘FNF’. The presenters are identified as presenter 1 and presenter 2 with the producer remaining as such.

*Table 4. 1 : Number of participants*

| Category                    | Targeted Number | Number interviewed | Code            |
|-----------------------------|-----------------|--------------------|-----------------|
| Producer                    | 1               | 1                  | Producer        |
| Presenters                  | 2               | 2                  | Presenter 1 & 2 |
| Farmers featured on SSU     | 5               | 4                  | FF              |
| Farmers not featured on SSU | 5               | 5                  | FNF             |
| <b>Total</b>                | <b>13</b>       | <b>12</b>          |                 |

The researcher interviewed all the targeted participants except FF 5 who could not be reached despite several attempts. This however did not affect the outcome of the research since the researcher asked the same questions to other featured farmers.

### 4.2.1 Characteristics of participants (farmers)

The participants were asked to indicate their age, gender and highest academic qualification. This was important in order to determine whether such factors influence farmers learning of new techniques from television programmes. Majority of the participants were aged 30 - 45 years as shown in table 4.2.

Table 4. 2: Age of participants (farmers)

| Age        | 25-30 | 30-35 | 35-40 | 40-45 | Over 45 |
|------------|-------|-------|-------|-------|---------|
| <b>FF</b>  | 0     | 1     | 2     | 1     | 0       |
| <b>FNF</b> | 1     | 2     | 1     | 0     | 1       |

This shows that more young people are engaging in farming activities. Younger farmers also easily embrace and adopt new farming ideas. This agrees with the sentiments of presenter 1 in excerpt 1 below who said that older farmers are not easily convinced to change their farming behaviour because they are used to doing their farming in a certain way. Such ways may not be right, leading to lower production and yields.

**Excerpt 1**, Presenter 1;

When it comes to adoption of new farming techniques, young farmers are easy to convince unlike older farmers who are used to doing their framing in a certain way but it may not be the right way.

On the academic qualification of the farmers interviewed, the highest were Master’s degree holders while the lowest were Secondary school dropouts (table 4.3). Most participants however were diploma holders. This shows that the farmers were fairly literate and could understand agricultural information communicated through television. Those with low literacy levels like FF 1 and FNF 3 confirmed that they could understand and use agricultural information that they get from television programmes.

Table4. 3: academic qualifications of farmers

| Academic qualification | High school dropouts | Diploma | Bachelors | Masters | PHD |
|------------------------|----------------------|---------|-----------|---------|-----|
| <b>FF</b>              | 1                    | 2       | 1         | 0       | 0   |
| <b>FNF</b>             | 1                    | 1       | 1         | 2       | 0   |

The study sample consisted of four female farmers and five male ones (Table 4.4). This indicates that both genders actively engage in farming.

Table 4. 4: Gender distribution of respondents (farmers)

| Gender | Male | Female |
|--------|------|--------|
| FF     | 2    | 2      |
| FNF    | 3    | 2      |

### 4.3 Communicative needs that led to the establishment of Shamba Shape Up

The idea of establishing the Shamba Shape Up programme came out of “*Tembea na Majira*” and “*Makutano Junction*” programmes produced by the Mediae Company. The SSU producer (excerpt 1) said this was due to the high response rate that the programmes received every time an agricultural theme was presented.

**Excerpt 1, Producer:**

In the process of doing ‘Makutano Junction’ which had different theme lines funded by different people, every time we did something agricultural bang! Everybody got interested. We did a story on how to make silage, how to handle milk bang!....this showed us that the programme was communicating something important to farmers, something they lacked before....DFID (Department for International Development, UK) commissioned a research and we found out that 70% of our audience reside in rural areas with farming as the common denominator. We therefore decided to do a pilot SSU programme in 2008 and we got overwhelming response.

The audiences displayed a need for agricultural information and therefore SSU was established to communicate the same to farmers. This was an indication that farmers in rural areas did not have a reliable source of agricultural information. This was corroborated by presenter 1 (excerpt 2), who said their various farm visits established that agricultural information did not reach famers effectively.

**Excerpt2, Presenter 1:**

....we found out that there was a need to educate farmers to improve their livelihoods and to change knowledge and behaviours. It was a noble idea (establishment of the SSU Programme) because farmers lacked information at the grassroots. Some of them didn’t know who to contact incase of anything. You could see people doing seminars but for the information to reach down to the farmer was very hard and we thought by using the mass media we could reach many farmers with information.

This is supported by Lwoga et al. (2011) who said that only a small amount of agricultural information reaches rural farmers despite the large body of knowledge that exists in research institutions, universities, public offices and libraries.

Presenter 2 said that most agricultural experts are poor communicators who use jargon and complex words which would not be easily understood by farmers. (See excerpt 3 below).

**Excerpt 3, Presenter 2:**

Most agricultural experts use big words and it is therefore my job to break it down to the farmer. I don't assume that the farmer knows everything so I start with the basics and build from there. Remember everyone has agricultural basics because they have been doing it even before SSU was started but was doing it maybe not the right way or not using correct farm inputs so we step in (as SSU team) to add to it not to remove but you do it in a nice way so that they feel appreciated.

There was need to establish a platform where complex information could be repackaged and communicated in simple language that is easily understood by most farmers thus improving their agricultural knowledge and consequently leading to higher yields. SSU programme therefore provides a link between agricultural experts and farmers.

#### **4.3.1 Sources of agricultural information**

The farmers interviewed by the researcher were asked to indicate their sources of agricultural information. This was an important question that would help establish where farmers get their agricultural information and how such information influences their farming behaviour. The farmers gave varied sources of agricultural information that include radio, community leaders, neighbours, farmer field days and exhibitions, radio, television, internet and newspapers (Table 4.2). However, television, radio and farmer exhibitions were cited by a majority of farmers as their preferred sources of agricultural information, with television being the most popular source followed by radio and farmer exhibitions.

Table 4 5: Sources of agricultural information

| Source of information             | Number of farmers citing |
|-----------------------------------|--------------------------|
| Community leaders                 | 4                        |
| Farmer field days and exhibitions | 7                        |
| Neighbours                        | 5                        |
| Radio                             | 8                        |
| Television                        | 9                        |
| Newspapers                        | 3                        |
| Internet                          | 2                        |

Television gained this prominence due to its audio visual qualities. Farmers said they find it easy to follow demonstrations on television as shown in excerpt 4 by FF 3.

**Excerpt 4, FF 3:**

Watching the programme on television is easy because I am able to see what is being said which I can copy in my farm.

Television pictures are understood even by farmers with limited literacy levels. The pictures create lasting impressions in the minds as opposed to instances where farmers get the information face to face or listen to the same on radio. This was confirmed in excerpt 5 by FF 1 who said that she understands what is shown on TV even though she possesses limited literacy levels.

**Excerpt 5, FF 1:**

Watching the programme on television is good because the pictures help simplify what is being explained by experts like when I watched a programme on how to vaccinate chicken to prevent diseases like Coccidiosis. It is easy to understand what you should do because the experts are shown doing it on television.

This agrees with the sentiments of Abubakar et al (2009), who said that the mass media (television) is an efficient modern means of communication which possesses peculiar qualities of sound, pictures and practical method of demonstration.

Radio was cited as the second most popular source of agricultural information because of its diversity. It was established that farmers do get agricultural information from radio but on different stations with some being vernacular stations. This confirms earlier assertions by the

producer on why they chose television over radio to transmit the SSU programme. This is because radio is now more fragmented with the establishment of many varied stations which makes it difficult to reach a large audience spread around the country using one radio station. At the time, television was more consolidated with the chosen station Citizen television (RMS) commanding a large viewership which it still does as shown in figure 1. The fragmentation of radio is further explained by the producer in excerpt 6.

**Excerpt 6, Producer:**

*Tembea na Majira*, which was aired on radio, had a listenership of about 4 million. In 1998 the listenership was quite high, come the year 2000 we realized the listenership was going down so part of the research was to find out why the listenership was going down and what we found out was quite interesting. In the year 2000, there was fragmentation of the FM frequencies, more FM stations came and now we had over 140 stations but prior to that we had only KBC radio.

Farmer field days and exhibitions was the third most popular source of agricultural information. Exhibitions cited include the Agricultural Society of Kenya (ASK) shows and University of Eldoret's (UOE) annual farmer exhibition. Farmer field days are usually organized by agro-chemical companies who are aiming to market their products to farmers. The drawback to these sources of information is that they are held after lengthy periods of time; for example, the ASK shows and UOE's farmer exhibitions are annual events. Farmer field days are organized at the discretion of agro-chemical industries.

Farmers also cited their neighbours as the fourth most popular source of agricultural information. This was corroborated by FF 2 in excerpt 7 who said that neighbours took interest when they saw a tent set up by the SSU team. The SSU team was showing FF 2 how to sample soil in the farm to enable them carry out soil fertility testing. Soil sampling can be done in many ways but some methods appear popular; one is through random sampling or by following a zig-zag 'W' shape pattern in the farm. The collected samples taken from 10 – 15 spots are thoroughly mixed in one container then a small amount is taken, put in a clean container, labeled and sent to a soil laboratory for testing. The label on the soil sample should include the name of the farmer, location, the date, type of farm and contact. A farmer can use private laboratories to carry out the test or use the government sponsored soil doctor programme. Carrying out soil testing in the farm of FF 2 was important because it helped the SSU team advice the farmer on the correct type of fertilizer and amount to use in planting maize. During



the visit by the SSU team to the farm of FF 2, neighbours peeped through the fence to see what was happening but eventually came into the compound to see what was taking place. The neighbours continued to seek information from FF 2 long after the SSU team had left as shown in excerpt 7.

**Excerpt7, FF 2:**

My neighbours were curious to know what the SSU team was doing in my farm but were afraid to come near but some of them gathered courage and came in. The SSU team was showing me how to sample soil in the farm to be used in measuring the soil fertility. They also advised me on the correct type and amount of fertilizer to use for good yields. When the visitors left (SSU team) other neighbours came to ask questions about soil fertility testing and the fertilizer I was advised to use and even up to now they still come to see how my maize is doing.

Although this source of information (neighbours) can give farmers a chance to copy or modify what they see in other successful farms, it may not be reliable because of distortions that can occur due to third party informants. For example, farmers can copy the use of a certain type and amount of fertilizer by a successful farmer before carrying out soil fertility testing in their individual farms. This practice can lead to low yields because different farms have different soil fertility and acidity levels. This is reinforced by Mwombe et al. (2014), who said that by using ICTs, agricultural innovations can be codified, repackaged to suit the target group and communicated to a wide range of clientele quickly, cheaply and with minimal distortion.

Community leaders were cited as the fifth most popular source of agricultural information. They include chiefs, village elders, women leaders and elected leaders. They are important in communicating information that needs to be adopted in a large scale in a given area, for example, vaccinating livestock in cases of disease outbreaks.

Newspapers came in sixth with the drawback being its affordability. Majority of the farmers interviewed said they hardly think of purchasing newspapers for agricultural information.

The internet was cited as the seventh most popular source of information. Although the internet has rich agricultural information besides archived SSU programmes on YouTube, its use is hindered by unreliable internet access due to poor connections and high cost of connectivity. Literacy levels could also play a part as the farmers who cited the internet as a source of agricultural information are learned with Bachelors and Masters Degrees.

### 4.3.2 Choice of television over other mass media

According to the producer of SSU programme, about 70% of television audiences in Kenya reside in rural areas with farming as the common economic activity. Mediae Company wanted to reach majority of these audiences with agricultural information. Television was chosen over other media like radio and newspapers because it is practical, thus making it easier to explain a concept to farmers using sound, pictures and graphics (excerpt 8).

**Excerpt8, Producer:**

Visually it is easier to explain something like the ‘push – pull’ programme that is used in controlling the stem borer moth from laying its eggs on the maize whereby desmodium is planted between maize rows and napier grass round it. The desmodium ‘pushes’ the moth away from the maize by emitting a bad smell while the napier grass ‘pulls’ it to lay its eggs on it. Television makes it easier to explain such a concept using pictures and graphics because people actually see what is being taught, plus television requires you to sit and watch unlike radio that can take a back banner.

Sitting to watch television makes it more appropriate for farmer education unlike radio which people listen to while engaging in other activities which can be distracting .On the use of newspapers the producer said that about 250,000 copies are published daily in Kenya but the majority are sold in Nairobi thus rural farmers may not access them. (See excerpt 9)

**Excerpt 9, Producer:**

...with newspapers our research showed that slightly over 250,000 copies are printed daily and they rarely leave Nairobi thus farmers in rural areas may not easily access them.

Low literacy levels among rural farmers pose another challenge in that only literate farmers are able to read agricultural information on newspapers.

Television agricultural programmes communicate information directly to farmers reducing the chance of distortion from third party informants. It can also reach a large number of people per household due to high penetration of digital TV signals. According to presenter 2 in excerpt 10, access to TV signals in Kenya has improved after the countrywide digital migration.

**Excerpt10, Presenter 2:**

Right now television signals are available countrywide so agricultural programmes on television can be watched by many people.

#### **4.4 Programming strategies that guide production of the SSU programme**

This study objective was to establish what makes SSU stand out from other agricultural programmes aired on television stations in Kenya. On the choice of a farm to be visited, the producer in excerpt 11 said a number of farms are visited before one is chosen for shooting. The farm chosen must have farming activities beneficial to a majority of farmers. Good communication skills from the farmer are key, but in instances where the farmer is not well conversant with English or Kiswahili a translator is used.

**Excerpt 11, Producer:**

It is a tedious task because you have to visit like 20 farms before you settle on one farm. There are things that we look at and the farm chosen must have things that we are looking for, like farming activities that can be beneficial to many farmers and because this is a TV programme, good speakers.....we have visited farms where the farmer did not speak English or Kiswahili but we got someone to translate. Once a farm is chosen we camp there continuously for three days before shooting is done.

##### **4.4.1 Continuous Camping**

The SSU team continuously camp in a farm being visited for three days before actual shooting takes place on the last day as shown in figure 4.3. This points to an aspect of good planning where you don't just visit a farm and start shooting but there is a deliberate effort to understand and see firsthand the challenges faced by a particular farmer. This enables the SSU team to provide solutions to such challenges through advice from agricultural experts. Focus is also given to activities that will benefit a large number of farmers. For example, a farm that engages in maize farming has a high likelihood of being chosen over one that engages in sorghum farming. This is because the advice on maize farming will be beneficial to many farmers across the country unlike sorghum farming which is not practiced by many farmers. In other programmes however, unique farming activities like millet and sorghum farming can be given prominence as a way of encouraging farmers to diversify their farming by planting nutritious drought resistant crops.



*Figure 2: A tent set up by the SSU team in a farm being visited*

*Source: SSU archives*

Continuous camping is a unique strategy by the SSU team. This unique way of programming gives the presenters and farmers an opportunity to interact closely enabling them to build a rapport for the actual shooting. This was confirmed by both presenters 1 and 2 in excerpts 12 and 13 respectively.

**Excerpt 12, Presenter 1:**

Some farmers may not be willing to talk on camera out of fear or they feel their English or Kiswahili is bad and they may be laughed at but out of staying together we crack jokes and make them feel at ease during shooting. In case they can't speak well at all then we look for an interpreter.

**Excerpt 13, Presenter 2:**

When we camp in a farm, we notice firsthand the challenges faced by the farmer. Our continuous presence sends a message to the farmer that we care and willing to help solve their challenges. It also helps us to carry out a healthy discussion between the farmer and experts on the challenges they are facing for their own benefit as well as the farmer watching at home with similar challenges.

In figure 4.4, one of the SSU presenters (center) is shown engaging an agricultural expert in banana farming (right) as the farmer (left) listens keenly. There appears to be a good interaction between the three as the shooting takes place. Such easiness was built out of continuous interaction between the farmer and the SSU team during the three days of continuous camping.



*Figure 3:* A scene in a banana farm showing an interaction between the farmer and the SSU team.

*Source: SSU archives*

#### **4.4.2 Farm Makeover**

The producer revealed that the SSU programme has adopted a ‘farm makeover’ format where a problem identified in a farm being visited is solved with the help of agricultural experts, the presenters and the farmer. For example, in a chicken farm, such solutions may require the rebuilding of a chicken house that could be small or one that is not well ventilated. The SSU team in such a scenario will demolish the old chicken house and replace it with one that has adequate space with separate cages for chicken of various ages as well as adequate lighting and proper ventilation. Such houses also come with separate feeding and laying areas. In a dairy farm, this could include teaching the farmer the importance of preserving surplus fodder in form of hay or silage to be fed to cows in a dry season when fodder is limited. The presenters and experts will lead the task of making silage so that a farmer can learn how to do it appropriately as explained in excerpt 14 by the SSU producer. This hands-on approach is appropriate in making the farmer learn how to solve similar challenges in their individual farms in future.



**Excerpt14, Producer:**

We don't just go to a farm and lecture them on how to do things like building a chicken house, how to space crops like vegetables or why it is important to make hay or silage for feeding dairy cows. In a dairy farm we tell them why availability of nutritious fodder throughout the year is essential for profitable dairy farming. To achieve this, surplus fodder during the rainy season needs to be preserved in form of hay or silage which can be fed to dairy cows during the dry season for constant and high milk production. We show them how this is done to enable them do it alone in future.

Viewers of SSU programme watching at home also benefit from the demonstrations which enable them to solve similar challenges experienced in their own farming activities.

**Excerpt 15, Presenter 2:**

It is a showcasing and it is a concept that the farmer would feel like we came to their place and showed them how to do this and that. For example, good silage may be made from maize, oats or barley among other crops. The fodder is harvested at a stage when the nutrient content is at its peak with enough dry matter. The green fodder must be cut into small pieces which are compressed in airtight pits or plastic bags.

A good example of this hands-on approach is shown in figure 4.5 where the presenters are seen actively helping a farmer to set up irrigation tanks. When the presenters lead such tasks, the farmers would be more ready to do it themselves in future. Farmers watching at home can learn and copy what is being shown in the programme.



*Figure 4: SSU presenter showing a farmer how to set up irrigation tanks*

*Source: SSU archives*

#### 4.4.3 Reality format

The programme has adopted a reality format which according to the producer in excerpt 16 makes the programme as natural as possible and is affordable to produce as opposed to other programming formats like drama. This is because reality format shooting is done in natural settings with minimal modifications to scenes unlike drama that requires a set consisting of actors, crowds and props.

**Excerpt 16, Producer:**

The world is changing and things are changing so we have to move with it. Reality shows are the in thing now and it is cheaper to produce compared to other formats like drama.

This means that the SSU programme is shot in natural settings that are common in most farms. This helps other farmers to identify with familiar features that are common in most farms thus they see the challenges they may be experiencing as not being unique to themselves. Such natural settings as depicted in figure 4.6 below can include falling fences, unkempt grass, smoky houses, and crops choking with weeds.



*Figure 5: A typical shooting scene showing the SSU presenter engaging with farmers on identified challenges in their farm.*

*Source: SSU archives*

Figure 4.6 presents evidence that there is minimal modification of the scene with the presenter and the farmers shown sitting under a tree on wooden logs that are common in many farms.

The researcher asked the presenters about their background and training. It was established that SSU presenters don't have formal training in agriculture. This confirms earlier assertions of Sithokozile and Onias (2015), who said that media in Africa lack experts in rural reporting.

However, the presenters have acting backgrounds. This means they are good communicators who can handle difficult topics with ease and can come down to the level of the farmer in order to ask questions from agricultural experts on their behalf. This was confirmed by presenters 1 and 2 in excerpts 17 and 18 respectively.

**Excerpt17, Presenter 1:**

...we all can't be jacks of all trade so there are people who are trained in agriculture then when they meet with people like us who are trained in the field of passing the message on television, we share the knowledge, what they have I break it down to the farmer and I become like a layman together with the farmer because if we are two experts we will look down upon the farmer but I'm the go-between, between the farmer and the expert.

**Excerpt18, Presenter 2:**

I don't have any training in agriculture. I'm an actress but I grew up in a farm. My father loved agriculture. It was all around us anyway so when we closed school we would go to the farm. My acting background helps me to understand the topic of the day and communicate with the farmer and the experts effectively.

#### **4.4.4 Partial scripting**

Partial scripting is an aspect whereby words to be spoken by the presenters in the SSU programme are not all written down to be recited word for word. This strategy allows a presenter to use their skills to facilitate the discussion between the farmer and agricultural experts in a manner that brings out the best in both of them. This was confirmed by presenter 2 in excerpt 19.

**Excerpt19, Presenter 2:**

The script is just a guide which enables us to frame or explain a question to the farmer or the expert in a way that they can understand it better.

An example of a shooting script is shown in figure 4.7. The script shows that Enkishon farm engages in mixed farming where they keep dairy cows, rear pigs, chicken, fish as well as growing maize, kales and onions. The script is a combination that covers the shooting aspect of the SSU programme in the field and editing in the studio. It shows actual words that the presenters must use in some scenes like the opening parts and when giving instructions on how to administer feed supplements like the Cooper Cooler. This is important in ensuring that the presenters do not miss out important facts about the ratio to be used when giving such feed supplement. Other times only key points are provided with the presenters expected to use their



own words to link up the key points. A good example of this is shown in the silage making process where only key points are given. The script also shows the camera angles to use and how to move from one shot to another like movement from wide shots to close ups. The objective here is to ensure that agricultural information is communicated to the farmer effectively through the SSU programme.

Fig. 4.7 SSU partial programme shooting script (the full script is attached at the appendices)

## SHAMBA SHAPE UP - SERIES 7

### FARM 03 – ENKISHON FARM, NAROK

|  |  |
|--|--|
| <p><b>SYNC TONNY</b><br/> <b>Hello farmer how are you</b><br/> <b>SYNC FARMER</b><br/> <b>farmer replies</b><br/> <b>SYNC CAROL</b><br/> <b>OK well, can you show us around your farm?</b></p> <p><b>VO THEY TOUR FARM</b><br/>         Enkishon farm covers 5 acres. They have 2 cows, 10 pigs, 250 chicken and over 1,000 tilapia in their fish pond, as well as growing sukuma wiki, maize and onions.</p>  | <p><b>PRESENTERS</b><br/> <b>LINK</b><br/> <b>MEET THE</b><br/> <b>FARMER</b><br/> <b>TOUR THE FARM</b></p> <p><b>B ROLL</b><br/>         Presenters and farmers visit key farm activities<br/> <b>ALSO</b><br/> <b>QUADCOPTER</b></p>       |
| <p><b>USE PIC RELEVANT TO TOPIC</b><br/>         Possible title..... slow mo....</p>   | <p><b>STING</b></p>  |
| <p><b>PRESENTER GUIDE QUESTIONS</b></p> <p>1/ How do farmers ensure quality nutritious fodder all year (make silage and hay)<br/>         2/ What is silage and why is it a good food source?<br/>         3/ When should fodder crop be harvested for optimum silage?<br/>         4/ How is silage best made<br/>         5/ What about using hay? Is it a good alternative to silage; is it as nutritious (as fodder, as silage)<br/>         6/ What are advantages (less labour than foder)</p> | <p><b>THE CHAT</b><br/> <i>(This part is not scripted to ensure a free discussion between the presenters, farmers and agricultural experts. The questions provided on the left side guides the discussion. researcher's explanation)</i></p> |

Unrestricted discussions as shown above in the part indicated as “THE CHAT” allow the presenters and the farmers to behave as naturally as possible which is key in ensuring that agricultural information communicated is understood and accepted by farmers and viewers of the SSU programme.

#### 4.4.5 Costumes

The presenters dress in costumes that include overalls, gumboots, gloves and hats. Such costumes are important in making the farmers see the presenters as ‘part of them’, thus gaining acceptance and trust. This was confirmed by presenter 1 in excerpt 20.

**Excerpt 20**, Presenter 1:

Costumes help me to go down to the level of the farmer and they see me as one of them. This is acting, therefore I have to get into character, you can imagine if I appear in a farm wearing a suit and tie, then I have to roll the sleeves to touch the soil, I would look ridiculous!

In figure 4.8, the presenters on the left and far right are shown dressed in overalls, gumboots and hats.



*Figure 6: The SSU team and farmers in a vegetable farm*

*Source: SSU programme*

Wearing costumes also sends a message that it is important to wear protective clothing when engaging in farming activities. Such clothing prevents dirt and injuries.

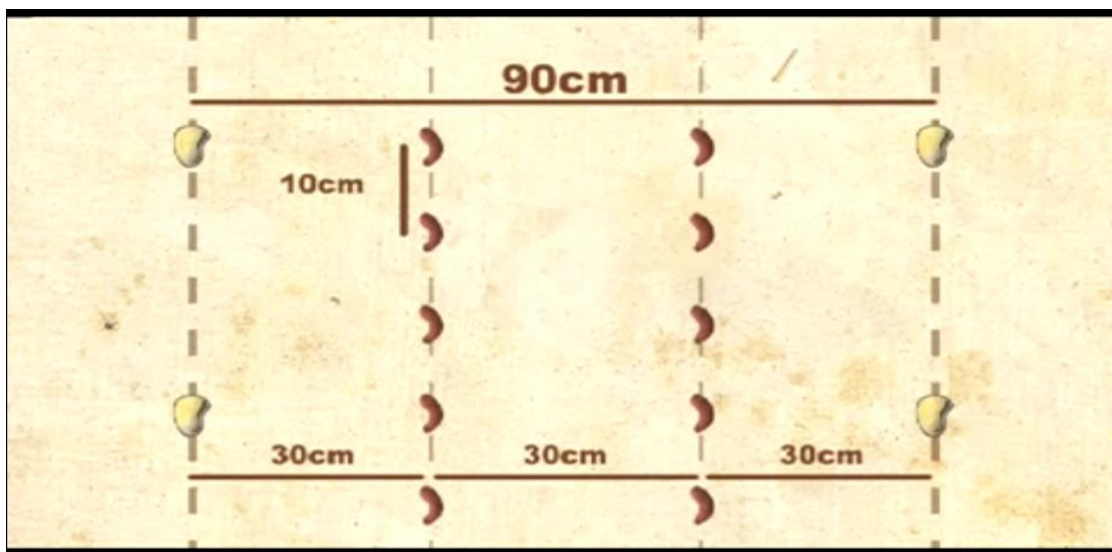
#### 4.4.6 Use of graphics

SSU programme uses both static and motion graphics which help the presenters to explain complex ideas to farmers. Presenter 2 in excerpt 21 revealed that it is easier for a farmer to understand a practice like crop rotation when explained using graphics as opposed to an explanation through speech or text only.

**Excerpt 21, Presenter 2:**

We use both static and motion graphics depending on what we want to show to the farmer. Using graphics is a great way of demonstrating something, for instance the correct spacing between maize crops on various rows and beans planted between them. Maize rows are spaced at 90cm between each other with two rows of beans planted between them and spaced at 30cm. Such a graphic will show this process systematically as we continue explaining to the farmer what is being done. A farmer will easily understand what we are saying with the aid of graphics as opposed to just mentioning it as the programme continues.

A screen grab of a motion graphic is shown in figure 4.9. The graphic demonstrates the correct spacing between maize rows and beans planted between them as the presenter does a voice over of the step by step process of what is being shown. It is recommended that maize rows be planted 90cm apart while two rows of beans are planted between them. The spacing between the two lines of beans is put at 30cm while the spacing between the beans on one line is 10cm. The use of graphics in this demonstration makes it easy for farmers to learn the correct spacing between maize and beans planted in one farm. This is shown in figure 4.9:



*Figure 7: A screen grab of a motion graphic showing correct spacing between maize and beans planted together in one farm.*

*Source: SSU programme- Maize planting*

**4.4.7 Language used**

According to the producer in excerpt 22, SSU programme uses Kiswahili and English to communicate agricultural information. Kiswahili and English are official languages in Kenya.

**Excerpt 22, Producer:**

...for us we felt it will reach a bigger audience because most Kenyans understand Kiswahili and for those who may not be comfortable with it then English is there.

Kiswahili is understood by a majority of the Kenyan population therefore agricultural information communicated through the SSU programme is understood by a majority of the population. Simple words are also used in the programme which ensures that agricultural information communicated in the programme is easily understood by farmers. For example, instead of using words like “acaricides” to refer to chemicals used to control ticks in livestock, the programme substitutes it with phrases like “spray for the control of ticks”. Easily understood words ensure that information communicated through the SSU programme reaches majority of Kenyan farmers.

**4.4.8 Time of transmission**

The SSU programme is aired immediately after lunch time news during the weekend. This is prime time which ensures that a large number of audiences are reached. The English version of the programme is aired on Saturdays at 1:30 pm with the Kiswahili version being aired at the same time on Sundays. Most farmers interviewed reported that they are comfortable with the time the programme is aired. However, some farmers said that the programme would have more impact if it was aired early evening between 6:00 pm- 8:00 pm.

**4.4.9 Repeat and archival strategy**

SSU programme uses repetition to ensure that a programme reaches a large number of audiences. According to the producer, this informed the airing of the same programme, same time on Saturday and Sunday albeit in different languages as said in excerpt 23.

**Excerpt 23, Producer**

Learning takes place when one sees the same thing over and over again. The key is repeat repeat! That is why we air the same programme on different days with previous episodes uploaded on YouTube.

Previously aired episodes are also available on YouTube which enables farmers to watch the programmes over and over at their own convenience.

**4.5. Effectiveness of the SSU programme in communicating agricultural information**

The respondents said that SSU programme is effective in communicating agricultural information to farmers. Agricultural information communicated through the SSU programme is beneficial to farmers. FNF 1 reported in excerpt 24 that he learned about biological control

of pests through planting desmodium between rows of maize and napier grass round the maize farm which contributes to the control of the stem borer moth. The stem borer moth naturally prefers to lay their eggs on the maize plant but is repelled (pushed) by a smell emitted by the desmodium. This then leaves the napier grass (trap plant) as the only viable option to lay the eggs thus the moth is pulled towards the napier grass hence the term “push pull programme” as shown in figure 4.10.

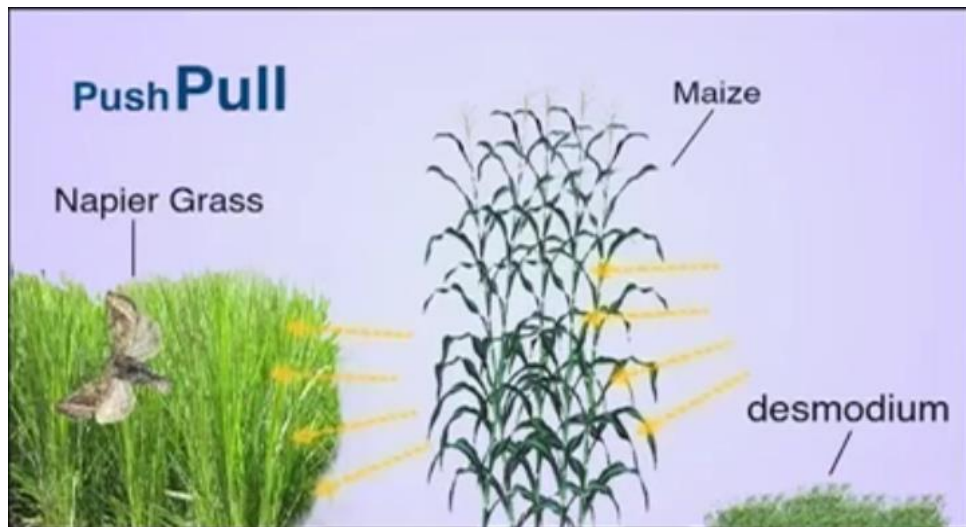


Figure 8: “Push – Pull strategy”

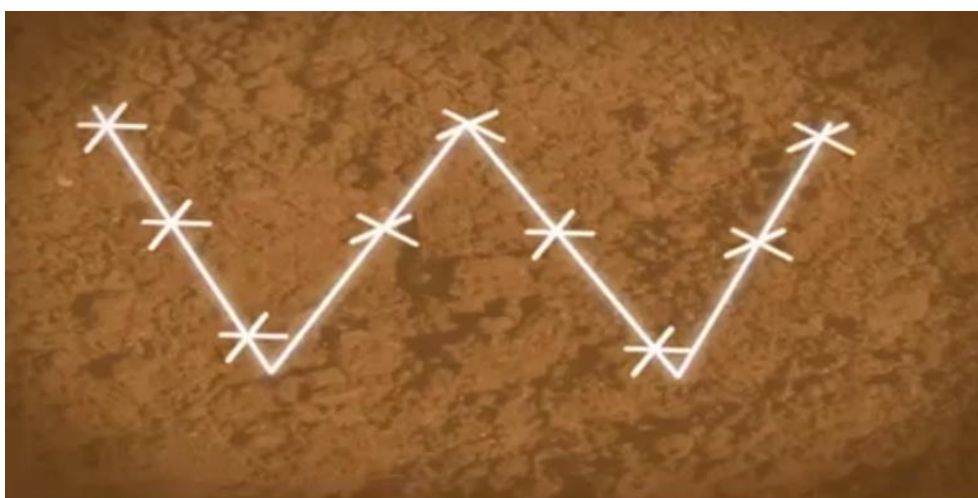
Source SSU programme, push- pull

**Excerpt24, FNF 1:**

I learned about biological control of pests by planting desmodium in between maize rows and napier grass beside it. Desmodium discourages the stem borer moth from laying eggs on the maize and instead lays it on the napier which is important in controlling the spread of the stalk borer disease. I have now planted desmodium and some napier grass beside my maize.

This agrees with the tenet of the Social Cognitive theory that says television viewers learn through observation by copying or imitating what they see on television. He further appreciated the role of agricultural experts in the programme because they know what they are talking about and the information given is trustworthy.

FF 2, a maize farmer, appreciated the visit by SSU team which consisted of the producer, presenters and agricultural experts. He said that he learned about soil testing and proper use of fertilizer from the SSU team which is helpful in reducing acidity in the soil. Soil testing starts with soil sampling in a farm. Sampling can be done through random sampling or by following a zig-zag or ‘W’ shape pattern in the farm as shown in figure 4.11.



*Figure 9:: Soil sampling done in a “W” shape*

*Source: SSU programme Season 2, episode 2*

The collected samples taken from 10 – 15 spots are thoroughly mixed in one container then a small amount is taken, put in a clean container, labeled and sent to the laboratory for testing. The label on the soil sample should include the name of the farmer, location, the date, type of farm and contact number. A farmer can use private laboratories to carry out the test or use the government sponsored soil doctor programme. FF 2 in excerpt 25 below confirmed that the maize crop in his farm was looking healthier than the previous season’s crop and he was expecting a good yield.

**Excerpt 25, FF 2:**

The maize looks good. I expect good yields, I’ve been harvesting 10 -15 sacks but now the way I can see it will be more than 20.

He was also shown how to construct a cow shed. The shed that FF 2 was shown to build consists of a corrugated iron roof with sparsely made timber wall. This is important in keeping the cows and feeds protected from rain and heat from the sun. The shed also needs to have a separate feeding and watering area with a cemented floor for easy cleaning. However, he has not managed to build the shed citing inadequate finances.

FF1 on her part said she learned how to build a chicken house from the SSU team as well as how to handle diseases that come with change in seasons. A good chicken house should have adequate space to avoid overcrowding which can lead to the spread of diseases and

cannibalism. The house should be well ventilated with separate cages for chicken of different ages to aid in proper feed management. There should also be a separate laying and brooding area. Mobile perches should be provided to enable the chicken to relax when they are not feeding. The floor of the house should be easy to clean with the use of saw dust or wood chipping encouraged since it makes cleaning easy besides providing good manure. FF 1 in excerpt 26 below confirmed that she learned about control of diseases in chicken through hygiene from the SSU programme.

**Excerpt 26, FF1:**

The biggest challenge I had with my chicken is diseases when the season changes but I have learned that I need to keep their house clean and vaccinate regularly.

Besides, she was taught environmental conservation and the use of an improved *jiko* and D.light. The improved *jiko* uses less fuel and burns for longer periods thus fewer trees will be felled for charcoal burning. Environmental conservation is important in improving and sustaining soil fertility leading to higher yields. The improved *jiko* and D.light helped her in cutting costs which frees money that can be saved for other uses.

FNF 2 in excerpt 27, a semi- zero grazing dairy farmer with three cows reported that she learned proper feeding of dairy cows from the programme by giving nutritious feed like silage. Silage can be made from napier grass or mature maize. The napier grass or maize is chopped to small pieces which is to be mixed with molasses and water. The chopped napier grass or maize is spread on polythene paper. One litre of molasses is diluted with three litres of water and mixed thoroughly. The mixture is then poured over the napier grass or maize and mixed by hand. The silage is then compacted well in polythene bags to remove air which can make it rot. The bag is then tied and stored in a cool place for two months away from direct sunlight with a heavy object placed on top. The silage is ready for feeding after two months.

**Excerpt 27, FNF 2:**

I learned about the importance of giving cows nutritious supplementary food like silage which is rich in vitamin A. Previously, I would feed them with crushed dry maize stalks which I have learned is not nutritious. Using silage also saves me the time that I would use in cutting and transporting green fodder to the feeding area.

This has led to an increase in milk production from 20 litres to 30 litres a day. She says that she has cut the cost of consulting veterinary officers because of what she learnt through the



SSU programme and their fliers. She also said that she was happy with the way the SSU programme is produced and presented in a simple manner as shown in excerpt 28.

**Excerpt 28, FNF 2:**

I like the way the programme is done in simplicity with localized stories which are educative and inspirational.

FF 3 in excerpt 29, a farmer who practices subsistence mixed farming said that the advice received from the SSU team has helped him to solve water challenges he had.

**Excerpt 29, FF3:**

I had a challenge with reliable source of water for my animals and crops during dry seasons, but the SSU team advised me to harvest water during the rainy season by installing gutters on the roof of my house to collect rain water which is channeled to storage tanks that I bought. I also use a pump to draw water from a well that I dug so I have enough water.

FNF 4, a dairy farmer who practices semi- zero grazing learned silage making from the SSU programme that he uses to feed his cows during dry seasons. Silage is made from green fodder of crops like maize, barley, sorghum, or napier grass when their nutritional value is at its peak. The green fodder is chopped into little pieces and stored in airtight pits or polythene bags. This process ensures that the fodder remains in succulent form and can be fed to cows during dry seasons when there is little green fodder thus ensuring their health and steady milk production. This was confirmed by FNF 4 in excerpt 30.

**Excerpt 30, FNF 4:**

I made some silage last year (2016) using maize which I fed my cows with during the drought early in the year (2017). I chopped the maize when the fruit was milky as I had learned that maize has high nutritional content at this stage. I thoroughly mixed the maize with molasses, compacted and sealed it in an airtight pit. Were it not for the silage maybe my cows would have died.

FNF 4 said that his cows remained healthy with steady milk production during the prolonged drought witnessed in early 2017.

FF 4, a farmer who engages in mixed farming appreciated the advice he got from the SSU team on how to feed his dairy cows. This is shown in excerpt 31.



**Excerpt 31, FF 4:**

I was encouraged to build a shed for my cows in order to manage feeds and improve hygiene. I was also advised to change the salt I was giving the cows to a more nutritious one.

The shed that the farmer was encouraged to build is a simple one with corrugated iron sheets for the roof and sparsely spaced timber on the walls. The shed has separate areas for feeds and water troughs. The shade is important in keeping cattle feed safe from weather elements like too much sun or rain. The cows can also shelter in the shed during hot weather.

FNF 3, who keeps improved *kienyeji* chicken informed the researcher that she learned through the SSU programme the importance of keeping the chicken in separate cages based on their age as this helped to reduce the spread of diseases. Separating chicken in cages also helps in feed management.

**Excerpt 32, FNF 3:**

Separation of the chicken, I learned helps to stop the spread of diseases. It also helps me to feed the chicken with the right type of food like growers mash for chicks and layers mash for layers.

Initially, FNF 3 fed her chicken with the same type of feed, which may have affected their growth and production.

FNF 5, a maize farmer said she learned about correct tilling of land through the SSU programme in excerpt 34.

**Excerpt 34, FNF 5:**

I used to dig deeply thinking that my maize would grow well but I have now learned that deep digging disturbs soil fertility. I now dig in a way that doesn't disturb the top soil so much.

From the findings above, it is clear that the SSU programme effectively communicates agricultural information to farmers in Uasin Gishu County and by extension the country at large. The farmers are able to appreciate and apply what they see or modify it to suit their farming activities.

Audience responses in form of text messages to series 7, episode 10 of the SSU programme were sampled and analysed to have a feel of what other farmers are saying across the country. Sample text messages are shown in table 4.12

|        |                        |   |         |        |
|--------|------------------------|---|---------|--------|
|        |                        | Jambo ? Tafatali nataka kujua kufuga samaki, Je waweza kunisahidia?   |         |        |
| 411085 | 2017-04-29 18:13:45+00 | (Hi? Please I would like to learn how to rear fish, can you help me?)   |         |        |
| 415372 | 2017-08-06 10:53:31+00 | Shamba shape up assist with ckl inseminaters  |         |        |
| 411104 | 2017-05-01 20:06:16+00 | COW   |         |        |
| 411011 | 2017-04-23 11:04:15+00 | Ken &Rebecca, Raymond ngeno. Box 11364_00400 Nairobi  |         |        |
| 415376 | 2017-08-06 10:54:33+00 | Zote(All),Daniel Kamau Kahiga, p.o box 69,Subukia<br>Zote(All)<br>Samson  | Njuguna | Wangui |
| 415437 | 2017-08-06 20:20:56+00 | P.O. Box 421 Thika  |         |        |
| 415290 | 2017-08-06 10:35:45+00 | "ZOTE" (All) WILSON M CHEGE PO BOX9566-200 NAIROBI  |         |        |
| 415355 | 2017-08-06 10:50:10+00 | 'Zote '(All)-Rosemary Makanji -Box 3927-40200-Kisiii.   |         |        |
| 411118 | 2017-05-04 05:45:28+00 | ALL, BENJAMIN KATHURIMA. 14937, NAKURU.   |         |        |
| 411234 | 2017-05-12 18:38:02+00 | CHICKENS  |         |        |
| 411192 | 2017-05-09 12:05:06+00 | ANOTHER LEAFLETS.   |         |        |
| 410980 | 2017-04-23 10:55:19+00 | "Ken & Rebecca"from Kefa Ondigi PO Box583-40200 Kisii   |         |        |
| 415387 | 2017-08-06 10:56:51+00 | "ZOTE"(All) Abraham Marangu P.O BOX 402 60100 EMBU  |         |        |
| 411032 | 2017-04-23 11:38:45+00 | How to manage bacterial wilt and nematodes in tomatoes.<br>Can I get more leaflets especially with teachings on how to keep |         |        |
| 411223 | 2017-05-11 09:32:00+00 | Kenbrochickens.   |         |        |
| 411072 | 2017-04-27 18:48:26+00 | Soil test   |         |        |

*Table 4.12 Sample text messages*

*Source: SSU programme, series 7 episode 10*

The programme received over 400 responses. Twenty five (25) text messages were sampled and analyzed. This was the last programme that was aired before the programme took a break for the season. Most of the farmers wrote “Zote” or “All” as an indication that they were requesting for further information on all the topics handled in series 7 of the SSU programme. Other farmers sought specific agricultural information on how to improve their various farming ventures. For example, an unidentified farmer asked about good care for cows in excerpt 35.

**Excerpt 35**, unidentified farmer:

I have 10 Friesians cows, 15 crosses and 26 bulls, how should I take good care of them?

Another farmer Nicholas Munyi from Siakago asked about the best feeds that he needs to feed his cows with to improve production and health as shown in excerpt 36:

**Excerpt 36**, Nicholas Munyi:

I would like to know the best feeds to give my cows for maximum milk production and best health.

Yet another farmer Kosgei Maswai from Nandi County asked for help to improve his banana plantation.

**Excerpt 37**, Kosgei Maswai:

I need your help please. I have been planting old types of bananas to get school fees but they are not yielding. I request you to get me good shoots of bananas and a leaflet of high yielding bananas.

Although the request for supply of good banana shoots in excerpt 37 appears to be out of mandate of the programme, it shows frustrations that farmers go through while seeking good agricultural information and best farming practices for purposes of improving their farming activities. One farmer who did not give his/her name also expressed anger because his/her chicken had died and blamed the SSU programme for not helping him/her.

**Excerpt 38**, unidentified farmer:

I always watch your TV Shamba shows but you do not assist me at all. My chicken have died.

It is, however, not clear what the problem was and whether the farmer had earlier sought information from the SSU programme. Other farmers sent their postal addresses in order to be sent a leaflet containing agricultural tips on various farming ventures. It also appears that

viewers of SSU programme are talking about the programme to their friends or neighbours as shown through a request from Perpetua Mumbi from Bungoma in excerpt 39:

**Excerpt 39**, Perpetua Mumbi:

Morning Shamba Shape Up, I have heard that you've been of help to many. Help me to improve my tomato production. We own a green house and we are failing every time we try.

This clearly shows that farmers are in need of agricultural information and television is best placed to communicate the same to farmers.

#### **4.5.1 Challenges faced in using agricultural information from SSU programme**

Some farmers have not fully implemented what they have learned through SSU programme. The farmers indicated that the biggest challenge was finances. For example, FF 2 did not top dress his maize twice as was recommended by the SSU team but only did it once due to financial constraints. He, however, modified the advice given by the SSU programme on top dressing the maize twice by applying animal manure which was readily available as shown in excerpt 40.

**Excerpt 40**, FF2:

I was advised to top dress my maize twice, but I'm seeing it is growing well because of manure that I applied to reduce soil acidity so there was no need to do it again but also because of the money needed to purchase CAN (Calcium Ammonium Nitrate) fertilizer.

FF 2 has also not built a cow shed which he had been advised to do.

Cultural practices also hinder change in farmer behaviour. Presenter 2 in excerpt 41 gave an example of communities like the Maasai who value large numbers of cattle with little milk production as opposed to keeping one or two highly productive dairy cattle.

**Excerpt 41**, Presenter 1:

It is not easy to convince a Maasai with over 100 heads of cattle that produces less than 20 litres to sell them and buy two cows that produces say 30 litres. To them having more cattle is a sign of wealth.

Generation gap also plays a part because older farmers hardly change their farming behaviours because they are used to doing it in a certain way.

**Excerpt 42**, Presenter 2:

Older farmers hardly embrace new ideas, but younger farmers on the other hand adopt new ideas easily. Personally, I'm happy with the number of young people embracing farming.

Young farmers easily embrace new ideas and are therefore better at implementing new farming ideas. It is important to note that failure to accept and implement advice from the SSU programme by farmers is not the inability to understand and interpret the information communicated, but is influenced majorly by inadequate finances or neglect. This necessitates the need to provide more subsidies to farmers in form of inputs and reliable market information for their products.

## **CHAPTER FIVE**

### **SUMMARY OF FINDINGS, CONCLUSION AND RECOMMENDATIONS**

This chapter presents a summary of the findings based on the objectives of the study, conclusions and study recommendations. The aim of the study was to examine the effectiveness of the Shamba Shape Up programme in communicating agricultural information to farmers.

#### **5.1 Summary of findings**

This section provides a summary of the research findings in line with the objectives of the study.

A lot of research on agriculture conducted by experts and research institutions does not reach farmers, especially those in rural areas. Most agricultural experts are poor communicators who may use complex words and there was need to have an avenue where agricultural information can be repackaged and communicated to farmers in a way they can easily understand. It was also necessary to educate farmers on new farming techniques to improve their agricultural knowledge leading to improved yields.

The study findings revealed that the SSU programme was developed out of the positive responses that “*Tembea na Majira*” and “*Makutano Junction*” programmes received every time an agricultural theme was presented. Farmers displayed a need for agricultural information by seeking feedback from the producers of “*Tembea na Majira*” and “*Makutano Junction*” programmes which showed a need to communicate the same to farmers on a regular basis.

The study found out that the producers of the SSU programme have adopted a number of strategies to ensure that the programme reaches a wide audience. The SSU team camp in a farm for several days in order to understand firsthand the challenges faced by a farmer. This helps them to advise the farmer appropriately on ways to mitigate the challenges. The SSU programme does a ‘make-over’ in the farm visited where a problem identified is solved with active participation of the presenters, agricultural experts and the farmer. The SSU programme is shot in reality format that uses natural settings and is affordable compared to other formats like drama.

Natural settings help farmers watching the SSU programme to identify with similar features in a farm being visited. The SSU programme presenters wear costumes like overalls, gumboots and hats which helps them to get into character and gain acceptance from farmers. The SSU programme uses partial scripting that enables the presenters to use their skills freely to facilitate

discussions between themselves, the farmer and agricultural experts. The SSU programme is repeated at the same time on different days albeit in different languages to ensure that information communicated reaches as many farmers as possible. Graphics and simple language are used in the programme to help the presenters simplify and explain complex ideas to farmers. The SSU programme uses Kiswahili and English which are official languages in Kenya to communicate agricultural information to farmers. Kiswahili is widely spoken and understood by majority of Kenyans. The SSU programme is aired immediately after the lunch time news which is a prime time that ensures high audience reach.

Both FF's and FNF's said that agricultural information communicated through the SSU programme is relevant and useful. They also said that they are happy with the reality format of the programme because they can identify with conditions that are shown in various farms. Most of the farmers are happy with the use of images, graphics and simple language in the SSU programme that makes it easy for them to observe, learn and imitate agricultural practices that they see in the programme. All farmers interviewed were happy with the involvement of agricultural experts because they are speaking from a point of knowledge. Although the farmers are comfortable with the time the programme is aired (1:30 PM- 2:00 PM) on Saturdays and Sundays, most of them suggested that the programme would be more effective if aired early evening between 6:00 PM – 8:00 PM over the weekend. Most of the farmers are comfortable with the use of English and Kiswahili however; some would like to see SSU programme presented in vernacular languages.

## **5.2 Conclusion**

Communicating agricultural information to farmers is critical in improving productivity. The SSU programme was established out of the positive response that “*Tembea na Majira*” and “*Makutano Junction*” programmes received every time an agricultural theme was presented. This showed a need to communicate such information regularly to farmers on a wide range affordably. Although a lot of research on agriculture has been done by experts and research institutions, such information does not reach farmers effectively, especially those in rural areas. Most agricultural experts are not good communicators and tend to use complex words that may not be easily understood by farmers. This affords the SSU programme presenters an opportunity to repackage such information by using simple words.



The SSU programme employs a number of programming strategies that include continuous camping, reality format, partial scripting, wearing costumes and using graphics that help to communicate to farmers and make it easy for them to understand what is being presented. Farmers find agricultural information communicated through the SSU programme to be relevant. Farmers who have implemented what they learned through the SSU programme said that their farm management and production have improved. Farmers have copied or modified agricultural information that they see on the SSU programme to suit their farming needs. This agrees with the tenet of the Social Cognitive theory that argue that people learn through observation by modeling or copying behaviours that they see on the mass media especially television. This implies that the SSU programme and by extension television is effective in communicating agricultural information to Kenyan farmers.

### **5.3 Recommendations**

In view of the findings of the study, the following recommendations are given:

1. Producers and presenters of television agricultural programmes as well as researchers and agricultural experts need to adopt the use of simple language to communicate agricultural information to farmers.
2. Producers and presenters of agricultural programmes should use graphics to simplify the explanation of complex ideas to farmers.
3. Researchers and agricultural experts need to ensure that they communicate their findings to farmers by partnering with television stations to produce agricultural programmes that are rich in content.
4. Vernacular television stations need to be encouraged to produce and air agricultural programmes because of the potential to reach audiences with limited literacy skills in languages they understand.

### **5.4 Recommendation for further research**

A comparative study needs to be done on all agricultural programmes aired on Kenyan television stations.

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## APPENDICES

### APPENDIX I: STUDENT INTRODUCTORY NOTE

My name is Gilbert Langat. I am a Master of Arts student (Journalism and Mass Communication) at Egerton University carrying out research in electronic media. My Research topic is “COMMUNICATING AGRICULTURAL INFORMATION USING ELECTRONIC MEDIA: THE CASE OF “*SHAMBA SHAPE UP*” PROGRAMME ON CITIZEN TELEVISION IN KENYA.

This interview is aimed at collecting information towards my project in partial fulfillment for the award of the above degree. The information you will provide will be treated confidentially and will not be used for any other purpose but this degree. You can opt out of this study at anytime. At the conclusion of this study, upon your request, you can receive a report of the findings.

Thank you.

Gilbert Kiprotich Langat

## APPENDIX II: REQUEST FOR RESEARCH PERMIT

### EGERTON

Tel: Pilot: 254-51-2217620  
254-51-2217877  
254-51-2217631  
Dir. line/Fax: 254-51-2217847  
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#### OFFICE OF THE DIRECTOR GRADUATE SCHOOL

AM19/14490/15

12<sup>th</sup> June, 2018

Ref:.....

Date :.....

The Director General  
National Commission for Science Technology and Innovation  
P. O. Box 30623-00100,  
**NAIROBI**

Dear Sir,

**RE: REQUEST FOR RESEARCH PERMIT – GILBERT KIPROTICH  
LANGAT REG. NO. AM19/14490/15**

This is to introduce and confirm to you that the above named student is in the Department of Literature, Languages and Linguistics, Egerton University.

He is a bonafide registered Masters student in this University. His research topic is entitled **“Communicating Agricultural Information Using Electronic Media: The Case of “Shamba Shape Up” Programme of Citizen Television in Kenya.”**

He is at the stage of collecting field data. Please issue him with a research permit to enable him undertake the studies.

Yours faithfully,

  
Prof. Nzula Kitaka  
**DIRECTOR, BOARD OF POSTGRADUATE STUDIES**



NK/ear

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### **APPENDIX III:INTERVIEW SCHEDULE FOR THE PRODUCER OF SSUPROGRAMME**

1. Why was SSU programme established?
2. Why was television chosen for transmitting SSU programme over other mass media like newspapers and radio?
3. What makes the SSU programme different from other agricultural programmes aired on Kenyan television stations
4. Who funds the production of SSU programme?
5. Do the funders influence the content of SSU programme?
6. How are the farms to be visited chosen?
7. How are experts involved in weekly segments chosen?
8. What programming strategies have been adopted by the SSU programme?
9. Why were English and Kiswahili chosen as the programming languages of SSU programme?
10. Are there plans to have SSU programme in various vernacular languages in Kenya?
11. In your opinion has SSU programme been effective in communicating agricultural information to farmers?
12. Do you incorporate feedback from farmers in SSU programmes?
13. What challenges have you faced in communicating agricultural information to farmers?
14. How can you overcome the challenges above?
15. What do you think can be done to make SSU programme more effective?

**Thank you for your time**



## **APPENDIX IV:INTERVIEW SCHEDULE FOR THE PRESENTERS OF SSUPROGRAMME**

1. Why was SSU programme established?
2. Why was television chosen for transmitting the SSU programme over other mass media like newspapers and radio?
3. Do you have any training in communication?
4. Do you have any training in agriculture?
5. What makes the SSU programme different from other agricultural programmes aired on Kenyan television stations?
6. What challenges have you faced in presenting the SSU programme?
7. In your various farm visits, what have you established hinders farmers' access to agricultural information?
8. Has the SSU programme been effective in providing sufficient agricultural information to such farmers?
9. Do you make follow up visits to previously visited farms?

**Thank you for your time**

## **APPENDIX V:INTERVIEW SCHEDULE FOR FARMERS WHO HAVE**

### **FEATURED ON THE SSUPROGRAMME**

1. What kind of farming are you involved in?
2. What is your source of agricultural information?
3. How did you know about the SSU programme?
4. Had you been watching SSU programme before then?
5. When were you visited by the SSU programme team?
6. What challenges were you facing in your farm then?
7. Did you find the advice given to you by the SSU team to be relevant in solving the challenges?
8. Has the production level in your farm increased due to your adoption of information obtained from the SSU programme team?
9. Do you still watch the SSU programme?
10. Which version of SSU programme do you watch?
11. Are you comfortable with the language, day and time of airing of the programme?
12. Have you faced any challenges in using the information obtained from the SSU programme?
13. What suggestions can you give that can help improve the effectiveness of SSU programme?

**Thank you for your time**

**APPENDIX VI: INTERVIEW SCHEDULE FOR FARMERS WHO HAVE NOT FEATURED ON THE SSU PROGRAMME**

1. What kind of farming are you involved in?
2. What is your source of agricultural information?
3. Do you know about the SSU programme?
4. When did you start watching SSU programme?
5. How often do you watch SSU programme?
6. Which version of the programme do you watch?
7. Are you comfortable with the language, day and time the programme is aired?
8. Do you find the agricultural information aired by SSU programme to be useful to you?
9. Have you sourced for additional information from SSU through feed back?
10. Are you aware of archived SSU programmes on YouTube?
11. Have you adopted any information you have received from SSU in your farming venture?
12. Has the agricultural information communicated through SSU been beneficial to you in your farming?
13. Have you faced any challenges in using the information obtained from the SSU programme?
14. What suggestions can you give that can help improve the effectiveness of SSU programme?

**Thank you for your time.**

## APPENDIX VII: SHOOTING SCRIPT

### SHAMBA SHAPE UP - SERIES 7

FARM 03 - Narok  
ENKISHON FARM



## SHOOTING SCRIPT

### STORIES:

- 1/ COOPERS Fodder & Feed - Expert - CAROL (Wednesday 20th, 11am) 3
- 2/ KHS Onions, seed - Expert - TONNY (Thursday 21st, 11am) 4
- 3/ UNGA Pigs - Barasa - CAROL (Wednesday 20th, 9am) 2
- 4/ OSHO Onions, bulb size - Expert - TONNY (Tuesday 19th, 11am) 1
- 5/ MAIN LINKS (Wednesday and Thursday afternoon)

|   |   |
|---|---|
| SOUND   | PICTURE   |
| <p>VO TONNY / CAROL</p> <p>We have travelled all over East Africa to find hard working farmers. We want to celebrate them while giving them the help they need to improve their farms, get better yields and become profitable farmers. We will see how farmers from across the region can benefit from our experts advice, and learn from each other, in so many ways. Join us on these journeys and share in the farmers experiences as they shape up their shambas.</p> <p>Hurry, to the Shamba Shape Up safari.</p>   | Pre-Titles<br>(montage)   |
| music   | Opening Title<br>LOGO   |
| music   | Sponsors Logos  |
| <p><b>PTC TONNY</b><br/><b>Welcome</b></p> <p><b>PTC CAROL</b><br/><b>ToShamba Shape Up.</b></p> <p><b>PTC TONNY</b><br/><b>Today we're in Narok County.</b></p> <p><b>PTC CAROL</b><br/><b>And we're going to meet Micah Kamau, the farm manager at Enkishon farm</b></p> <p><b>PTC TONNY</b><br/><b>The farm is being run for the girls living at the House of Hope Rescue Centre</b></p> <p><b>PTC CAROL</b><br/><b>A refugee for girls fleeing forced early marriage and female genital mutilation</b></p> <p><b>PTC TONNY</b><br/><b>So for food, and provide some life skills they work on the farm</b></p> | <p>PRESENTERS<br/>LINK<br/>INTRO<br/>walk toward<br/>camera</p> <p>RONIN where<br/>possible</p> |

|   |  |
|---|--|
| <p><b>PTC CAROL</b><br/>So lets go and find out all about it!</p>   |  |
| <p><b>FAMILY PORTRAIT</b><br/>So this is Enkishon farm, The House of Hopes farm school. It's run by Patrick and his wife Josephine. With help from farm manager Micah Kamau.</p>  | <p><b>FAMILY PORTRAIT</b><br/>CAM1 wide reverse lock-off<br/>CAM 2 close up faces</p>  |
| <p><b>VO TONNY / CAROL</b><br/>The farm located just outside Nairasalasa, surrounded by wheat fields, in the beautiful countryside of Narok county.</p>   | <p><b>AERIAL FARM</b><br/>quadcopter<br/><br/><b>LOCAL LANDMARKS</b><br/>wide &amp;gy's locality</p>   |
| <p><b>SYNC TONNY</b><br/><b>Hello farmer how are you</b><br/><br/><b>SYNC FARMER</b><br/><b>farmer replies</b><br/><br/><b>SYNC CAROL</b><br/><b>OK well can you show us around your farm?</b><br/><br/><b>VO THEY TOUR FARM</b><br/>Enkishon farm covers 5 acres. They have 2 cows, 10 pigs, 250 chickens and over 1,000 Tilapia in their fish pond. As well as growing Sukuma Wiki, Maize and Onions.</p> | <p><b>PRESENTERS</b><br/><b>LINK</b><br/><b>MEET THE FARMER</b><br/><b>TOUR THE FARM</b><br/><br/><b>B ROLL</b><br/>Presenters and farmers visit key farm activities<br/><b>ALSO</b><br/><b>QUADCOPTER</b></p> |
| <p><b>SYNC TONNY</b></p>  | <p><b>PRESENTERS</b></p>   |

|   |   |
|---|---|
| <p><b>So that looked great</b></p> <p><b>SYNC CAROL</b><br/><b>But do you have any problems</b></p> <p><b>SYNC FARMERS</b><br/><b>Yes - Pigs, Onions, Cows</b></p> <p><b>SYNC CAROL</b><br/><b>Well we have some experts who can help with that.</b></p> <p><b>SYNC TONNY</b><br/><b>OK, Lets pitch the tent and get ready for work!</b></p>  | <p>LINK<br/>MEET THE<br/>FARMER<br/>PROBLEMS</p>          |
| <p>VO Tonny<br/>OK so lets' pitch the tent and get ready for work.</p>  | <p>TENT goes up<br/>Timelapse<br/><br/>end on CU sign</p> |
| <p><b>SYNC TONNY</b><br/><b>So, Enkishon farm is doing well, but they still need some help.</b></p> <p><b>SYNC CAROL</b><br/><b>And we have lots of new ideas we'd like to introduce them to.</b></p> <p>VO<br/>Feeding pigs to get a heavier body weight</p> <p>And planting crops popular in the market place</p> <p><b>SYNC CAROL</b><br/><b>But first I'm going to find out about the cows</b></p> <p><b>SYNC</b><br/><b>Well then I'm going to check on the Onions</b></p> <p><b>See you later!</b> (they leave)</p> | <p>Tent exterior, they walk in</p>                        |
| <p>USE PIC RELEVANT TO TOPIC<br/>Possible title..... slow mo....</p>  | <p>STING</p>  |
| <p>TOPIC 1 COOPERS - Feed-CAROL</p>   | <p>CAM</p>  |

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| <p>VO INTRO</p> <p>The House of Hope Rescue centre provides a home for the girls – but not far away it’s their farm that provides them with their food, and the skills to one day be independent.</p> <p>The cows are central to the farms activities - they are looked after by Mary and Grace, together with farm manager Kamau. And now it's time I took them to meet our first expert of the day.</p> <p>VO INSPECTION</p> <p>George is from Coopers, he’s checking out the cow feed. Enkishon farm has two cows producing milk, but the yield is low - each cow only produces around 5 litres a day. George suspects they might not be getting enough nourishment. Lets find out what he has to say.</p> <p>FOW THEY MEET</p> <p>MAIN CHAT STARTS</p> <p>VO</p> <p>So the problem of low milk yield is not the feed itself – hay and silage if correctly prepared are excellent feeds for cows. To get the best quality hay and silage it’s important the crop is harvested at the milky stage – it’s called that because when the seed is pressed – a milky residue comes out.</p> <p>VO HOW TO MAKE SILAGE &amp; HAY</p> <p>The advantages of hay are that it reduces the labour of cutting green forage daily. Plus Storage losses are less with hay, than with silage.</p> <p>The advantage of silage is that it has a higher vitamin content than hay.</p> <p>If the animals do not like the taste of silage at first, mix 5 to 10 kg of silage in their green fodder ration for 5 to 6 days, until they get used to it.</p> <p>So, lets see why the milk yield is low.</p> | <p>Film expert arriving</p> <p>CAM<br/>Film expert inspecting</p> <p>CAM<br/>Film expert meeting farmer</p> <p>CAM<br/>Film closing sequence - eg cu images of topic</p> |
|---|--|



VO

For Cooper Cooler give 400 gramms of supplement per cow per day. For Diamond V, one table spoon per cow per day. Just a little extra cost on suppliments - for a big increase in milk yield - can't be bad!

#### MAIN CONTENT

**Availability of nutritious fodder throughout the year is very essential for profitable dairy farming.** But it varies from season to season. Therefore, every dairy farm must preserve the surplus fodder in the form of silage or hay. The surplus forages of the two glut seasons i.e. long rainy season (March-July) and short season (October-November) could easily be carried over to the succeeding lean periods of fodder supply. During the lean periods the hay or silage can supplement the dry fodder and limited quantity of green fodder available to overcome the scarcity of fodder.

With careful selection of crops, their rotations and the conservation of seasonal surplus either as silage or hay, it is not only possible but also practical to maintain all the year round supply of quality roughages for dairy animals. The practice of fodder conservation is inseparable from a good herd management programme. **Fodder conserved in a season of plenty is an insurance against under-feeding and economic losses during scarcity period.**

#### SILAGE

Silage is the preserved green fodder in succulent form under air tight conditions. Ensiling is a process which involves the conservation of green fodder crops, grasses and the storage over long period. Good quality silage is yellowish-green in colour with a pleasant vinegar smell. There is a wide range of crops suitable to this purpose. Excellent silage may be made from crops like Maize, Sorghum, Rhodes grass, Oats, Barely, Guinea grass, Sudan grass among others.

**The fodder crop should be harvested at a stage when nutrient content is at peak stage and it has produced enough dry matter.**

Silage is made by compressing the chaffed green fodder in airtight pits called silos.

## **Trench Silo**

### **Filling the pits**

### **Sealing the pit**

### **After care of the pit**

### **Nutritive Value**

The value of silage as cattle feed has been well recognized. Apart from its nutrient content good silage has higher vitamin A content and better palatability than hay and other dry roughages. Cattle prefer silage to coarse, mature and less palatable green fodder. During ensiling the concentration of toxic constituents such as hydrocyanic acid, nitrate and oxalic acid is reduced drastically thus, the fodder having very high concentrations can be safely fed to animals after ensiling.

The animals may not like its taste for the first few feedings. Help them to develop the taste by mixing 5 to 10 kg of silage in their green fodder ration for the first 5 to 6 days.

### **HAY MAKING**

The drying and storing of high quality forage after harvesting at proper stage offer many advantages. It assures the supply of high digestible feed with highly protein and calorific values all the year round. It reduces the amount of concentrates that must be fed to cattle. Good quality hay is as nutritious as the green fodder and its helps in increasing milk production during period of fodder scarcity.

The storage losses are less than those in silage. It reduces the labour involved in handling and transporting green forage, because the green forage has 80-90 per cent water, whereas the hay has less than 20 per cent. It makes movement to the market as well as to the feed trough easier. The labour of cutting green forage daily is eliminated.

### **KEY POINTS**

1. Availability of nutritious fodder throughout the year is very essential for profitable dairy farming.
2. The intensity of cropping can be increased and more cuttings can be taken from the multi cut crops when practicing conservation.

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| <p>3. Fodder conserved in a season of plenty is an insurance against under-feeding and economic losses during scarcity period.</p> <p>4. Properly conserved fodders are as nutritious as the cut and carry fodder.</p>  |  |
| <p><b>PRESENTER GUIDE QUESTIONS</b></p> <p>1/ How do farmers ensure quality nutritious fodder all year (make Silage and Hay)</p> <p>2/ What is silage and why is it a good food source?</p> <p>3/ When should fodder crop be harvested for optimum silage?</p> <p>4/ How is silage best made</p> <p>5/ What about using Hay? Is it good alternative to Silage, is it as nutritious (as fodder, as silage)</p> <p>6/ What are advantages (less labour than foder)</p>                  | <p><b>THE CHAT</b></p>   |
| <p><b>SUMMARY</b></p> <p>Presenter rounds up topic with up to 3 main 'take-home' messages - end speaking to camera.</p>   |  |
| <p><b>B ROLL</b></p>  | <p>Do a makeover?</p>  |
| <p><b>BIG FO WIDE</b></p>   |  |
| <p><b>USE PIC RELEVANT TO TOPIC</b></p> <p>Possible title..... slow mo....</p>  | <p><b>STING</b></p>  |
| <p><b>TOPIC 2KHS - Onion Seed - TONNY</b></p> <p><b>VO INSPECTION</b></p> <p>Carol's done well with the cows, now I've asked George from Royal Seed to help out with the Onions. The secret to success here is to choose an Onion Seed that is best suited to the local soil and climate conditions, to get the best yield.</p> <p>So lets find out why George recommends Royal Seed, and what varieties they have that could grow well here.</p> <p><b>CHAT</b></p> <p><b>VO</b></p> | <p><b>CAM</b></p> <p>Film expert arriving</p> <p><b>CAM</b></p> <p>Film expert inspecting</p> <p><b>CAM</b></p> <p>Film expert meeting farmer</p> <p><b>CAM</b></p> <p>Film closing sequence - eg cu</p> |

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| <p>Red Pinoy sounds like a great variety for this region - but the secret to getting a bumper harvest is making sure the plant gets off to a good start - so it grows strong and healthy.</p> <p>CHAT</p> <p>VO recap</p> <p>So choose a royal seed variety that's best suited to local conditions. Kamau has chosen Red Pinoy as it matures in just 90 days, it yields 25 to 30 tons per acre and has a long shelf life of up to 6 months. Not only that it has a deep red colour that makes it attractive in the market!</p> | <p>images of topic</p>   |
| <p>B ROLL</p>  | <p>Do a makeover?</p>  |
| <p>BIG FO WIDE</p>   |  |
| <p><b>SYNC TONNY</b><br/><b>So we've learnt about how to manage your Cows</b></p> <p><b>SYNC CAROL</b><br/><b>And how to choose the best seeds for Onions</b></p> <p><b>SYNC CAROL</b><br/><b>But on this farm xx is the real expert</b></p> <p><b>SYNC TONNY</b><br/><b>That's right so we've asked xx to share his/her top tip for farming</b></p>   | <p>PRESENTERS<br/>LINK<br/>TOP TIP</p> <p>CAM: Take stills of farmers top tip activity for montage</p> |
| <p>TOP TIP GRAPHIC</p>   | <p>TOP TIP GRAPHIC</p>   |
| <p>FARMERS TOP TIP<br/>Farmer describes top tip to camera</p>  | <p>2 x CAM ws / cu<br/>To camera</p>   |
| <p><b>SYNC CAROL</b><br/><b>So what do you think of that Tonny?</b></p> <p><b>SYNC TONNY</b><br/><b>Tonny replies.</b></p> <p>VO PRESENTERS<br/>OK coming up after the break .....</p>   | <p>PRESENTERS<br/>LINK<br/>END OF PART ONE</p>   |

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| <p>UNGA will give us some advice on managing pigs</p> <p>And Osho will talk about how to increase yield</p>   |   |
| <p><b>PART BREAK</b></p>  | <p><b>PART BREAK</b></p>  |
| <p><b>SYNC (both together)</b><br/> <b>Welcome back to Shamba Shape Up.</b></p> <p>VO / music starts<br/> VO / music starts<br/> We're in Narok and we're visiting Enkishon Farm</p> <p>we want to find out about managing pigs</p> <p>And the benefits of using a quality fertiliser</p> <p><b>SYNC TONNY</b><br/> <b>So, no time to waste!</b></p> <p><b>SYNC CAROL</b><br/> <b>See you later</b></p>   | <p>PRESENTER<br/> LINK<br/> PART TWO</p> <p>SYNC in tent</p> <p>Montage</p> <p>they walk off</p>                                  |
| <p><b>USE PIC RELEVANT TO TOPIC</b><br/> Possible title..... slow mo....</p>  | <p><b>STING</b></p>   |
| <p><b>TOPIC 3: UNGA - Pigs-CAROLVO INSPECTION</b><br/> Sereti and Laya are the House of Hope girls tasked with looking after the pigs at Enkishon farm. Having fled their families they too are hoping to learn new skills to help them when they are ready to leave the refuge. Pigs can be a great business. They grow faster than other livestock, producing around 10 young twice a year. They also put on weight faster than other livestock, they require little investment and are highly profitable. But only if the Pigs are managed properly - we wanted to help the girls make a success of their pigs - so we invited pig expert Duncan from UNGA to give us some advice. First we wanted to check whether the pigs were fed and watered correctly.</p> | <p>CAM<br/> Film expert arriving</p> <p>CAM<br/> Film expert inspecting</p> <p>CAM<br/> Film expert meeting farmer</p> <p>CAM</p> |

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| <p>VO</p> <p>Fugo Piglet Pellets are specially formulated to give suckling piglets all the nutrients they need to grow into healthy pigs. Add the feed gradually as the piglets begin to wean.</p> <p>VO</p> <p>Fugo Sow and weaner meal has a special formula designed to bring the best out of pigs aged between 8 weeks and when the pigs reach the weight of 60 kilos.</p> <p>VO</p> <p>Feeding Fugo Pig finisher meal at 2.5 kilos per day gives an excellent meat quality. But when fed to lactating sows the feed should be increased by an additional 1/4 of a kilo for each piglet. So for 10 piglets add another 2.5 kilos giving 5 kilos in total. But how should the girls make sure the sow is not hurt by the suckling piglets?</p> <p>VO</p> <p>Duncan has one final and important piece of advice on pig breeding.</p> <p>MAIN CONTENT</p> <p>Pig feeding for maximum gains</p> <ol style="list-style-type: none"> <li>1. Management bit of the furrowing Pen. Tooth Clipping, Iron Injection and Castration.</li> <li>2. The feeding regimen for the piglets, Weaners, Lactating and Finishing.</li> <li>3. The housing Management.</li> </ol> | <p>Film closing sequence - eg cu images of topic</p> |
| <p>PRESENTER GUIDE QUESTIONS</p> <ol style="list-style-type: none"> <li>1/ Are pigs difficult to keep?</li> <li>2/ What are the advantages of keeping pigs?</li> <li>3/ How should furrowing pen be managed?</li> <li>4/ What about tooth clipping, iron injection and castration?</li> <li>5/ How should housing be managed?</li> <li>6/ How important is feed in getting pigs to maximum weight?</li> <li>7/ How should animals of different ages be fed (piglets, weaners, lactating and finishing)?</li> </ol>  | <p>THE CHAT</p>                                      |
| <p>B ROLL</p>   | <p>Do a makeover?</p>                                |
| <p>BIG FO WIDE</p>  |  |
| <p>USE PIC RELEVANT TO TOPIC</p> <p>Possible title..... slow mo....</p>   | <p>STING</p>   |
| <p>TOPIC 4: OSHO - Onions, bulb size–TONNYVO</p>  | <p>CAM</p>   |

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| <p><b>INSPECTION</b><br/>Our final expert today is Sammy is from Osho, he's come to make sure once planted the onions give a bumper harvest - by making sure there are no diseases and the plants have the correct fertiliser. Already, he's noticed there seems to be a problem with the current crop.</p> <p><b>VO</b><br/>With the diseases taken care of, the next step to getting a good harvest is a fertiliser such as DAP. But this can add too much acidity to the soil. I wonder what Sammy can suggest?</p> <p><b>MAIN CONTENT</b><br/>The key to increasing the bulb size for onions is starting right straight from transplanting. The bulb size will be determined by how much nutrients the plant will intake from the ground. We will be featuring two key products that help in root development and also nutrient uptake.</p> <ol style="list-style-type: none"> <li>1. Oshozyme granules</li> <li>2. Blackearth</li> </ol> <p>These products are granules mixed with the organic or non-organic fertilizer the farmer uses while planting the onions. The management of the crop is also key for any crop. We will cover the following solutions<br/>Thrips :- Nimbecidine&amp; final flight<br/>Purple bloch&amp; fungal diseases:-Oshothane&amp; Control<br/>Easy gro range: - Micro nutrients</p> | <p>Film expert arriving</p> <p>CAM<br/>Film expert inspecting</p> <p>CAM<br/>Film expert meeting farmer</p> <p>CAM<br/>Film closing sequence - eg cu images of topic</p> |
| <p><b>PRESENTER GUIDE QUESTIONS</b><br/>1/ What are the main factors that influence bulb size?<br/>2/ How can nutrient uptake be improved? (Oshozyme and Blackearth)<br/>3/ What about micro-nutrients, why are these important?<br/>4/ How important is crop management?<br/>5/ What are the key pests and diseases that affect onion and what are the recommended treatments?</p>   | <p><b>THE CHAT</b></p>   |
| <p><b>B ROLL</b></p>  | <p>Do makeover?</p>  |
| <p><b>BIG FO WIDE</b></p>   |  |
| <p><b>STING</b></p>   | <p><b>STING</b></p>  |
|   |  |

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| <p><b>SYNC CAROL</b><br/>Well farmers, what did you think of that?</p> <p><b>SYNC FARMERS</b><br/>they reply</p> <p><b>SYNC TONNY</b><br/>And if you at home would like to shape up your shamba - you can.</p>  | <p>PRESENTER<br/>LINK<br/>FARMERS<br/>REACTIONS<br/>iSHAMBA<br/>PROMO LINK</p> <p>Do some variations<br/>(ask farmers if they<br/>have mobile phone<br/>- introduce<br/>iShamba)</p> |
| <p><b>INSERT</b><br/>SMS iShamba GRAPHICS<br/>To receive all our Shamba Shape Up leaflets SMS the word “all” with your name and address to 30606. If you’d like to receive the leaflet for just this farm SMS the name of the farmer with your name and address to 30606</p>  | <p><b>INSERT</b><br/>SMS iShamba<br/>GRAPHICS</p>  |
| <p><b>SYNC CAROL</b><br/>"Do you think that will help?"</p> <p><b>SYNC FARMERS</b><br/>"Yes it will be great"</p> <p><b>SYNC TONNY</b><br/>"OK then we are off to our next farm...."</p>  | <p>PRESENTER<br/>LINK<br/>iSHAMBA OUT<br/>GOODBYE</p> <p>swish out</p>   |
| <p><b>INSERT SSU online GRAPHICS</b><br/>TONNY PTC<br/>SSU is Online, to learn more about todays topic or to watch any of our previous episodes visit shambshapeup.com select the episode and click play. You could also visit our Facebook page Shamba Shape Up, get more information, get involved in a discussion and also get a chance to enter some of our great competitions to win great prizes. You can also find us on twitter @shambashapeup. Or simply text 30606.</p> | <p><b>INSERT</b><br/>GRAPHICS<br/>Tonny PTC<br/>Shamba Online</p>  |
| <p><b>THE END</b></p>   | <p><b>THE END</b></p>  |



| Farmer set-up<br>Farmer milking<br>Farmer feeding<br>Farmer cooking<br>Farmer and photos of kids<br>Farmer tending farm/soil<br>Animals gv's<br>Farm gv's<br>Local town gv's<br>Local scenic gv's | B ROLL CHECK LIST |
|---|-------------------|

## FARMER PROFILE

|  |                               |  |
|--|-------------------------------|--|
| Farmer/Couple Name   |                               | Enkishon Farm  |
| Location   |                               | Nairasalasa village, Nairasalasa location  |
| Farm size  |                               | 5 acres  |
| Access to electricity                                      |                               | No electricity. Uses solar power   |
| Telephone Number   |                               | 0710 219834 - Micah Kamau (Farm manager)   |
| Children and ages, schools                                 |                               | A home for 80 girls who have been rescued from early marriages and FGM   |
| Any health issues/things to note                           |                               | None   |
| Description of homestead (e.g. shares with parents in law) |                               | Enkishon farm belongs to an NGO that works to rescue young Maasai girls from early marriages and FGM   |
| Cattle (e.g. # dairy cows, litres)                         |                               | 2 dairy cows producing about 10 litres of milk per day.<br>Growing fodder; lucerne, sorghum, nappier<br>Making silage but the production of the milk still very low. |
| Sheep/Goats  |                               | None   |
| Pigs   |                               | 10, 5 piglets and 5 mature<br>Feeding Unga sow and weaner pellets to the piglets and finisher to the mature pigs   |
| Chickens   |                               | 250 improved Kari Kienyeji. Feeding them with Kienyeji mash from a company called Kay's.   |
| Other livestock (fish/bees)                                |                               | Fish pond with 1,300 tilapia. Also has an apiary.  |
| Livestock market or market for milk                        |                               | The milk feeds the rescued girls   |
| Crops grown  |                               | Passion fruits, tree tomatoes, bananas, sweet potatoes, onions (red creole from Simlaw. Transplanted one and a half months ago)                                      |
| Market for crops   |                               | All the produce from the market feeds the girls  |
| Other points (e.g. neighbour growing demo crop)            |                               |  |
| <b>PARTNER</b>   | <b>TOPIC</b>                  | <b>DETAILS</b>   |
| Unga   | Pig feeding for maximum gains | 1. Management bit of the furrowing Pen. Tooth Clipping, Iron Injection and Castration.   |

|         |                             |  |
|---------|-----------------------------|--|
|         |                             | 2. The feeding regimen for the piglets, Weaners, Lactating and Finishing.<br>3. The housing Management.    |
| Osho    | Onions                      | Increase bulb size   |
| Coopers | Commercial Dairy Production | Fodder & Feed production:Silage establishment/production/conservation                                      |
| KHS     | Onion Seed                  | Land ready for planting. KHS need to know land size to see if they can get seedlings. If not will be seed. |

|   |                                   |                                   |
|---|-----------------------------------|-----------------------------------|
| <b>FARMER'S NAME – ENKISHON FARM</b>                              |                                   |                                   |
| <b>LOCATION – NAROK</b>   |                                   |                                   |
| <b>FILMING DATES – 19<sup>TH</sup>. 21<sup>ST</sup> JULY 2016</b> |                                   |                                   |
| <b>CALL TIME: 9:00AM</b>  |                                   |                                   |
| <b>TUESDAY 19<sup>TH</sup></b>                                    | <b>WEDNESDAY 20<sup>TH</sup></b>  | <b>THURSDAY 21<sup>ST</sup></b>   |
| <u>9:00AM</u><br>Crew arrives/breakfast                           | <u>9:00AM</u><br>Unga             | <u>9:00AM</u><br>Links/Brolls/Gvs |
| <u>11:00AM</u><br>Osho  | <u>11:00AM</u><br>Coopers         | <u>11:00AM</u><br>KHS             |
| <u>2.00PM</u><br>Visit to Enkishon home                           | <u>2:00Pm</u><br>Links/Brolls/Gvs | <u>2:00Pm</u><br>Links/Brolls/Gvs |

# APPENDIX VIII: RESEARCH PERMIT

**THIS IS TO CERTIFY THAT:**

**MR. GILBERT KIPROTICH LANGAT**  
**of EGERTON UNIVERSITY, 3900-30100**  
**Eldoret, has been permitted to conduct**  
**research in Nairobi, Uasin-Gishu**  
**Counties**


**on the topic: COMMUNICATING**  
**AGRICULTURAL INFORMATION USING**  
**ELECTRONIC MEDIA: THE CASE OF**  
**"SHAMBA SHAPE UP" PROGRAMME OF**  
**CITIZEN TELEVISION IN KENYA**

**for the period ending:**  
**3rd July, 2018**

**Permit No : NACOSTI/P/17/33879/17868**  
**Date Of Issue : 4th July, 2017**  
**Fee Received :Ksh 1000**

*[Signature]*  
**Applicant's Signature**


*[Signature]*  
**Director General**  
**National Commission for Science,**  
**Technology & Innovation**




**CONDITIONS**

1. The License is valid for the proposed research, research site specified period.
2. Both the Licence and any rights thereunder are non-transferable.
3. Upon request of the Commission, the Licensee shall submit a progress report.
4. The Licensee shall report to the County Director of Education and County Governor in the area of research before commencement of the research.
5. Excavation, filming and collection of specimens are subject to further permissions from relevant Government agencies.
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7. The Licensee shall submit two (2) hard copies and upload a soft copy of their final report.
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**REPUBLIC OF KENYA**



**NACOSTI**



**National Commission for Science,**  
**Technology and Innovation**

**RESEARCH CLEARANCE**  
**PERMIT**

**Serial No.A 14623**

**CONDITIONS: see back page**



**NATIONAL COMMISSION FOR SCIENCE,  
TECHNOLOGY AND INNOVATION**

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NAIROBI-KENYA

Ref: No. **NACOSTI/P/17/33879/17868**

Date: **4<sup>th</sup> July, 2017**

Gilbert Kiprotich Langat  
Egerton University  
P.O. Box 536-20115  
**EGERTON.**

**RE: RESEARCH AUTHORIZATION**

Following your application for authority to carry out research on *“Communicating agricultural information using electronic media: the case of “shamba shape up” programme of Citizen Television in Kenya,”* I am pleased to inform you that you have been authorized to undertake research in **Nairobi and Uasin Gishu Counties** for the period ending **3<sup>rd</sup> July, 2018.**

You are advised to report to **the County Commissioners and the County Directors of Education, Nairobi and Uasin Gishu Counties** before embarking on the research project.

On completion of the research, you are expected to submit **two hard copies and one soft copy in pdf** of the research report/thesis to our office.

**GODFREY P. KALERWA MSc., MBA, MKIM  
FOR: DIRECTOR-GENERAL/CEO**

Copy to:

The County Commissioner  
Nairobi County.

**COUNTY COMMISSIONER  
NAIROBI COUNTY  
P. O. Box 30124-00100, NBI  
TEL: 341666**

The County Director of Education  
Nairobi County.

Proceed  
11/7/2017  
[Signature]

Proceed  
11/7/2017  
[Signature]  
**COUNTY COMMISSIONER,  
UASIN GISHU COUNTY**



## Role of Television in Communicating Agricultural Information: the Case of Citizen Television's Shamba Shape up Programme in Kenya

Gilbert K. Langat

Bartoo Phylis

Khaemba Josphine

Department of Linguistics

Egerton University

Nakuru, Kenya

### Abstract

*Communicating agricultural information to farmers is critical in improving productivity. Agriculture is an important contributor to the Kenyan economy earning the government an estimated 45% of its revenue. Farmers face a number of challenges related to productivity. In order to ensure an increase in agricultural productivity, information must be communicated to farmers in a way that is effective and affordable. Although Shamba Shape Up a media programme presents a variety of agricultural topics, little is known about its effectiveness. The aim of the study was to examine the effectiveness of Shamba Shape Up Programme in disseminating agricultural information to farmers. The study was guided by the Social Cognitive theory. The theory argues that people learn through observation by modeling or copying the behaviors they see. The study collected information from the producer and presenters of SSU programme as well as farmers purposively sampled in Uasin Gishu County Kenya. The interview method was used to collect the data which was analyzed and presented using texts. The study makes an agricultural productivity which is beneficial to farmers and television producers in packaging content relevant to their audiences.*

**Keywords:** Communication Food Security Agriculture Behaviors Farmers

### 1.0 Background to the Study

The agricultural sector is the backbone of the Kenyan economy. According to KARI (2011), the sector directly contributes 24% to the GDP and 27% indirectly through manufacturing, distribution and other services related to the sector. Agricultural information disseminated to farmers is critical in improving agricultural productivity in Kenya. The agricultural extension service can no longer be relied upon to fulfill this task on its own. This is because of deficiencies of the service such as inadequate number of extension officers, poor communication strategies, and personal bias. Food security is critical to a country like Kenya with a rapidly growing population estimated at 40 million (GOK, 2009) and shrinking arable land due to change in use for purposes like settlement. This means that the farming practices by Kenyan farmers should be changed with a view to enhancing yields and production. The information on how to adopt best farming practices is with experts like agricultural extension officers and researchers. For the same information to reach a wider public, a medium that is both affordable and accessible to the public is required. The mass media is considered ideal for this purpose. According to Scimbuwa (2015), the media has been seen as an effective disseminator of information as well as a partner that catalyses interaction with agriculture sector practitioners and multidisciplinary professionals.

Although radio has traditionally been used as a tool for communication and access of information by stakeholders (Nabusoba, 2014), television is gaining ground on the same. This is because television has unique qualities of sound and pictures which make it ideal for demonstrative purposes. Television also employs the use of graphics which makes it easy to explain complex ideas to farmers. The television industry in Kenya is growing rapidly more so after the digital change over. This has led to the establishment of many and varied television stations numbering over 62 ([www.digitalkenya.go.ke](http://www.digitalkenya.go.ke)) Some of these stations broadcast in vernacular languages something that is new in the country. Currently there are over five vernacular stations which include Kass TV that broadcasts in Kalenjin language while Inocro TV, 3 Stones TV and Kameme TV broadcasts in Kikuyu. Ramogi TV broadcasts in Dholuo while Meru TV broadcasts in Auseru ([www.ca.go.ke](http://www.ca.go.ke)).