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**INYUVESI
YAKWAZULU-NATALI**

**INFORMATION BEHAVIOUR OF RURAL WOMEN INVOLVED IN SMALL AND
MEDIUM ENTERPRISES (SMEs) IN CHAMWINO AND MANYONI DISTRICTS OF
CENTRAL TANZANIA**

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(Information Studies) in the School of Social Sciences, College of Humanity, University of
KwaZulu-Natal, Pietermaritzburg, South Africa

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Submitted: 6 December 2015

DECLARATION

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ABSTRACT

The study investigated information behaviour of rural women involved in SMEs in Chamwino and Manyoni districts of central Tanzania. The following research questions were addressed: What is the information behaviour of rural women involved in SMEs? What channels of communication are used by women to seek and satisfy their information needs? What information resources are used to seek and satisfy their information needs? What skills do women have to effectively identify and access information? How is the information sought by women involved in SMEs used? What challenges are faced by women in seeking and using information? The study was underpinned by the Wilson 1981 model of information behaviour. The interpretive research paradigm and qualitative research method were employed. A sample of 217 women was drawn from the two types of SMEs (poultry and kiosks). Interview and focus group discussion were used to collect data. Data were analyzed using thematic analysis and Nvivo (version 7) computer software.

The findings revealed that although respondents' pattern of information behavior was passive, the most commonly needed information was family care and business. Mobile phones were the most used channel of communication, followed by face to face meetings and visitations to friends and neighbours. Further, respondents were more likely to consult informal than formal sources of information and most respondents did not have skills in identifying and accessing information. The challenges that respondents faced included lack of enough time; lack of awareness; inadequate and irrelevant information materials within the centres; limited airtime to communicate through their mobile phones; network failure; and lack of electricity.

The study recommends regular surveys of user needs using participatory approaches. Government should leverage the CDOs, WEOs and VEOs to plan, design and implement special programs for rural women entrepreneurs. It is highly recommended that information centres in rural areas make available, information resources in common languages such as Kiswahili, and in appropriate formats. The local authorities must recruit permanent staff to keep the information centres throughout the week. The government needs to provide the opportunity for the rural women entrepreneurs to link up with such agencies as ILO, UNIDO,

national and international trade fairs that could provide training in SMEs management and financing. The recommendations proposed include providing a framework for policy review regarding the information needs of women involved in SMEs. In addition, capacity building initiatives should be developed for women entrepreneurs involved in SMEs. Other recommendations include information infrastructure development and business networking to enable women to play a meaningful role in the rural economy of Tanzania.

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“I have the strength to face all conditions by the power that Christ gives me”

Philippians 4:13

DEDICATION

I dedicate this work to my beloved parents the late James Manyama Manyerere and the late Rev. Deborah Daudi-Manyerere who took me to school some thirty-seven years ago without knowing one day I would reach this stage. I love you and I miss you (RIP).

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LIST OF ABBREVIATIONS AND ACRONYMS

CBO	Community-Based Organization
CDC	Centre for Disease Control and Prevention
CDO	Community Development Office
DONET	Dodoma Network
ESRF	Economic and Social Research Foundation
FAO	Food and Agriculture Organization
FINCA	Foundation for International Community Assistance
ICT	Information Communication Technology
IGAs	Income Generation Activities
IFAD	International Fund for Agricultural Development
IFC	International Finance Co-operation
ILO	International Labour Organization
LIS	Library and Information Science
MP	Member of Parliament
NGO	Non-Government Organization
NPES	National Poverty Eradication Strategy
NSGRP	National Strategy for Growth and Reduction of Poverty
OECD	Organization for Economic Co-operation Development
OUT	Open University of Tanzania
PRIDE	Promotion of Rural Initiative and Development Enterprises Limited
ROSCA	Rotating Savings and Credit Association
SEDA	Small Enterprises Agency
SMEs	Small and Medium Enterprises
SUA	Sokoine University of Agriculture
TAKUKURU	<i>Taasisi ya Kuzuia na Kupambana na Rushwa</i>
TGNP	Tanzania Gender Networking Programme

Tshs	Tanzania Shillings
UCD	University College of Dulbin
UCC	Uganda Communications Commission
UDSM	University of Dar es Salaam
UKZN	University of KwaZulu-Natal
UMATI	<i>Chama Cha Uzazi na Malezi Bora Tanzania</i>
UN	United Nation
UNDP	United Nation Development Programme
UNIDO	United Nations Industrial Development Organization
URT	United Republic of Tanzania
Ushs	Uganda shillings
UWT	<i>Umoja wa Wanawake Tanzania</i>
VEO	Village Executive Officer
VICOBA	Village Community Bank
WED	Women Entrepreneurship Development
WEO	Ward Executive Officer
WHO	World Health Organization
WWW	World Wide Web

CHAPTER ONE

BACKGROUND TO THE STUDY

1.1 Introduction

This chapter describes the concept of information behaviour and Small and Medium Enterprises (SMEs). The chapter also provides the general background and statement of the research problem. It further outlines research objectives, research questions, delimitations of the study, and significance of the study. This chapter also provides the assumptions of the study, theoretical framework, and preliminary literature review. The methodology used in the study is introduced as well as ethical issues. Finally, key terms used in the study are defined and the structure of the the thesis provided.

The purpose of this study was to investigate information behaviour of rural women involved in Small and Medium Enterprises (SMEs) in central Tanzania. Information today has become a critical resource in any sector or sub-sector of any nation's economy. For this reason, it has been referred to as the fourth factor of production (Ojo, Akinsunmi, & Olayonu, 2015). Information is a basic human right and has a significant role to play in almost every human activity (Mbangala & Samzugı, 2014). Therefore, information is needed in all stages of human development including in business.

Information behaviour is the term used in library and information science to refer to a sub discipline that engages in a wide range of types of research conducted in order to understand the human relationship to information (Naeem, Ahmed, & Khan, 2013). Information behavior is defined by Bates (2010) as the many ways in which human beings interact with information, particularly the way in which people seek and utilize information. For Case (2007:81) information behaviour is an umbrella term dominantly used in the Library and Information Science (LIS) field to describe an information-seeking activity, the causes and consequences of that activity, or the relationships among stages in information-seeking behaviour.

Stilwell (2010:3) refers to information behaviour as a broader term that covers information seeking behaviour, information needs, information searching and information use. Fisher and

Julien (2009:317) assert that information behaviour focuses on people's information needs, specifically how they seek, manage, give and use information, either purposefully or passively, for various work-tasks related to their everyday lives.

From the studies cited above, the common denominators in the concept of information behavior text are information needs, information seeking and information use. Therefore, for the purpose of this study information behavior includes information needs, information seeking, information sharing, information exchange and information use.

Information needs and information use are some of the most important concepts of information behavior in information science discourse. The concepts of information need and information uses arose in 1960s when the amount of information started to grow phenomenally leading to information overload (having too much information than needed to make decision) (Khan and Shafique, 2011). Information needs refers to an individual's or group's desire to locate and obtain information to satisfy a conscious or unconscious need. In another words, information needs are those needs that arise in order to cope with problems arising from different business situation (Ndenje-Sichalwe, 2004). With regard to information seeking, Krikelas as cited in Weiler (2004) notes that information seeking begins when someone perceives that the current state of knowledge is less than needed to deal with some issues or problems; whereas the process of information seeking ends when that persuasion no longer exists. Therefore, understanding information behavior of women involved in SMEs is the first step towards meeting their information needs.

The concept of SMEs has no universally accepted definition in diversity of extant literature. However, different countries define SMEs according to, among other criteria, annual turnover, number of employees, and level of development of a particular business enterprise (URT 2002; Banda, Mutula & Grand, 2004; Mutula & Brakel, 2006). The term SMEs can therefore be defined as a business that is privately owned or operated with a small number of workers and has relatively low quantity of sales (URT, 2002). Mutula and Brakel (2006) in the context of South Africa assert that SMEs employ 100-200 workers, and have turnover of 5 Million South African Rands per year. According to the Uganda Investment Authority (2008) a Micro Enterprise is defined as an enterprise employing maximum of 4 people; with an annual sales/revenue turnover and assets of maximum of 12 million Ugandan Shillings. A Small and Medium Enterprise in

contrast is defined as an enterprise employing a maximum of 50 people; with an annual sales/revenue turnover and assets of maximum 360 million Ugandan Shillings. The government of Tanzania classifies business firms (including SMEs) as follows: Micro enterprises, 1-4 employees and annual turnover of 5 Million Tanzanian shillings (Tshs); Small enterprises, 5- 49 employees and annual turnover of above Tshs 5 Million; Medium enterprises, 50-99 employees and annual turnover of Tshs 200 Million; And Large scale enterprises, over 100 employees and annual turnover of Tshs 800 Million.

SMEs are universally recognized as engines of economic growth and development (Kebede & Abera, 2014; URT, 2002). According to Ceglie and Dini (1999) SMEs produce fifty percent of any country's industrial output and provide employment to twelve percent of the rural and thirty four percent of urban labour force. SMEs are responsible for creating the large number of non-farm employment and income opportunities in relatively poorly developed areas and require small capital and little sophisticated managerial and technical skills (UNIDO, 2003). Small and Medium Enterprises are also considered as veritable engines of the economy as they partake in countless transactions across the globe, creating a constant flow of value which forms the backbone of every nation's economy (Ojo, Akinsunmi, and Olayonu, 2015). The United Nations (2008:3) observes that it is generally accepted; that SMEs play an important role in alleviating poverty especially in developing countries. Similarly, URT (2002) asserts that SMEs play a fundamental role in utilizing and adding value to local resources and facilitating distribution of economic activities and fostering equitable income generation. Likewise, ILO (2008) states that in most developing countries such as Tanzania, women who owned and operated businesses have played an important role in stimulating economic growth and increasing new job opportunities.

In the world over, it would seem that majority of women are engaged in small-scale business enterprises (ILO, 2008). For instance, in Latin America women own between one-third and one-half of all small rural enterprises (ILO, 2008). Similarly, in many other developing countries a high percentage of small scale businesses that cater for local needs are owned by women. ILO (2003) points out that 128 women entrepreneurs involved in SMEs have created 983 jobs in Tanzania, of which 752 are full-time paying. SMEs therefore contribute significantly towards employment creation, income generation and stimulation of growth in both urban and rural areas.

Women involved in SMEs must therefore be capacitated to meet their various information needs to help manage and sustain their businesses.

Information and business information services are of strategic importance to businesses (Chiwere, 2008), as the success of any firm depends on its ability to acquire the right information at the right time and cost. Ojo, Akinsunmi, and Olayonu (2015) aver that business information is an indispensable resource in overall business performance. Banda, Mutula and Grand (2004) assert that, knowledge of user needs and information behavior is important in providing relevant information services. Therefore the significance of information in business management cannot be over emphasized. Boadi & Letsolo (2004) notes that, information is needed in all stages of human development including SMEs for sustainable development. Moreover, information is an essential element in any SMEs activity such as development and implementation of various business plans (Banda *et al.*, 2004:99). Prasad (2000) on his part consider information as a fourth organizational resource after financial, human and physical resources. Prasad (2000) explains further that, information pervades all fields of human activity including research and development, business and industry. The importance of information is also reflected in Tanzanian government small and medium enterprise development policy (URT, 2002:18) which states that “in this new millennium, information has become a prime mover of all economic undertakings”. Despite the importance of information as well as the significant role played by SMEs as engines of economic growth, women operating small business enterprises in Tanzania are constrained by limited access to information, lack of awareness about the importance of information and the prohibitive costs of acquiring the information.

Information is one of the critical resources needed by SMEs to thrive (Chiwere, 2008). Similarly, Banda *et al.*, (2004) indicate that, information is a very important factor in informed decision-making in SMEs. Therefore it is imperative that business information as an ingredient for business transactions and prospects be effectively provided to SMEs (Okello-Obura and Matovu, 2011). According to URT (2002), SMEs in Tanzania have limited access to technology partly because they lack relevant information. The lack of access to information by women in Tanzania must therefore be addressed since information has become a prime factor of socio-economic development.

Studies on information needs and information seeking behaviour of rural women are well documented. Nwagwu and Ajama (2011) observed that women sought information mainly for themselves and their children in rural oil palm plantation community in Nigeria. Mooko (2005) investigated the information needs and information seeking behavior of rural women in Botswana and found that the family situation led them to seek information on health, agriculture, employment, family violence and basic needs as well as information on government aided funding, welfare subsidies, policies and training. Hossain and Islam (2012) studied information needs of rural women in Bangladesh and found that women irrespective of location needed information on family health, food and nutrition, family planning and child education, agriculture and animal husbandry. Similarly, Gundu (2006) observed that women in Zimbabwe had limited access to information due to inappropriate levels of literacy. The study established that the major reasons for seeking information by the urban black women in Zimbabwe were for meeting personal and family needs. The study by Gavgani, Qeisari, and Jafarabadi (2013) indicated that in the context of Iran, women were passive information seekers. The study revealed that the most common resources used by women seeking health information were television and discussion with other women.

In the context of Tanzania, Ndenje-Sichalwe, (2004) studied the information needs; information seeking behavior of small scale business women in Dar es Salaam and sources of information they used; problems they encountered in accessing information and their training needs. The findings revealed that lack of access to information was one among several problems small scale women entrepreneurs faced when trying to develop their businesses. The results also revealed that although women needed access to information on business skills, business opportunities, market and technology; such information was inaccessible to them. The departure of this current study from that of Ndenje-Sichalwe is that; whereas Sichalwe's study was carried out in urban setting, this study is situated in rural setting where illiteracy is a major constraint to accessing information. Moreover, this study extends Sichalwe's study to cover channels used to seek and satisfy the information needs, and the information skills the women have to effectively identify access and use information.

Despite the growing research on information behavior, there is limited literature covering

information needs of rural women involved in SMEs in Tanzania. Moreover, most of the available literatures on information needs and information seeking behavior in the country focus on various groups of people in academic and administrative sectors (Ruzegea, 2002; Elia, 2006; Manda, 2008; Mtanda, 2008; Norbert and Lwoga, 2012a). The outcome from this study is therefore expected to create awareness among policy makers about the need to integrate information components in development strategies especially those involving women entrepreneurs in rural settings in Tanzania.

1.2 Statement of the Problem

There is evidence the world over that women contribute significantly to the national economic development through involvement in agriculture and SMEs (Food and Agriculture Organization FAO, 2009). In order to facilitate women entrepreneurship, information is a vital tool for the growth and development of their businesses. In Tanzania, women bear the largest brunt of rural domestic and production burden and they contribute more than 70 percent of household's time and efforts (ILO, 2009; Blackden, and Wodon, 2006; Fair, 2000). However, these women entrepreneurs are constrained by access to relevant, timely, appropriately-packaged and current information; concerning for example access to credit, markets, pricing information, and legal advice. Moreover, their information seeking characteristics are not known. Therefore, understanding information needs and seeking behavior of rural women involved in SMEs in rural Tanzania is fundamentally necessary.

Furthermore, the Tanzanian government in an attempt to support women's efforts in development has formulated various policies aimed at improving their involvement in socio-economic development. These policies among others include Small and Medium Enterprise Development Policy (2002); Rural Development Strategy (2001); Community Development Policy (1996) and Policy on Women in Development in Tanzania (1992). These policies and initiatives are in addition aimed at improving SMEs performance as well as supporting women's efforts in income generation and their participation in decision making; ownership of property; and creation of employment through SMEs. Furthermore the Policy on Women in Development in Tanzania (1992) is aimed at promoting organizations that assist the development of women such as Tanzania Women Organization (*Umoja wa Wanawake Tanzania*) (UWT), and the

Ministry of Community Development, Women Affairs, and Children. The policy also focuses on reviewing all laws which discriminate against women. It also advocates for strengthening social services and setting up special services for women such as Mother and Child Health (MCH) and The Family Planning Association of Tanzania (*Chama Cha Uzazi na Malezi Bora Tanzania*) (UMATI). The policy also advocates for Tanzania to become a member in international organization dealing with women issues.

Similarly the Community Development Policy was enacted to respond to the needs of special groups of women, children and youth in order to reduce poverty, strengthen family income, and enable them to participate in decision making and ownership of property. Another related government initiative aimed at improving the economic status of women is the Rural Development Strategy (2001) which envisages having in place policy and legal instruments to address gender imbalance and programmes aimed at enhancing women's employment opportunities to reduce poverty. The policy recognizes that currently most initiatives aimed at improving the status of women are concentrated in urban areas.

Furthermore, Small and Medium Enterprise Development Policy (2003) has been designed to revitalise the sector to enable it to contribute to the objective of the National Development Vision 2025 that aims at achieving a high quality livelihood for its people, attain good governance through the rule of law and develop a strong and competitive economy (URT, 2000:12). SMEs development policy in addition aims at creating a mechanism to put in place an effective institutional framework for its implementation, coordination, monitoring and evaluation. Central to all these strategies is the ultimate objective of attaining rural industrialisation in line with the Poverty Reduction Strategy (URT, 2002). While these policies are welcome they fail to address issues related to access to information by women involved in SMEs in Tanzania (Kiondo, 1998).

In addition, the efforts by government to address the plight of women and enhance their participation in development through policy intervention is hardly accompanied by an understanding of the information needs and information seeking behavior of women especially

those involved in small and medium businesses yet; information is an important factor in development.

Moreover, women especially in rural Tanzania are confronted with daily challenges of meeting their information needs to grow their businesses. These challenges include lack of access to relevant information in appropriate formats, limited skills to search and use information, illiteracy and poor information infrastructure. As a result the contribution of the women to the nation economy is hampered. Therefore this study investigated the information behaviour of rural women involved in small and medium enterprises in Dodoma and Singida region of Tanzania so that appropriate action can be taken. This enables them participate effectively in economic development activities of the regions. The need to undertake this study therefore emanates from the reality that, in the last few decades there has been increasing awareness of the need to empower women; in order to improve their socioeconomic status for them to be able to contribute effectively to economic development in their countries (Oyelude and Bamigbola, 2012). Understanding information behavior of rural women in Tanzania would help government and non-governmental organizations to design informational strategies to enable women to access relevant information necessary to facilitate their contribution to development.

1.3 Research Objectives

This study addresses the following research objectives to:

1. Investigate the information behaviour of rural women involved in SMEs.
2. Assess the channels of communication used by women to satisfy their information needs.
3. Determine the information resources used by women to seek and satisfy their information needs.
4. Outline the skills women have to effectively identify and access information.
5. Explain how the information sought by women involved in SMEs is used.
6. Find out the challenges faced by women in seeking information.

1.4 Research Questions

The following research questions are addressed:

1. What is the information behaviour of rural women involved in SMEs?

2. What channels of communication are used by women to seek and satisfy their information needs?
3. What information resources are used to seek and satisfy their information needs?
4. What skills do women have to effectively identify and access information?
5. How is the information sought by women involved in SMEs used?
6. What challenges are faced by women in seeking and using information?

1.5 Significance of the Study

The study outcome is expected to make various contributions to the domain of knowledge on women and SMEs, to policy on SMEs and theory. The study is to contribute towards understanding the information behaviour of rural women entrepreneurs in central Tanzania with regard to identifying, seeking and using information to promote their businesses. Regarding policy, this study is expected to provide policy makers with the necessary data needed to improve existing policy through monitoring and evaluation and also by enacting other enabling policies to empower women in business. Furthermore this study is expected to also provide policy makers, with the tools to assist them in formulating various policies and strategies to promote information access by women involved in SMEs in rural areas in Tanzania. The outcome from this study is expected to contribute to increasing the ability of rural women entrepreneurs to seek access and use information in support of their SMEs. It is also expected that the outcome of this study will add to the growing research in the area of SMEs as engines of economic growth; and also stimulate further research in the area of small and medium scale enterprises in rural Tanzania. Last but not least, the outcome of the study is expected to contribute towards enhancing the growth of women entrepreneurs in Tanzania by facilitating access to relevant information in the rural areas.

1.6 Assumptions

This study is predicated on the following assumptions:

- Understanding user needs and information behavior is important in providing relevant information services.

- Access to and use of information among women in SMEs depends on the availability of information resources and communication channels used to disseminate the information.
- Effective access to information in various formats requires women to have efficacy in searching and retrieval.

1.7 Theoretical Framework

This study was informed by Wilson (1981) information behavior model which is addressed substantively along with other related theories/models in chapter two of this thesis. The Wilson information behavior model focuses on the information processes, definition of terms of user behavior, and clarifies how information may be transferred, retained and later exchanged with other users. The Wilson (1981) model provides three views of information seeking namely: the context of the user/seeker, the system engaged (either manual or machine), and information sources. The Figure 1.1 below presents the Wilson 1981 model of information behaviour.

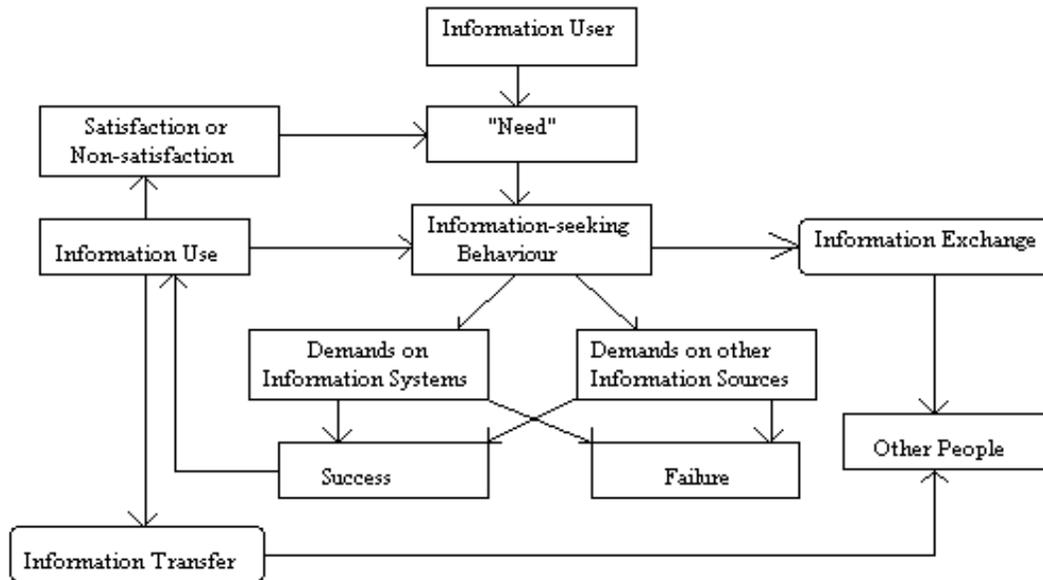


Figure 1.1: Information Behaviour Model (Source: Wilson, 1981)

This model posits that information seeking behaviour occurs as a result of a need perceived by the information user. In order to satisfy the need, the user makes demands on either formal or informal information sources. The demands for information result in success or failure in finding

appropriate information. The successful retrieval of information results in user satisfaction or dissatisfaction. The information perceived as useful may also be passed to other people by the person seeking the information and part of information seeking behaviour may involve other people through exchange of information.

The Wilson (1981) and other related models such as Wilson's (1981) second model of information-seeking behavior; Wilson (1996) model of information behaviour; Nonlinear model of information-seeking behavior (Foster, 2004); Bystrom and Jarvelin's (1995) task-based information-seeking model; Williamson's (1998) model of information seeking and use; Krikelas's model of information seeking; Leckie *et al.*, (1996) general model of information-seeking of professionals; Johnson's (1997) comprehensive model of information seeking; Kuhlthau's (1991) model of information search process; and Ellis's (1989) behavioral model are discussed in detail in chapter two (Theoretical framework).

1.8 Preliminary Literature Review

This section highlights the empirical and theoretical literature that is discussed substantively in chapter three of this thesis. Such literature is found in books, journal articles, conference proceedings and other primary and secondary sources. Several studies have been undertaken on the role of small and medium enterprises in economic growth, job creation and poverty alleviation (Hamisi, 2011; Nkonoki, 2010; Mnenwa and Maliti, 2008; UN, 2008; Mutula, 2005; URT, 2004; ILO, 2003. For instance, URT (2003:3) states that "small and medium enterprises contribute significantly to employment creation, income generation and stimulation of growth in both urban and rural areas". Mnenwa and Maliti (2008:12) declare that, income from small and medium businesses contributes to poverty alleviation.

The International Labour Organization (ILO) has also published broadly in this area on such topics; as challenges of growing small businesses with regard to women entrepreneurs in Africa; and how governments, the ILO, donors, Non-Government Organization (NGOs) and the private sector can improve the prospects for women's entrepreneurship. Furthermore they enhance the contribution of women entrepreneurs to sustainable employment opportunities, and poverty alleviation and reduction (ILO, 2004:3). Nkonoki (2010) studied the factors limiting the success and/or growth of small businesses in Tanzania; and found that since small and medium

enterprises tend to be labour intensive, they create employment at relatively low level of investment per job created. Hamisi (2011) on his part declared that over the years, small and medium enterprises sector had played a critical role in developing Tanzanian economy through: creation of employment opportunities, income generation, and equitable distribution of income whence contributing towards poverty alleviation.

Despite the contribution of SMEs in economic growth, job creation and poverty alleviation, findings from these studies and others by and large show that women, particularly those living in rural areas in least developed countries and sub-Sahara Africa, carry the burden of poverty (Siringi, 2011:187; UNIDO, 2003). UNIDO (2003) asserts that women have been deprived for too long from participating in the opportunities, benefits of economic growth and globalization. Moreover, most women involved in small and medium enterprises experience gender bias in the socio-economic environment in which they operate, since in many African societies, women carry the added burden of family and domestic responsibilities. Women in Tanzania especially those in the rural areas have multiple roles and heavy workload (URT, 1992). They also lack information on business managerial skills, education and marketing (Tushabomwe-Kazooba, 2006; Mutula, 2005; ILO 2004; ILO, 2003; Jagero and Kushoka, 2011). For instance, Jagero and Kushoka (2011) found that women entrepreneurs in Ilala municipality in Dar es Salaam lacked education, finance and infrastructure. These women faced the challenge of loss of capital whenever they were moved by city authority or while being harassed by municipal policemen.

Moreover, around the world, there are growing literatures showing the lack of adequate access to information by rural women involved in SMEs (Goel, 2011; Saleh and Lasisi, 2011; Amin, Ahmad, and Zafar, 2010; Blessing, 2007; Lyimo-Macha and Mdoe, 2002; Kiondo, 1998). For example, Kiondo (1998) in her study on access to gender and development information by rural women in the Tanga region, Tanzania, revealed that information delivered was not adequate to satisfy rural women's needs. However, she found that information accessed was moderately relevant as far as their health information needs were concerned. Saleh and Lasisi (2011) studied information needs and information seeking behaviour of rural women in Borno State, Nigeria. The study identified the barriers to information needs of rural women; among them inability to access formal channels of information due to poverty and lack of adequate and efficient information delivery mechanisms.

Similarly, Blessing (2007) in a study about information needs, sources, and information seeking behaviour of rural women found that rural women did not access adequate information because the library as well as local government who this responsibility rests on had been inefficient. In addition, women running small business enterprises are faced with a wide range of problems, including the lack of capital, basic business skills, and market (Rahman, Sayeed, Sarker, Alam & Rahman, 2007).

An increasing number of studies exist on information behavior of rural women worldwide (Mooko, 2005; Blessing, 2007; Bakar, 2011; Hossain & Islam, 2012; Maepa, 2012). For instance, Bakar (2011) studied information seeking behaviors of rural women in Malaysia. The study found that the information considered important for them to run their daily lives was finance or availability of money. Besides finance, the respondents believed that information on child education, religion, food and health was highly important. Respondents also indicated that magazine, television, and radio were much preferred as sources of information. In addition, women observed that their village lacked certain infrastructure that impedes their access to information they needed. Hossain and Islam (2012) on their part studied information needs of women in three villages of Bangladesh. The study found that when women needed quick information, they usually asked neighbours or friends, sometimes they used personal experience. The study found that the women did not have authentic and modern sources of information to meet their information needs. .

Notwithstanding the growing number of studies on information behaviour of rural women in various parts of the world, there are very few studies about information needs and seeking behaviour of women in small and medium enterprises. Studies that are closely related to the current study include Mchombu (2000), Ikoja-Odongo (2001), Bourgouin (2002), Duncombe (2004), and Njoku (2004). Mchombu (2000) studied information needs of women operating small businesses in Botswana. The study revealed that entrepreneurs needed information on business management, business diversification, financial assistance, and information on how to operate nursery schools. A similar study by Ikoja-Odongo (2001) focused on information needs and use in the informal sectors in Uganda. The study ranked information needs as follows: market information, the need for raw materials, supply information, seeking advice, looking for contracts, policy and regulations.

In the context of Tanzania, a study on information behavior of rural women involved in SMEs is limited (Ndenje-Sichalwe, 2004). Most of the available literature focuses on academic and professional perspectives (Ruzegea, 2002; Sife, 2004; Elia, 2006; Malekani, 2006; Manda, 2008; Norbert & Lwoga, 2012a). For example, Norbert, and Lwoga (2012a) studied information seeking behavior of physicians in Tanzania. Manda (2008) on the other hand studied gender analysis of sexual and reproductive health information access and use. Elia (2006) examined information seeking behaviour of University of Dar es Salaam students in an electronic environment. Malekani (2006) studied comparison of information needs and information seeking behavior of students of the Open University of Tanzania and those of Sokoine University of agriculture. Sife (2004) investigated information needs and seeking behavior of Tanzania forestry researchers in the electronic environment. Ruzegea (2002) on her part studied information seeking behaviour and library use of secondary school students to mention but a few.

The reviewed literature reveals several gaps. For instance, there are limited studies covering information behaviour of rural women in small and medium enterprises in Tanzania. Most of the available literatures on information needs and information seeking behavior in the country are focused on academic and administrative sectors. Moreover, although some of the studies reviewed cover women in small and medium enterprises, they are situated in urban areas. For instance Mchombu (2000) studied women in small and medium business in Gaborone, the capital of Botswana; and Ndenje-Sichalwe (2004) studied women in Dar es Salaam, which is the country's commercial capital. Therefore, this study makes a contribution in bridging these gaps by providing empirical evidence about the information behaviour of rural women involved in small and medium enterprises in Tanzania. The outcome from this study is therefore expected to enhance policy and practical interventions to promote women entrepreneurship in SMEs. As pointed out earlier, a detailed review of literature is presented in Chapter Three (Literature Review) of this thesis.

1.9 Delimitation of the Study

This study was carried out in Chamwino and Manyoni districts of central Tanzania (Dodoma and Singida regions). These regions are among semi-arid zones and the poorest areas in Tanzania (URT, 2006). These regions are characterized by low agricultural activities reflected in various national policies and strategies (URT 2005). This study focuses on rural women as the most vulnerable group affected by poverty. The focus is on women entrepreneurs in rural areas of Chamwino and Manyoni districts in central Tanzania involved in two businesses namely, Poultry and Kiosk respectively.

1.9.1 Chamwino District

Chamwino is among the seven administrative districts in Dodoma region. Chamwino district was established in 2007 after the government split the Dodoma rural district into two districts namely Chamwino and Bahi. Chamwino district is located in the eastern part of Dodoma region. It is bordered on the west by Bahi and Dodoma districts, in the north by Kondoa district, in the east by Kongwa and Mpwapwa districts and in the South by Iringa rural district. Chamwino district is dominated mainly by Gogo tribe. Other tribes inhabiting in the district are Nguu, Rangi, Maasai, Sandawe, Barbaigs and Mbuwi (Chamwino District Social-Economic Profile, URT, 2010). By the year 2010 Chamwino district population was estimated at 294,298 people out of which 153,582 were female and the remaining 141,016 were male (URT, 2006).

1.9.2 Manyoni District

Manyoni is one of the six districts in Singida region. The others are Singida rural, Singida urban, Iramba, Mkalama and Ikungi. Manyoni borders Bahi district (Dodoma region) in the east; Tabora and Sikonge district (Tabora region) in the west; Chunya district (Mbeya region) in the south west; Singida district (Singida region) in the north; Iringa district (Iringa region) in the south east; and Kondoa district (Dodoma region) in the north east. The main indigenous ethnic groups in Manyoni are the Gogo, Kimbu, Nyaturu, Taturu, Sukuma, Barbaig and Nyiramba (Manyoni District Profile, URT, 2013). According to Tanzania National Census (2002), Manyoni has a population of 204,482; among of which 104,863 are female and 99,619 are male (URT, 2004). The district experiences low rainfall and short rainy seasons which are often erratic

with fairly wide spread drought year in and year out (Manyoni District Profile, 2013). The Figure 2 below is a map of Tanzania showing the location of Chamwino and Manyoni districts.

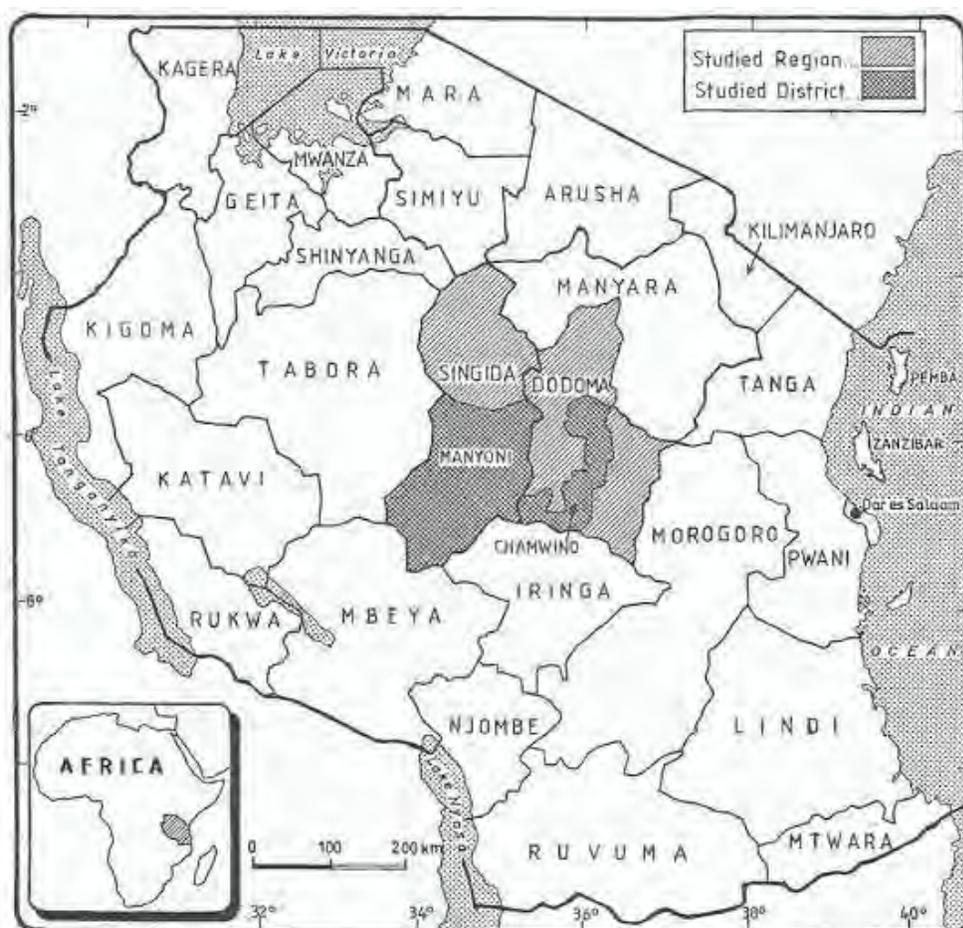


Figure 1.2: Map of Tanzania Showing Chamwino and Manyoni Districts
(Source: UDSM Cartographic Unit, 2014)

1.10 Methodology

This study was informed by interpretive paradigm to help understand meanings attached to women experience in striving to meet their information needs and information seeking behavior. The term paradigm derives from the work of Thomas Kuhn (1970), who suggested that scientists are influenced by dominant ways of /or frameworks for conducting science. The most common paradigms referenced in social sciences are positivist, interpretivist and post-positivist. According to Walsh (2001:10) positivist approach to research investigation is commonly used in

the natural sciences. It is also widely used by psychology and medical researchers and is sometimes referred to a scientific approach. On the other hand, interpretive paradigm is strongly associated with the discipline of anthropology and sociology. Post positivist on the other hand according to Ryan (n.d) emphasises meaning and the creation of new knowledge. According to Lapan, Quartaroli and Riemer (2012) interpretive researchers assume that people create their own meaning in interaction with the world around them. Similarly, Creswell (2009) asserts that individuals develop personal meanings of their experience, meanings that are directed toward certain objects or things. Interpretive paradigm holds the assumption that individuals seek to understand their world in which they live and work.

This study applied qualitative approach. Creswell (2009) describes qualitative research as a means of testing objective theories by examining the relationship among variables. These variables in turn can be measured using statistical procedures. Qualitative approach is suited for exploring and understanding the meaning individual or group ascribe to a social or human problem. Leedy and Ormrod (2005) observes that all qualitative approaches have two things in common, first, they focus on phenomena that occur in natural settings that is in the real world; second, they involve studying those phenomena in all their complexity. Chilimo (2008) declares that, qualitative methodology is mainly concerned with how ordinary people observe and describe their lives. The rationale of using interpretive paradigm as well as qualitative approach in this study is to investigate rural women's information behaviour; as well as explore and describe their information needs to support their SMEs. The qualitative and interpretive paradigms were used in a related study by Mutula and Brakel (2006).

The study population comprised women involved in poultry and kiosk business, which are the predominant enterprises in the two districts of Chamwino and Manyoni in central regions of Tanzania. From a population of 481, a sample size of 217 was drawn from the two types of SMEs (poultry and kiosks) based on Saunders, Lewis and Thornhill (2012) model of selecting sample sizes. Respondents provided information concerning their information needs, methods and sources used to satisfy their information needs, challenges faced when searching for information and the skills they possessed to effectively identify, access and use information.

The study employed two methods of data collection namely focus group discussion (FGD) and semi-structured interviews. Focus group discussions are a useful way of finding out the main issues and bringing these issues to the surface that might not otherwise have been discovered (Neville, 2007). De Vos (2002) claimed that focus group discussion create a process of sharing and comparing among the participants. The participants selected in focus group discussions have certain characteristics in common that related to the topic being researched. In addition, discussion in a focus group is triggered by a stimulus; the stimulus might be some shared experience that the group members bring to the session from their personal environments (Denscombe, 2007). De Vos (2002) states that focus groups normally involve six to ten participants because the size allows everyone to participate. Dorner, Godman and Calvert (2015) in contrast states that “once the general nature of the groups is determined, typical practice is to invite 8-12 participants for broader topic”. Therefore, also in the current study focus group discussion comprised between 8-12 respondents from groups of rural women involved in small businesses (poultry and kiosk).

The interview was also used to collect data from group leaders of rural women entrepreneurs. Interview allows interviewees to speak their minds and is therefore a better way of discovering things about complex issues. Interview allows interviewees to use their own words and develop their own opinions (Denscombe, 2007). According to De Vos (2002) interview is a predominant method of data collection in qualitative research. Interview is an interactional event, and interviewers are deeply and unavoidably implicated in creating meaning that apparently reside within participants. Generally, researchers use semi-structured interviews in order to gain a detailed picture of a participant’s belief about or perception or accounts of a particular topic. The method gives the researcher and participant much more flexibility (De Vos, 2002). Gray (2004:215) asserts that, “Semi-structured interviews are non-standardized, and are often used in qualitative analysis. The interviewer has a list of issues and questions to be covered, but may not deal with all of them in each interview. The order of the question may also change depending on what direction the interviewer takes; and an additional question may be asked thus, this study used interviews to allow for probing of views and opinions of the women group leaders.

Data gathered through focus group discussion and semi-structured interview were analyzed using computer software (Nvivo version 7) and thematic analysis. According to Richard (1999) Nvivo provides a range of tools for handling rich data records and information about them for browsing and enriching text, coding it visually or in categories, annotating and gaining access to data records accurately and swiftly. Nvivo has also tools for recording and linking ideas in many ways and for searching and exploring the patterns of data and ideas. Richard further explains that, Nvivo is designed to remove rigid divisions between data. It also offers many ways of connecting the parts of a project, integrating, reflection and recording of data (Richard, 1999).

Thematic analysis was used to identify, analyse and report patterns within data (Braun and Clarke, 2006). By using thematic analysis, usually researcher moves back and forth between data and new concepts. In this way, the researcher involves processes of induction and deduction, whereby induction creates themes and deduction verifies them. To ensure a reasonable level of validity and reliability, the researcher pre-tested the instruments. Pre-testing and review of data collection instruments provided a chance for the researcher to improve questions. Pre-testing of data collection instruments was undertaken on similar group of respondents known as the Upendo group which comprised ten rural women at Matumbulu village in Dodoma municipal. This group was not part of the sample study.

To ensure ethical compliance, consent of the respondents was sought and they were informed of the purpose of the study and were given the option of participating voluntarily. Permission was also sought and granted from the relevant authorities in Tanzania responsible for research (see appendices 11 and 12 respectively). The research ethical code of UKZN was complied with (see appendix 10). Information collected was used for study purposes only and was not divulged to third parties.

1.11 Definition of Key Terms and Concepts

Channel of Communication:

Losee (1999) defines a communication channel as the set of components in the universe that implement the functionality needed for the communication process to take place. Grimsley

(2003) in contrast defines a communication channel as a particular type of media through which a message is sent and received. The communication channels can flow down from superiors to subordinates, up from subordinates to superiors, or across from and to co-workers of the same hierarchical level of authority. For the purpose of this study communication channel is a means by which messages get from one individual to another.

Development:

The Oxford Advanced Learner's Dictionary by Hornby (2010) defines development as the gradual growth of something so that it becomes more advanced, and stronger. In contrast Friedman (2012) defines development as the process of economic or social transformation that is based on complex cultural and environmental factors and their interactions. Cherry (2014) on the other hand defines development as, the growth of humans throughout the life span from conception to death. According UNDP (2008) development is about leading long and heartily lives; being acknowledgeable to have access to the resources needed for respectable standard of living and being able to participate in the life of the community. Munthree and Juan (2010) define development as movement from one level to another, usually with same increase either in number, size or quality of some kind. For the purpose of this study, development is the process in which something progresses step by step from one stage to the next.

Information:

According to Faibisoff and Ely (nd) information is that which assists in decision-making. Information may exist as data in books, computers, people, files and thousands of other sources. Therefore, information is a symbol or a set of symbols which has the potential meaning". Kaniki (2001) in discussing community profiling and needs assessment defines information as "ideas, facts, and imaginative works of the mind and data of value; potentially useful in decision making, question answering and problem solving.

For the purpose of this study information is defined as meaningful message which is capable of being shared between two or more people.

Information Behaviour:

Information behaviour according to Wilson (2000) is the totality of human behavior in relation to sources and channels of information, including both active and passive information seeking, and information use. Bates (2010) refers to information behaviour as the many ways in which human beings interact with information, mainly the way in which an individual or group of people seek and utilize information. Similarly, Case (2007) defines information behaviour as information seeking as well as the totality of other unintentional or passive behaviour. Thus, it includes face-to-face communication with others, as well as the passive reception of information as in, for example, watching TV advertisements, without any intention to act on the information given. In the context of this study information behavior therefore refers to the way people search for and utilize information.

Information Need:

Faibisoff and Ely (nd) define information need as a generic concept with subsets which address information demand (or requirements) and information wants (or desire). In contrast Prasad (2000) defines information need as a factual situation in which there exists an inseparable inter-connection with “information” and “need”.

Nicholas (2000:20) perceives information needs as arising when a person recognises a gap in his/her state of knowledge and wishes to resolve the anomaly”. Case (2002:69) sees information need as “a function of extrinsic uncertainty produced by a perceived discrepancy between the individual’s current level of certainty about important environmental objects and criterion state that he seeks to achieve.”

For the purpose of this study, information need is used to mean a process started when individual perceives that there is a gap between the information and knowledge available to solve a problem.

Information Seeking Behaviour:

Information Seeking Behavior is the purposive seeking for information as a consequence of a need to satisfy some goal. In the course of seeking, the individual may interact with manual information systems (such as a newspaper or a library), or with computer-based systems (such as

the World Wide Web) (Wilson, 2000). Davis (2000:57) defines information seeking behaviour as “an activity of an individual that is undertaken to identify a message that satisfies a perceived need”. For the purpose of this study, information seeking behavior is a process that starts when someone recognizes the presence of an information need and ends when that need is believed to have been satisfied.

Information Searching Behavior:

Information Searching Behavior is the ‘micro-level’ of behavior employed by the searcher in interacting with information systems of all kinds. It consists of all the interactions with the system, whether at the level of human computer interaction (for example, use of the mouse and clicks on links) or at the intellectual level (for example, adopting a Boolean search strategy or determining the criteria for deciding which of two books selected from adjacent places on a library shelf is most useful); which will also involve mental acts, such as judging the relevance of data or information retrieved (Wilson, 2000). For the purpose of this study information searching behaviour refers to the way people search for and utilize information.

Information System:

Information system has been defined in terms of two perspectives: one relating to its function; the other relating to its structure. From a functional perspective; an information system is a technologically implemented medium for the purpose of recording, storing, and disseminating linguistic expressions as well as for supporting of inference making. From a structural perspective; an information system consists of a collection of people, processes, data, models, technology and partly formalized language; forming a cohesive structure which serves some organizational purpose or function (Standards Compliance Mode, 2011). For the purpose of this study an information system is any organized building or room with computers and other information sources (books, journals, Newspapers, CDs DVDs etc) where people can search for information.

Information Use:

Information use consists of the physical and mental acts involved in incorporating the information found into the person's existing knowledge base. It may involve, therefore, physical

acts such as marking sections in a text to note their importance or significance, as well as mental acts that involve, for example, comparison of new information with existing knowledge (Wilson, 2000). For the purpose of this study information use refers to a process of individual or group of people utilizing (share, transfer or exchange) the available information.

Rural Women:

Rural women represent the female population living in rural areas Centre for Resource Planning Management (CRPM, 2012). There are two main rural characteristics; first, rural people usually live in a farmstead separated by farmland, pasture, trees or scrubland. Second, most rural people spend most of their working time on farms (IFAD, 2010). For the purpose of this study rural women means human beings (female) who live in rural areas.

Sources of Information:

The origin of information sources may be traced to man's earliest attempt to record thoughts, concepts, ideas and events. An information source therefore refers to where you got your information from; this can be a book or a Website. Information sources can also refer to the various means by which information is recorded for use by an individual or an organization. It is the means by which a person is informed about something or knowledge is availed to someone, a group of people or an organization. Information sources can be observations, people, speeches, documents, pictures, organizations. Information sources can be in print, non-print and electronic media or format (John, 2011). For the purpose of this study source of information is anything that might inform individual by providing knowledge about something.

1.12 Organization of the Thesis

This thesis is organized in seven chapters as described below:

Chapter One: Introduction

This chapter provides general introductory information on the subject of study. It includes background information, statement of the problem, research objectives, research questions, delimitation of the study, significance of the study, assumptions, theoretical framework,

preliminary literature, methodology, ethical issues as well as definitions of key terms and concepts.

Chapter Two: Theoretical Framework

This chapter elucidates various information behavior theories and models and their applicability to the study.

Chapter Three: Literature Review

The chapter presents a review of empirical and theoretical literature contained in books, journals, conference proceedings, databases, etc. on information behavior of rural women involved in SMEs. The gaps in literature are adduced, and how the study assists in addressing them is provided.

Chapter Four: Research Methodology

Chapter Four describes the research paradigms, approaches, research designs, population, sampling procedure, data collection procedure, data analysis, validity/reliability of instruments, and ethical considerations.

Chapter Five: Data Analysis and Presentation of Findings

The chapter presents the analysis of data and results. The results are presented thematically using frequencies, charts, figures, tables and narrations.

Chapter Six: Discussion and Interpretation of Findings

This chapter interprets the meaning of the empirical and theoretical findings in the context of the study using extant literature and the relevant theories/models that underpinned the study. The chapter also provides the originality of study and its contribution to policy, theory, practice, methodology and benefits to society.

Chapter Seven: Summary, Conclusion and Recommendations

This final chapter provides a concise summary of the findings, conclusion and recommendations. The chapter further suggests areas of further research.

1.13 Summary

This chapter describes the concept of information behaviour and Small and Medium Enterprises (SMEs). The chapter also provides the general background and context of the study as well as the statement of the research problem. It also outlines research objectives, research questions and the delimitation of the study, significance of the study. In addition, the chapter provides the assumption of the study, theoretical framework, and preliminary literature review. The methodology used in the study is introduced as well as ethical issues. Finally, key terms used in the study are defined and structure of the rest of the thesis provided.

CHAPTER TWO

THEORETICAL FRAMEWORK

2.1 Introduction

A theoretical framework is a structure that identifies and describes the major elements and variables (Ennis, 1999). Moreover, theories are usually composed of interrelated ideas (or propose to explain) some phenomenon. Lassa and Enoh (2000) point out that a theoretical framework is a set of theories put together to provide a basis or support for explaining, viewing, or contemplating phenomena. Sekaran (2005) asserts that the theoretical framework is the foundation on which the entire research project is based. A good theoretical framework identifies and labels the important variables in the situation that are relevant to the problem defined (Sekaran, 2005). Theoretical framework helps to understand what is already known about the topic and what need to be learned or discovered. Theoretical frameworks can help to reveal patterns or relationships that assist in anticipating events or perceptions; and opening up avenues for change or improvement (Ennis, 1999).

The term theoretical framework is used interchangeably by various scholars in research to either refer to one of the following; metatheory, theory, or model (Fisher; Elidelez; McKechnie, 2005). According to American Heritage Dictionary (1969) cited by Fisher *et al.*, (2005) metatheory is a theory concerned with the investigation, analysis or description of theory itself. While theory is defined as the body of generalization and principles developed in association with practice in a field of activity. American Heritage Dictionary moreover, defines a model as a tentative structure used as a testing device. Therefore, this study used models in the place of theory. A model is of great value in the development of theory. A model is a type of proto-theory, a tentative proposed set of a relationship which can then be tested for validity. There is not always a sharp dividing line between a model and theory. Besides, theory in Library and Information Sciences (LIS) is really still at the modeling stage (Fisher *et al.*, 2005).

The purpose of this study was to investigate the information behaviour of rural women involved in Small and Medium Enterprises (SMEs) in Chamwino and Manyoni district of Central

Tanzania. The study was underpinned by Wilson's (1981) model of information behaviour. Other models relevant to this study include Wilson's second model of 1981 information-seeking behaviour; Wilson's (1996) model of information behaviour; Nonlinear model of information seeking behavior; Bystrom and Jarvelin (1995) task-based information-seeking model and a nested model of the information seeking and information searching; Wilson's (1999) nested model of the information seeking and information searching research areas; Williamson's (1998) model of information seeking and use; Krikelas's 1983 model of information seeking, Leckie *et al.*, (1996) general model of information-seeking of professionals; Johnson (1997) a comprehensive model of information seeking; Ellis's (1989) behavioral model, and Kuhlthau's 1991 model of information search process.

2.2 Wilson's 1981 Model of Information Behaviour

This study is underpinned by Wilson's (1981) model of information behavior. This model is based upon two major suggestions; first, information need is not a primary need but secondary need. Second, in the effort to discover information need, the enquirer is likely to meet with obstacles of different kinds. Wilson defines basic information need as being affective (related to moods, feelings and attitudes), psychological or cognitive (related to cognition or the mental action or process of acquiring knowledge through thought, experience and senses) and the context of any one of these needs may be the individual, or role demands of the person's work or life or environments (that is political, technological or economic). In this model Wilson explains how information need arises and what may put off (barriers) the actual search for information.

The model focuses on the information processes, definition of terms of user behavior, and clarifies how information may be transferred, retained and later exchanged with other users. The Wilson (1981) model provides three views of information seeking namely: the context of the user/seeker, the system engaged (either manual or machine), and information sources.

This model posits that information seeking behaviour occurs as a result of a need perceived by the information user. In his model Wilson proposed that, in order to satisfy the need, the user

makes demands on either formal or informal information sources. Wilson explains that, the demands for information results in successful or failure in finding appropriate information. The successful retrieval of information results in user satisfaction or dissatisfaction. In addition, the information perceived as useful may also be passed to other people by the person seeking the information and part of information seeking behaviour may involve other people through exchange of information.

The Wilson 1981 model of information behaviour was found to be relevant for this study because it provides variables that mirror the research questions being investigated. The model is helpful in investigating the different approaches which groups of respondents use to get information. The model is also considered as unbiased and does not influence respondents in expressing their information behavior. This model further emphasizes information use and informal information transfer as areas that must be focused upon because they are relatively lacking in research within information science. The model is therefore useful in addressing the challenges faced by rural women involved in SMEs when seeking for information.

Wilson's 1981 model of information behavior remains the most widely used by researchers studying information behavior phenomenon. For example, Preez (2008) in a study of information needs and information seeking behavior of consulting engineers used Wilson's (1981) model. Similarly, Yang (2007) in a study of information seeking behaviour of international students for career decision making at the University of Tennessee, Knoxville used the Wilson model. In the context of South Africa Wilson's model has been used by Fourie (2002) in a review of web information seeking/searching studies; Mostert and Ocholla (2005) in discussing information needs and information seeking behaviour of parliamentarians in South Africa; Majyambere (2012) to investigate information needs and information seeking behaviour of international students at the University of KwaZulu-Natal, Pietermaritzburg Campus; Fourie (2010) in interpreting the information behaviour of patients and families in palliative cancer care in South Africa; and Seyama (2009) in a study of information seeking behaviour of students with visual impairments at the University of KwaZulu Natal.

This model has also been applied in Tanzanian context in related studies by Elia (2006) and Ndenje-Sichalwe (2004) among others. Figure 2.1 below is a graphic representation of the Wilson (1981) Information behaviour model.

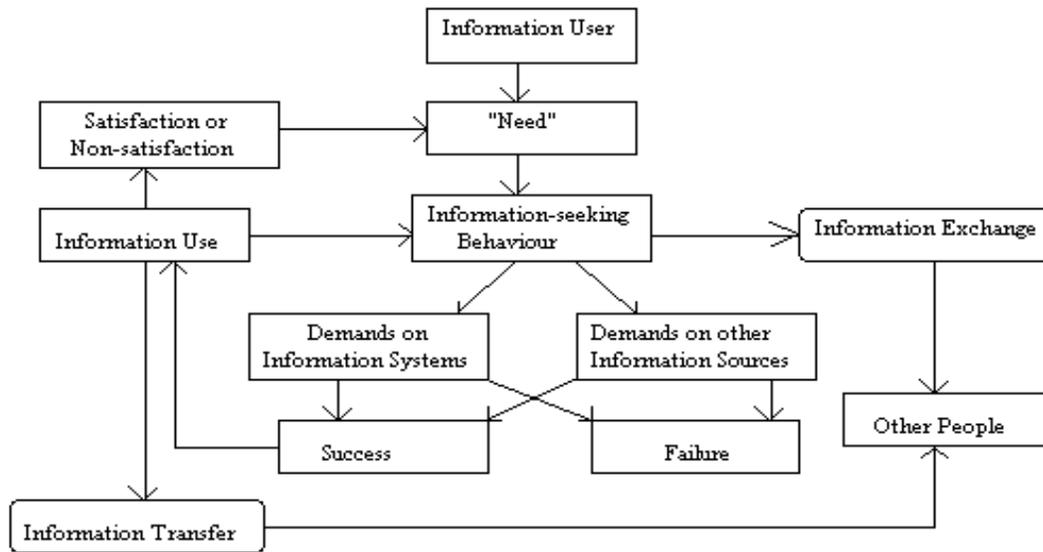


Figure 2.1: Wilson’s 1981 Model Information Behaviour (Source: Wilson, 1999)

Table 2.1: Mapping Research Questions to Variables in the Wilson (1981) Information Behaviour Model

Research questions	Wilson model key variables	Relevant themes in information behavior literature
What are the information needs of rural women involved in SMEs?	Information needs	Information needs, information seeking
What channels of communication are used by women to seek for information to meet their business needs?	Information systems, information channels	Information systems, information transfer, information exchange
What information resources are used to	Information systems, information resources	Information resources, information systems,

Research questions	Wilson model key variables	Relevant themes in information behavior literature
seek and satisfy their information needs?		information needs
What skills do the women have to effectively identify and access information?	Information skills, information sharing, information use, information exchange, information transfer.	Information skills, information searching, information access, information retrieval.
How is the information sought by women used?	Information use	Information use
What challenges are faced by women in seeking and using information?	Information seeking, information use, information access challenges	Information seeking, information access and information use challenges
How do the women use available information?	Information use	Information use

2.3 Wilson’s second model (1981) of information-seeking behaviour

The current study used Wilson’s 1981 second model to discuss context of information need, barriers and information seeking behavior. This model is based upon two major suggestions; first, information need is not a primary need but secondary need. Second, in the effort to discover information need the enquirer is likely to meet with obstacles of different kinds. Wilson recommends that the basic need can be defined as being affective (related to moods, feelings and attitudes), psychological or cognitive (related to cognition or the mental action or process of acquiring knowledge through thought, experience and senses) and the context of any one of these needs may be the individual, or role demands of the person’s work or life or environments (that is political, technological or economic). In his model Wilson explains how information need arises and what may put off (barriers) the actual search for information. Wilson shows eight processes similar to Ellis’s model of information seeking-behaviour with which users may engage when seeking for information, namely; starting (the way employed by the client to begin

seeking information, for instance asking well-informed person); chaining (using materials such as citation and footnotes); browsing (semi-structured/semi-directed searching); differentiating (a way of filtering the amount of information obtained by the user using different information sources); monitoring (keeping up-to-date searching); extracting (choosing carefully relevant materials in an information sources); and verifying (examining the accuracy or quality of information) (Wilson, 2000).

The strength of Wilson's second model of 1981 is that it represents totally a set of hypotheses about information behaviour that are testable. Thus the model can be regarded as a source of hypotheses. The model also demonstrates how barriers to information seeking are personal, role and environment related. The Model is useful in addressing the challenges faced by rural women involved in SMEs when seeking for information.

Although Wilson's second model of 1981 is central to the current study, the model seems inadequate in investigating issues such as channels of communication used to share information perceived useful; resources used to seek and satisfy information needs of rural women involved in SMEs; skill needs to effectively identify and access to information. Despite the fact that this model represents totally a set of hypotheses, the hypotheses on information behavior are not directly expressed. This model is quiet in the processes whereby context has its effect upon the person; the factors that result in the perception neither of barriers, nor of whether the various assumed obstacles have alike or unlike effects upon the motivation of individuals to seek information. Furthermore, it is true that, the model's absence in certain elements stimulates thinking concerning the kinds of elements that a more complete model ought to comprise. Additionally, this model shown in a simplified version as a result does not suit with the research question of the current study (Wilson, 1999). Figure 2.2 below is a graphic representation of the Wilson (1981) second model of Information-seeking behaviour.

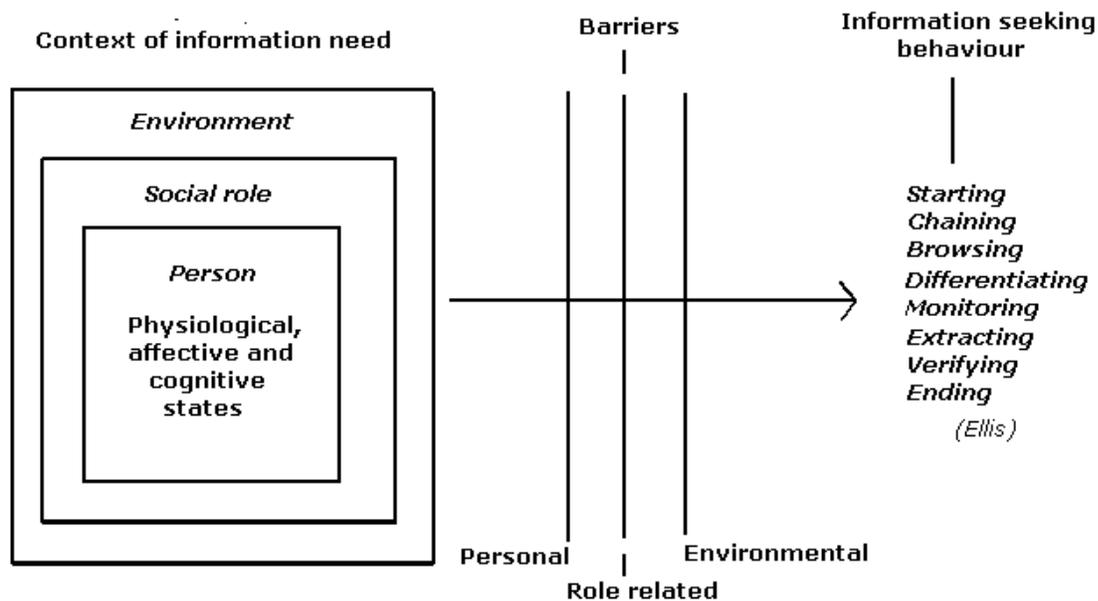


Figure 2.2: The Wilson (1981) second model of Information-seeking behaviour (Source: Wilson, 1999)

2.4 Wilson's (1996) Model of Information Behaviour

Wilson developed various models of information seeking and information behaviour over the period 1981 to 1996. Wilson in his 1996 model of information behavior made major amendments to his 1981 model of information behaviour. For example, other than information science Wilson drew up research from variety of fields which include; decision making, health communication, consumer research, psychology and innovation. Despite new aspects included in the 1996 model, the basic framework of Wilson's 1996 model is predicated on the 1981 model.

In this model Wilson emphasizes that if information needs are to be satisfied three relevant theoretical ideas must be present namely: stress/coping -which offer possibilities of explaining why some needs do not invoke information seeking behavior; risk/reward - which may help to explain sources of information that may be used more than others by a particular person; and social learning - which embodies a concept of self-efficacy (Wilson 1999; Preez, 2008).

The 1996 model shows information seeking barriers represented by psychological (mind, emotional and mental), demographic (human population such as births, deaths, wealth, diseases,

age, gender etc), roles related or interpersonal, (the type of work one does for example teacher, librarian, entrepreneur, peasant) (relationship/ communication between people), environment (condition or area around the people) and source characteristics (electronic or print) (Wilson, 1999). The model further shows that information seeking behavior varies from one user to another. For instance rural women involved in SMEs may have different information seeking behavior according to the age or their responsibilities or lifestyle.

Wilson 1996 model outlines information-seeking behaviors to include passive attention (means passive absorption of information from the environment, for example (when television or radio is on without person's attention to seek information); passive search (applies to those occasions when a particular type of behavior results in acquisition of information that happen to be relevant to a person); active search (takes place when a person actively seeks out information); and ongoing search (means continuing search carried out to update or expand area of information) (Wilson, 2000; Fisher et al, 2005). The search process in this model, shows that, when information obtained by a user is processed it becomes an item of individual knowledge and is used directly or indirectly to influence the environment. If users are not satisfied with the information, they may go back to start the search process again.

For the purpose of this study Wilson 1996 model of information behavior is relevant in investigating information behaviour of rural women involved in SMEs, since it helps in understanding the entire search process of information. Moreover the model contributes towards the understanding of various concepts of information behavior (information need, information seeking, and information use). In addition, the model explains the challenges/ barriers which users face whenever they seek for information. Although the Wilson 1996 model of information behavior is relevant in the current study, the model does not discuss other aspects of information behavior at the centre of this current study such as channels of communication, and resources/sources of information. Moreover, Wilson model of information behavior of 1996 is based in other fields rather than the information science in which the current study is situated. The model is founded in decision making, health communication, consumer research as well as psychology and innovation. Figure 2.3 below is a graphic representation of Wilson's 1996 model of information behavior

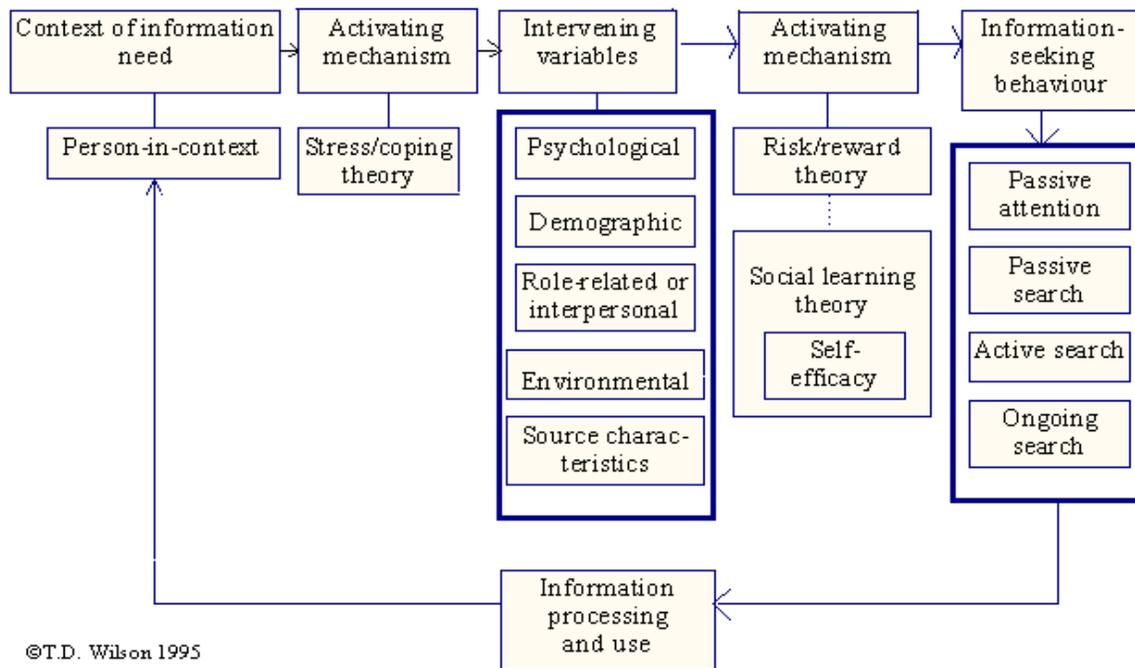


Figure 2.3: Wilson’s (1996) Model of Information Behaviour (Source: Wilson, 1999)

2.5 Nonlinear Model of Information Seeking Behavior

The current study used nonlinear model of information seeking behaviour to investigate the information seeking behaviour of respondents. The non-linear model of information behavior was proposed by Foster in 2004 (Foster, 2004). The model illustrates the process of information-seeking in a way that reflects the experience of information seekers. The model has three core processes and three levels of contextual interaction. The core processes include opening; orientation and consolidation taking account of the interaction between the information seekers; and their cognitive approach, and their internal and external context. This model provides a theoretical framework within which information behavior may be understood and explored. The Opening part of the model corresponds with the process of moving from a state of orientation to actually seeking, exploring, and revealing information. The concept of opening represents a collection of activities which include two complex processes of breadth exploration and eclectics that interact further opening activities and the other core processes as the first step in

information-seeking behavior (Foster, 2004). Orientation processes refers to the choice of keywords, selection of sources and initiation of combinations of other core processes. Orientation processes include a range of activities focusing on defining problem, picture building, reviewing and identifying the shape of existing research. The last part of the three core processes is consolidation, which according to Foster (2004) describes a process of judging and integrating information and deciding whether further information seeking is necessary.

The nonlinear model of information seeking behavior can be represented in three levels of contextual interaction. The model views information behavior as integral to the context within which the information seekers work, and include both internal and external aspects. Internal aspects refer to feelings and thoughts, coherence and knowledge and understanding while external aspects are social and organizational, time, project, navigation and access to sources. This model specifies four cognitive approaches to information seeking namely; flexible and adaptable, openness, nomadic thought, and holistic approaches. Cognitive approach also describes the mode of thinking such as observed willingness to identify and use information that might be relevant to information problems (Foster, 2004).

The strength of Nonlinear model of information seeking is that it promotes the understanding of processes of information seeking in a way that reflect the experience of information seekers such as rural women involved in SMEs. The model is strong on cognitive approach to information seeking thus, enabling the user in processing and acquiring knowledge through their thought and experience. This also contributes towards individual and group awareness of ways of identifying and using information to solve their business problems. Though this model is relevant to the current study with regard to its contribution on information behavior aspect, it is not useful on other aspects on information behaviour such as information needs, information sources and channels of communication. Figure 2.4 below is a graphic representation of non-linear model of information seeking behaviour.

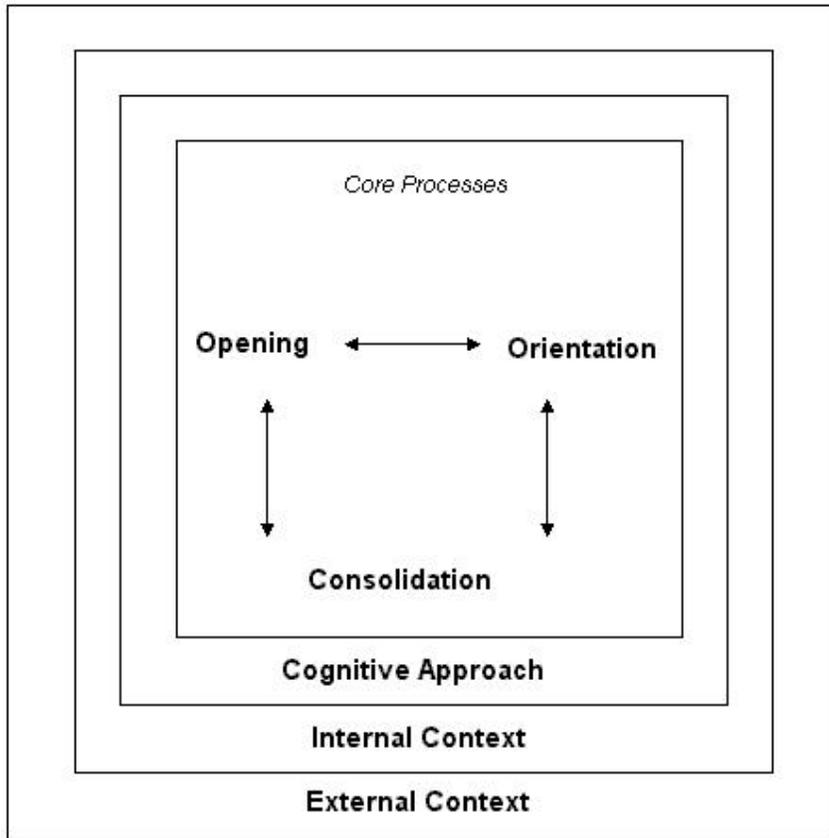


Figure 2.4: A nonlinear model of information seeking behavior (Source: Foster, 2004)

2.6 Bystrom and Jarvelin's (1995) Task-Based Information-Seeking Model

Bystrom and Jarvelin's (1995) task-based information-seeking model is used to underpin task-based information-seeking. *Tasks* are activities people try to attain in order to keep their work or life moving forward. Bystrom and Jarvelin (1995) define *task* as a context leading to information activities. A *task* has been found as an important factor influencing human being's behaviour in psychological and organizational management for a period of time. Ingwersen and Jarvelin (2005) assert that, the concept of *work task* is central to information seeking and retrieval and it extends to cover non-job-related tasks or interests such as daily-life tasks such as natural work task, stimulated work task, and request for information. A *work task* refers to activities people perform so as to fulfill their responsibility for their job. A work task is therefore a motivation of information seeking. *Information search task* on the other hand is defined as task that users need to accomplish through effective interaction with information system (Li and

Belkin, 2010). Therefore information needs, seeking, and use are seen as a part of task performed process.

Bystrom and Jarvelin (1995) consider this model as a problem solving process. They modeled information seeking as a process consisting of information need analysis, selection of actions, implementation of seeking actions and evaluation of the results. This process depends on a number of factors that are situational, organizational, and personal for the performance of perceived task. Bystrom and Jarvelin (1995) categorized task into five stages; namely automatic information processing task (simple task that does not need to seek new information); normal information processing task (in this category some judgment may be needed depending on specific circumstance and restrictions); normal decision task (structuring of task with case-base arbitration playing a major role); genuine decision task (structuring of the result as a priori but the process and information requirement for this sort of task are largely indeterminable, unexpected) (Bystrom and Jarvelin, 1995).

Li and Belkin (2008) and Bystrom and Hansen (2005) categorized task into three levels that is; work task, information-seeking task and information search task. These levels of task are closely associated with one another and interact in the course of information seeking. Furthermore, information seeking does not focus on activities with any specific information system or human information sources but information search is a specific behavior in a specific information system.

The strength of this model is that it integrates information seeking and information retrieval. In addition, this model is helpful in understanding various concepts on task-based information-seeking, for example the relationship between task complexity, the information needs, and information sources. Furthermore the classification scheme of task aspect is helpful in making predictions of information behaviour such as “task” and “behaviour” of rural women involved in SMEs. A weakness of the model is the absence of other aspects of information behavior such as communication channels used by information users whenever seeking and sharing information, and challenges faced by information seekers. The Bystrom and Jarvelin task-based information-seeking model is shown in Figure 2.5 below

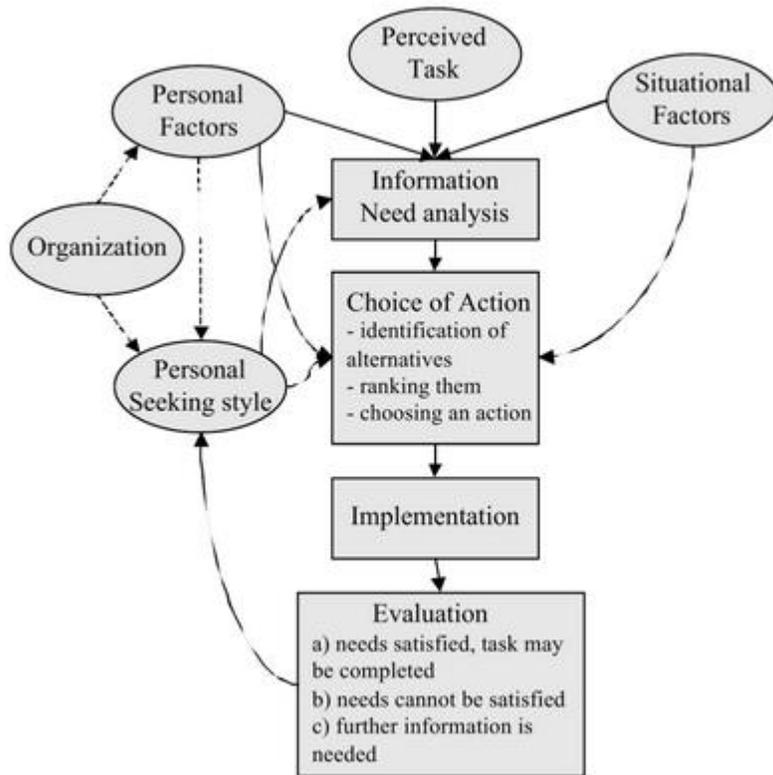


Figure 2.5: Bystrom and Jarvelin Task-Based Information-Seeking (Source: Bystrom and Jarvelin's (1995))

2.7 Wilson's (1999) Nested Model of the Information Seeking and Information Searching Research Areas

The current study used Wilson nested model of the information seeking and information searching research areas. The information behaviour models that have been developed to date are not necessarily applicable to all user groups. Wilson 1999 cited by Preez (2008) explains that models of information behaviour and information seeking are related. This relatedness is reflected in the nested model of information behaviour. Nested model clearly shows the position of the conceptual area of information behaviour and information seeking in relation to the conceptual area of information searching behaviour and information retrieval behaviour.

The nested model states that information searching behaviour is a “micro-level” of behaviour employed by the searcher in integration with information systems of all types. In this regard information searching is a sub-set of information seeking, while information seeking is also a

sub-set of information behavior. However information behaviour regarded as the more general field of investigation (Wilson, 1999).

The nested model further shows that information behaviour is a part of human communication behaviour though the focus of information behaviour is on the information seeker of known or unknown communication. Figure 5 attempts to show the link between two fields as it was mentioned before. This model enables the researcher to consider the relationship in the information-seeking process. In this study, the nested model has been used to enhance understanding of the relationship between information-seeking behaviour and channels of communication as well as information sources.

A weakness of this model is the absence of other aspects which are covered in the current study such as challenges faced by users when seeking and using information. Furthermore the nested model does not explain skills which users need to identify and access information. The nested models of the information seeking and information searching research areas are shown in Figure 2.6.

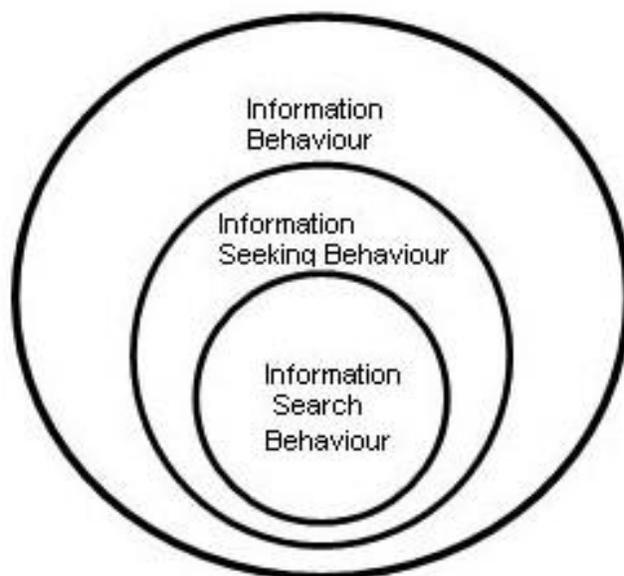


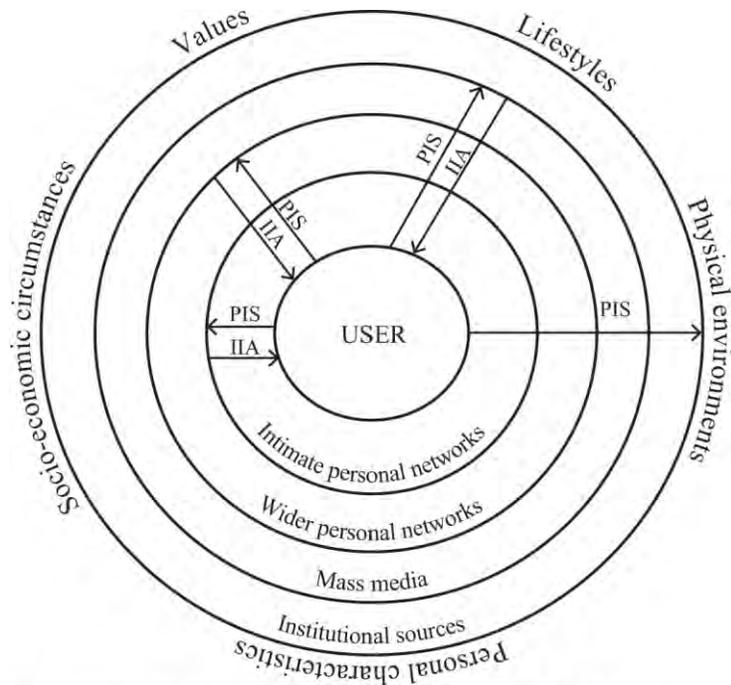
Figure 2.6: Wilson's (1999) Nested Model of the Information Seeking and Information Searching Research Areas (Source: Wilson, 1999)

2.8 Williamson's 1998 Model of Information Seeking and Use

Williamson's 1998 model of information seeking and use was developed from the ecological theory for the study of human information behaviour by Williamson. This model puts information seeking, information acquisition and information use in the context of variables which may have influence. These variables include lifestyle, values, physical environments, personal characteristics and socio-economic factors. The model emphasizes that, information is frequently incidentally acquired rather than purposefully sought in the field of everyday life information. In this model Williamson recognizes the role of individual agency in shaping information behaviour, while admitting that information behaviour may be shaped by person's wider environment, that may comprise intimate personal networks (family and friends); wider person network (Social clubs); mass media (television and radio) and formal institutions (libraries and government organizations), as well the extent to which individual makes use of information sources (Ooi and Liew, 2009)

Williamson's 1998 model further shows that, while clientele purposefully seeks information in response perceived needs, they also observe their world, and acquire information which they were not all the time aware that they needed. Moreover, Williamson believes that, people monitor the world for pertinent information; however some needs are unconscious becoming recognized only when relevant information uncovered.

The Williamson model was found relevant to the current study because it emphasizes that for investigations involving individual or group information behaviour biological and social situations should be taken into account. The model also helps an understanding that, in the field of everyday life, information is often incidentally acquired rather than purposefully sought. In addition this model acknowledges that that other activities may lead someone or group of people to find unexpected information. The weakness of Williamson's 1998 model of information seeking and use is the absence of other aspects of information seeking such as barriers or challenges faced by users when seeking and using information. The Williamson's 1998 model of information seeking and use is shown in Figure 2.7 below



Notes: PIS = Purposeful information seeking; IIA = Incidental information acquisition

Source: Reprinted from Williamson (1998, p. 36) with permission from Elsevier

Figure 2.7: Williamson’s 1998 Model of Information Seeking and Use (Source: Williamson, 1998)

2.9 Krikelas’s Model of Information Seeking

Krikelas’s model of information seeking was developed in an effort to unify the field of user studies. The model emphasizes both the significance of uncertainty as a motivating factor, and the potential for an information seeker to retrieve an answer from own memory. The model comprises 13 components, namely; information gathering, information giving, need-creating event/environment, need deferred, need immediate, source preference, internal, external, memory, personal file, direct (structured) observation, direct (interpersonal) contact and recorded (literature).

There are twin actions in Krikelas model that are information gathering and information giving. The activities of information gathering/information seeking come about in reply to deferred needs which in turn are stimulated by an event or environment of the user. The outcomes of information gathering are directed to memory or personal files. In the other words information

gathering depend on the nature of the individual needs. Some of these needs can be deferred which leads to storage in memory of physical media, while other needs are immediate. In order to meet an information need the seeker is assumed to choose information sources; these sources according to Krikelas could be internal (oneself) or external (other people) (Case, 2002). The author includes information gathering in this model so as to contribute to the understanding and appreciation of human information behavior. Information giving is defined as the act of disseminating messages that may be communicated by various ways (written, verbal, and visual). Krikelas points out that, individuals are usually both senders and recipients of the information.

According to Fisher *et al.*, (2005) Krikelas takes a major step away from the traditionalist approach and dismisses the tendency to equate information with use of records. Krikelas makes great efforts to develop in-depth understanding of the nature of needs in the part of the “immediate information needs”. The author further points out that a momentous proportion of the population may say they have the basic knowledge; when in reality they may not have precise information. The strength of this model is that, it is simple and can be applied to ordinary life. It contributes towards understanding that the nature of a need is essential in providing information to users.

Though this model is relevant to the current study with regard to its contribution on developing in-depth understanding of nature of various needs, it is not useful in investigating information behavior of rural women involved in SMEs; because it does take into account critical variables in the current study such as channels of communication used by user when gathering and giving information; and challenges clientele face whenever gathering and using information disseminated. Besides, the model is not explicit that “personal file” can also include “recorded literature” though anyone would assume so. Furthermore, education and age which could be considered as part of “need-creating environment” since these might affect information seeking, are not clearly explained. Krikelas’s model of information seeking also does not consider characteristics of the seeker. The model of information seeking is shown in Figure 2.8 below

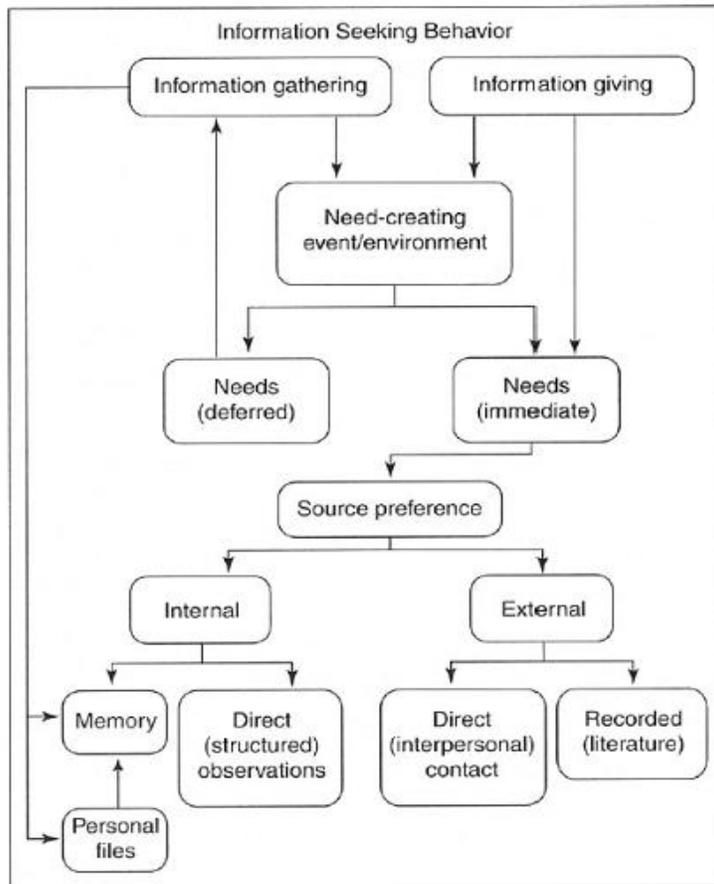


Figure 2.8: Krikelas’s 1983 Model of Information Seeking (Source: Corcoran-Perry & Graves, 1990)

2.10 Leckie *et al.*, (1996) General Model of Information Seeking of Professionals

Leckie, Pettigrew and Sylvain’s (1996) general model of information seeking professionals model was developed for use by engineers, doctors and lawyers; and has gained wider use especially with regard to “work role” and “task” that are a primary motivation for information seeking (Case, 2002). Leckie *et al.*, (1996) posit that information seeking is related to the performance of a particular role and its associated tasks. For instance rural women involved in SMEs expect and carry out various roles and their related tasks which result in information need. The needs create an awareness of information sources and thus motivate individuals to examine the sources to satisfy the need. According to Leckie *et al.*, awareness of information sources and accessibility has a direct impact on the move taken in information seeking. This model shows

information seeking behaviour as a two way arrow labeled "information is sought"; while the end results of information seeking is labeled as "outcome". Furthermore, the model shows that if an information need is not satisfied, the seeker may begin the process of seeking for information again. The model indicates that the process of information seeking may now involve different information sources and may be influenced by different awareness factors.

Although this model is not directly applicable to the group of rural women involved in SMEs it is still useful for the reason that the outcome of information seeking rely on the sources of information available, as well as awareness of those sources. Rural women involved in SMEs should be made fully aware of all information resources available to them (Kerins; Madden and Fulton, 2004).

The weakness of the Leckie model is that, it has to some extent limited applicability to everyday life information seeking, because the model is intended for work-related processes. Furthermore, Leckie *et al.*, does not cover individual demographics (e.g. age, profession and geographical location) believed to be variables that manipulate the information needs. The Leckie *et al.*, (1996) general model of information-seeking of professionals is shown in figure 2.9 below.

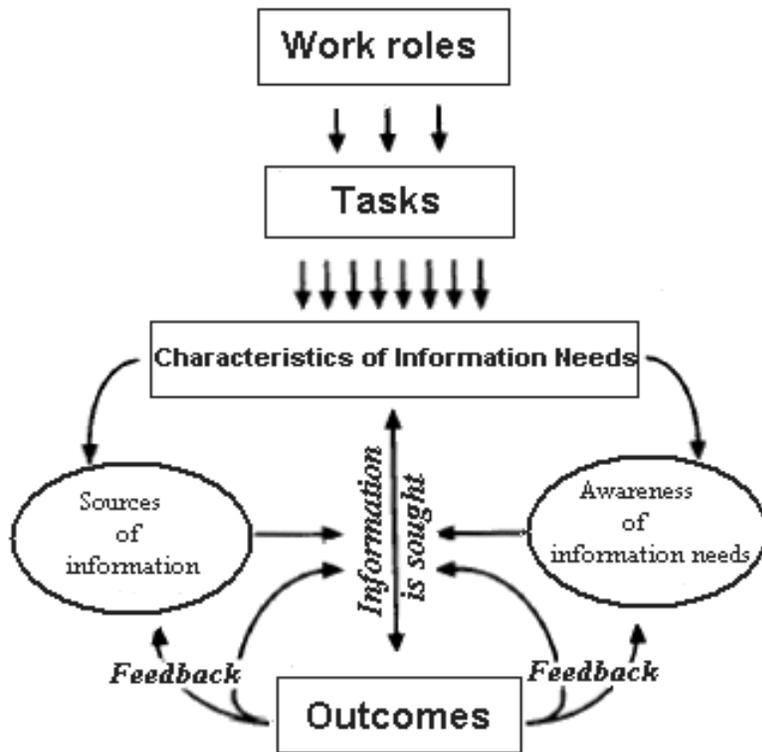


Figure 2.9: Leckie *et al.*, (1996) General Model of Information-Seeking of Professionals (Source: Leckie *et al.*, 1996)

2.11 Johnson (1997) A comprehensive Model of Information Seeking

The current study used Johnson’s model to discuss various factors that motivate users to seek information. The model includes seven factors (demographics, direct experience, salience, beliefs, characteristics, utilities and actions) under three headings namely antecedents, information carrier factors and information seeking actions. This model is pictured as a connecting process that flows from left to right. According to Johnson’s explanations cited by Case (2002) the first and second components are grouped together under the label of “background” factors that include demographics (age, gender and ethnicity) and socioeconomic variables (education, occupation and wealth). For the purpose of the current study, these factors are helpful in investigating beliefs and attitude of people. The second factor under ‘background factors’ in the Johnson model is *direct experience* with; the key concept under this factor being the social network of person with an information need.

Johnson describes third and fourth factors (salience and beliefs) which fall under the heading of personal relevance, as dependent on a person's degree of understanding their situations of unawareness about the subject. Johnson asserts that being unaware is not a motivation factor for information seeking. People are only motivated to seek information if they know what they are unaware of and when missing information becomes salient. Salience implies that information is not only perceived to be suitable to a need, but that it is also applicable. According to Case (2002) beliefs are an important factor in information seeking since they constrain the individual's thinking about the world and themselves, determining the answer to the questions they seek to answer. Beliefs are not only about facts but also about relations to the current situation.

In Johnson's model with regard to utility of channels, points out that channels are selected on the basis of their match with the seeker's needs as well as expectation concerning satisfaction to be obtained (Case, 2002). Information seeking actions is the last component of the Johnson model, and describes searching of information that involves channels, sources, processes, feelings, and cognitive elements. The strength of Johnson's model is that, it is a very general model that can be applied in different contexts of information seeking. The model is shown in Figure 2.10 below

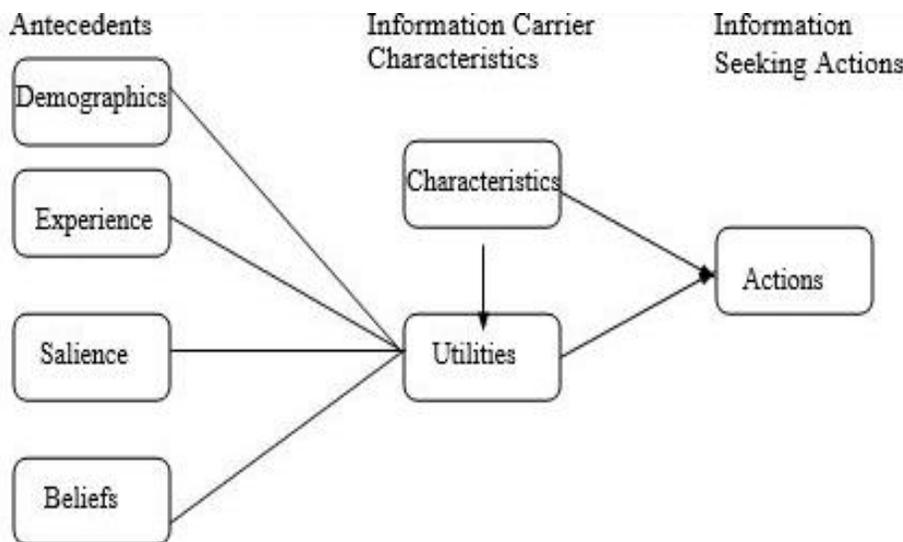


Figure 2.10: Johnson Model (1997) A Comprehensive Model of Information Seeking (Source: Johnson *et al.*, 1995)

2.12 The Ellis's (1989) Behavioral Model

Ellis's (1989) behavior model was developed from a grounded theory approach. Ellis did not depict his model as a diagram, but rather described it in series of paragraphs. This model is based on observations of the information seeking behavior of academics in various scientific fields of study on social scientists, physicists and chemists; engineers and scientists in industry and humanities scholars. Ellis has been careful to point out that the model is not intended to indicate a fixed sequence of events, but acknowledged the order of actions might differ and also be iterative (Case, 2012).

Ellis's (1989) behavioral model features eight types of activities namely starting, chaining, browsing, differentiating, monitoring, extracting, verifying and ending. Initially this model contained six types of activities before adding two final actions. Various authors (Case, 2012; Jarvelin and Wilson, 2003) describe these activities/ features as follows:

- **Starting:** This stage involves activities characteristic of the initial search for information where potentially relevant sources are identified.
- **Chaining:** The second stage consist of chains of citations or other types of connections among materials.
- **Browsing:** This activity encompasses semi-directed search in area of potential interest. For instance scanning table of contents, subject heading and indices.
- **Differentiating:** This level includes assessing and filtering information sources by examining differences in nature and quality. Differentiating also involves “ranking information sources according to their relative importance based on own perceptions (Ellis and Haugan 1997:399).
- **Monitoring:** It involves maintaining awareness of developments in a given subject area by regularly checking key sources. This stage involves “maintaining awareness of developments and technologies in a field through regularly following particular sources.” (Ellis and Haugan, 1997: 396).
- **Extracting:** This involves systematic examination of a particular source to extract material of interest.

- **Verifying:** This stage involves checking that information is correct.
- **Ending:** It includes additional seeking at the end of the project, for instance final search of literature.

The strength of Ellis's model is that it is based on empirical research and has been tested in subsequent studies. Ellis's model enables researchers to understand the detailed interaction of the features in any individual information seeking patterns. Despite the strength of Ellis's model, the model lacks other features that are pertinent to the current study. For instance Ellis's model does not cover the use, exchange or transfer of information. In addition Ellis's model does not cover challenges faced by users when seeking and using information. The Ellis's (1989) behavioral model is shown in Figure 2.11 below

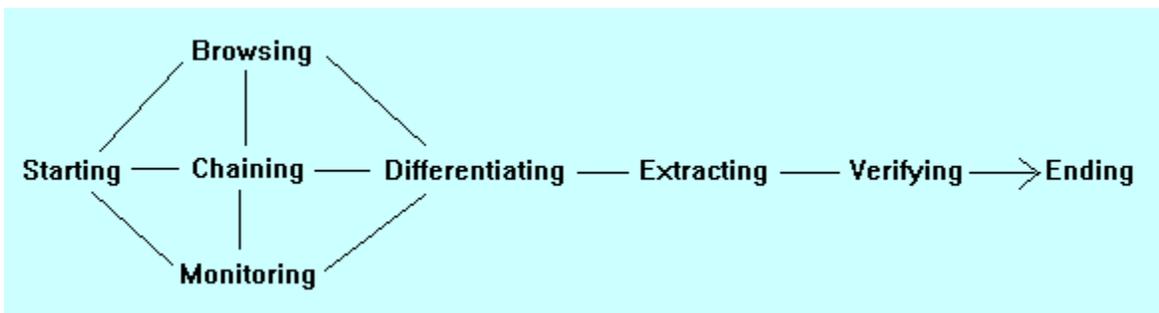


Figure 2.11: Ellis's (1989) Behavioral Model (Source: Case, 2012)

2.13 The Kuhlthau (1991) Model of Information Search Process

The Kuhlthau (1991) model of information search process is universally applicable to any field. This model is based on many years of research, mainly with students. The model has been cited nearly a thousand times in the academic literature, although it does not consider some factors and variables that are commonly considered in information seeking research. This model focuses on the feelings, thoughts, and action that follow as individuals become aware of a gap in their knowledge. Kuhlthau identifies doubt as key concept and emphasizes the role that emotions play in motivating the search for information. Kuhlthau's model is different from the other models because it focuses on action, cognition, and emotions that take place during a search. Kuhlthau

(1991) model of information search process comprises seven stages namely initiation, selection, exploration, formulation, collection, presentation and assessment which are explained below.

- **Initiation:** This stage is considered as the birth of an information need, as a person identifies what is missing in their knowledge. Furthermore, this is the stage in which an individual becomes aware of uncertainty or lack of knowledge about something.
- **Selection:** Is a stage in which an individual selects the topic he or she is pursuing and how to approach it. At this point the individual assesses one's own degree of interest, necessary tasks, and available resources and tends to be optimistic about the process and outcome.
- **Exploration:** In the third stage feelings of doubt and confusion may arise as sources are discovered and the information search becomes difficult to frame or express to information system or other person. At this point some seekers may abandon their effort to expand their understanding.
- **Formulation:** This is the time where focus is sharpened and clarity of purpose may be achieved. At this point a search may narrow and confidence of the outcome tends to return.
- **Collection:** Is when effort is focused on gathering, digesting, and recording the most relevant information on the topic. .
- **Presentation:** At the sixth stage an individual is able to use retrieved information to answer the initial questions or complete the task. This stage according to Wilson (1999) is the end of the information search.
- **Assessment:** The last stage is about assessment of what the individual accomplished, leading to improved self-awareness and esteem.

In this study, Kuhlthau's (1991) model of information search process enabled the researcher to consider the search process. For instance the first stage shows how an individual recognizes the need for information. Not only that, this model enabled the researcher to understand various stages involved when seeking information. This model however does not address other aspects of this study such as how information transfer or exchange among users occurs; skills needed to identify, access and use information; as well as challenges clientele face whenever gathering and using information. The Kuhlthau (1991) model of information search process is shown in Figure 2.12 below

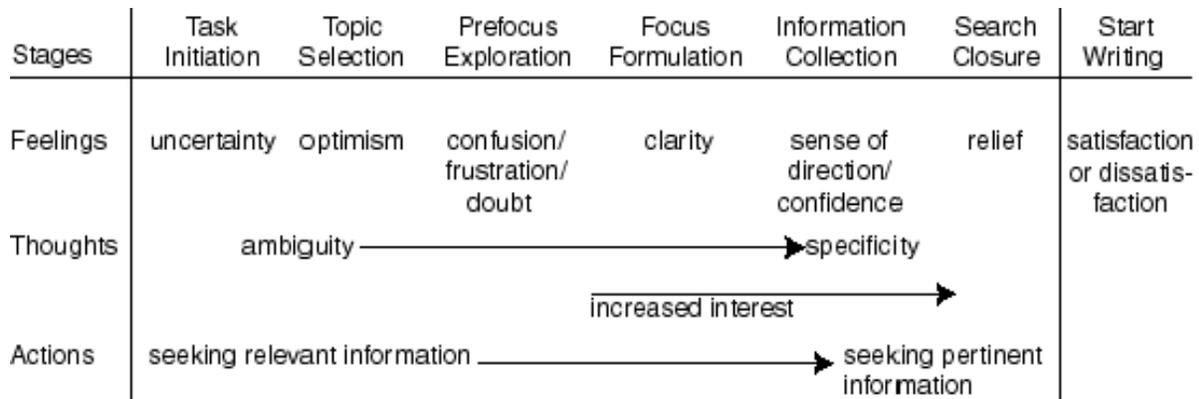


Figure 2.12: Kuhlthau (1991) Model of Information Search Process (Source: Kuhlthau, 1999)

2.14 Summary

This chapter provided a description of the models used in the information behaviour studies. The models reviewed included Wilson's second model of (1981) information-seeking behaviour; Wilson's (1996) model of information behaviour; Nonlinear model of information seeking behavior; Bystrom and Jarvelin (1995) task-based information-seeking model and a nested model of the information seeking and information searching; Wilson's (1999) nested model of the information seeking and information searching research areas; Williamson's (1998) model of information seeking and use; Krikelas's (1983) model of information seeking, Leckie et al., (1996) general model of information-seeking of professionals; Johnson (1997) a comprehensive model of information seeking; Ellis's (1989) behavioral model, and Kuhlthau (1991) model of information search process.

Despite the potential contribution of these information seeking behaviour models in explaining the research problem in this study, the Wilson (1981) model of information behavior was found to be the most relevant and appropriate for this study for the reasons that have already been adduced. The next chapter presents a review of the literature.

CHAPTER THREE

LITERATURE REVIEW

3.1 Introduction

The purpose of literature review in PhD research according to Boote and Beile (2005) is to enable researcher to learn from theory of subject, to show where the research fits in to the existing body of knowledge as well as to outline gaps in previous research. Moreover, reviewed literature illustrates that the work is adding to the knowledge and understanding of the field. Lastly, literature review helps to ensure the research has not been done before. Similarly, Enon (1998) on his part points out that, the major reason for reviewing literature is to provide the researcher with understanding of insight for the development of a logical framework into which the problem fits and to provide justification of the study, since it helps to indicate what needs to be done. Furthermore, it points out to the researcher some research strategies, methods and instruments that have been found productive or faulty. Additionally, it assists to determine what has been done before so as to avoid duplication. Stilwell (2000:173) on her part clarified that “literature review needs to indicate the different views, agreements, disagreements and trends of thought on the topic of research and be accurately portrayed and acknowledged in the text”.

The purpose of this study was to investigate information behaviour of rural women involved in Small and Medium Enterprises (SMEs) in Chamwino and Manyoni districts of central Tanzania. The following research questions were addressed: What is the information behaviour of rural women involved in SMEs? What channels of communication are used by women to seek for information to meet their business needs? What information resources are used to satisfy their information needs? What skills do women have to effectively identify and access information? How is the information sought by women involved in SMEs used? What challenges are faced by women in seeking and using information?

Empirical and conceptual literature reviewed in this chapter is obtained from books, journals, theses, conference proceedings, databases. Kothari (2004) points out that there are two types of literature concerning the concepts and theories and the empirical literature which discusses studies

related to the variables of the current study. The chapter is organized around themes of research questions, key variables of the underlying theory and broader issues on the research problems. Thematic areas from the research questions include; information behaviour of rural women, channel of communication, challenges in information seeking and use. In addition, key variables from the underlying theory are information sources and resources, information transfer and exchange. Moreover, the broader issues around the research problem in this study include Small and Medium Enterprises (SMEs) and rural women, women and development, and gender perspective of information behaviour. Within each theme, international context is reviewed followed by regional and local contexts.

3.2 An Overview of Information Behaviour

Information is “data that has been gathered, processed and analysed to provide a useful result called information” (Case, 2002:62). It is a vital tool in any development and implementation of any plan. For this reason Adio and Arinola (2012) stated that information is indispensable for human development since it can be considered as an important resource contributing towards the development of a nation. Banda, Mutula and Grand (2004) regard information as an important aspect of informed decision making. They consider information as a fourth organizational resource after financial, human and physical resources.

Information is therefore an indispensable asset everybody needs for informed decision making (Zawawi and Majid, 2001:25). The importance of information is also reflected in Tanzania Small and Medium Enterprise Development Policy (URT, 2002). This policy points out that information has become a prime mover of all economic undertakings and is valuable to rural women involved in SMEs if it is provided at the right time, in the right format and using right channels. Thus, in order to provide right information to the users, understanding information behavior is an essential process.

Information behavior has multiple definitions and interpretations. Wilson (2000) considers information behavior as entirety of human behaviour in relation to sources and channel of communication, together with passive and active information seeking and information use. The

author asserts further that information behavior includes face to face communication with others, as well as passive reception of information as in listening radio and watching television without acting on the information given. This is in line with Bates (2010), who refers to information behaviour as the many ways in which human beings interact with information, mainly the way in which individual or group of people seek and utilize information. Similarly, Case (2007) defines information behaviour as information seeking as well as the totality of other unintentional or passive behaviour. Preez (2008) on the other hand perceives the concept of information behaviour to include all aspects of human behaviour that requires clientele to create, communicate and seek information that is suitable to their needs.

Stilwell (2010:3) in contrast says information behaviour is a broader term that covers information seeking behaviour, information needs, information searching and information use. Fisher and Julien (2009:317) on their part argue that information behaviour focuses on people's information needs; specifically how they seek, manage, give and use information, either purposefully or passively, for various work-tasks related to their everyday lives. Therefore, for the purpose of this study information behaviour includes information need, information seeking, information sharing and information use.

Information needs and information seeking are some of the most important concepts of information behavior in information science dialogue. The notions of 'information needs' and 'information uses' arose in 1960s when the amount of information started to develop phenomenally leading to information overload (having too much information than needed to make decision) (Khan and Shafique, 2011). Information needs refers to an individual's or group's desire to locate and obtain information to satisfy a conscious or unconscious need. Case (2007) refers to information need as a recognition that knowledge of someone is inadequate to satisfy a goal that a person has. Ikoja-Odongo and Mostert (2006:147) assert that "an information need is a requirement that drives people into information seeking". Wilson (2000) points out that information seeking behavior is a procedure that starts when individual or group of people recognizes the presence of an information need and finishes when that need is believed to have been satisfied. Moreover, he adds that information seeking behavior is the purposive seeking for information as a consequence of a need to satisfy some goal. In the sequence of seeking, the

individual may interact with manual information systems like books, journals a newspaper or a library, or with computer-based systems such as database and the World Wide Web. In this context, Banda, Mutula and Grand (2004) assert that understanding of user needs is important to providing pertinent information services.

Regarding information-seeking behaviour, Kakai *et al.*, (2004) and Adio & Arinola (2012) refer to information-seeking behavior as an individual's way and manner of gathering and sourcing for information for knowledge updating, and development. This view is in line with Krikela's who citing Weiler (2004) asserts that information seeking refers to a situation when someone perceives that the current state of knowledge is less than needed to deal with some issues or problems. Therefore to get a clear picture of the information needs and information seeking behavior, there is a need to know the type of user groups, as well as their activities. Furthermore, information need and seeking behavior differ among user groups, therefore information providers ought to understand information users and their needs in order to address those needs.

An information user is any person who exposes himself or herself to available information in a given environment with the intention of applying or using it for solving problems. Boadi and Letsolo (2004) characterise human being as an information user and notes that information is used in all stages of human development. Information users are of different groups (women, students, youth, children, disabled, patient etc) and have different backgrounds, some are educated, others are not, some are old people, others are young and some live in the urban areas, while others live in the rural areas (Blessing, 2007). Thus, for the purpose of the current study rural women involved in SMEs are regarded as information users like other groups.

3.3 Studies on Information Behavior in Developed Countries

Several studies have been undertaken on information behavior worldwide. For instance Francis (2005) investigated information seeking behaviour of social science faculty at the University of the West Indies, St. Augustine campus. The findings showed that social sciences faculty members need information in teaching and research purposes. The study used questionnaires with nineteen (19) closed and one (1) open-ended question to collect data; twenty six (26) full

time social sciences staff participated in the study. Likewise, Kuruppu and Gruber (2006) investigated the information needs of faculty and graduate students in agricultural and biology science at Iowa States University of Science and Technology in United States of America. The results of the study are in line with those reported in Francis (2005) that graduates and faculty members need information to meet their research activities. Qualitative research methods including one-on-one interview and focus group session were used to collect data. In this research fourteen (14) faculty members were interviewed; while twenty three graduate students participated in focus group session divided into five groups.

In a related study by Otike (1999) attempted to examine information needs and seeking habits of lawyers in England. Findings showed that lawyers need detailed and research information, while legal professionals rely heavily on printed media and practicing lawyers rely on their junior colleague for legal research. Data were collected by using semi-structured interview and total of 33 respondents were interviewed. A similar kind of study was conducted by Reed and Tanner (2001) on information needs and library services for the fine arts faculty in Texas Tech University. The study found books (75%) to be important materials for the research, followed by journals (35%), slides (25%), electronic databases (20%), CD-ROMs and exhibition catalogue (10%). Materials in foreign languages are also needed by faculty members. Based on language, materials in French are most used followed by German, Italian, Spanish and Latin. On the other hand Nicholas, Huntington, Jamali, and Watkinson (2006) carried out a study about information seeking behaviour of the users of digital scholarly journals in Unite Kingdom. Results showed that most requests were for full text in Hyper Text Markup Language (HTML), followed by full text in Portable Document Format (PDF).

The reviewed literature in developed countries found that information behavior of users is very much influenced by the nature of the work people do. Literature reviewed in developed countries show limited studies conducted in rural areas. Further, many studies address information behavior from academic perspectives.

3.3.1 Studies on Information Behavior in Sub-Saharan Africa

Information behaviour remains an important research area in the field of information science since researchers and other information providers make greater efforts to understand users' information needs and how they try to fulfill these needs (Rafiq and Ameen, 2009). There are several studies on information need, seeking and use conducted in many African countries Tanzania inclusive. For instance Haruna and Mabawonku (2001) carried out a study on information needs and information seeking behaviour of legal practitioners and the challenges of law libraries in Lagos Nigeria. The findings showed that, lawyers needed information in various disciplines. Information on decision of superior courts of record, information on most recent legislation, international information, as well as local seminars and conferences. Moreover, legal practitioners wanted information on how to acquire and apply legal "know-how". Furthermore, information concerning leading authorities in different areas of law, and different subject area was needed. Finally, legal practitioners needed information on relevant papers on law. The study which adopted a stratified random sampling method to select 361 layers out of 601 was conducted in 20 universities and research institutional libraries in Lagos Nigeria.

Ikoja-Odongo and Ocholla (2004) surveyed information seeking behaviour of the informal sector entrepreneurs in Uganda. They found that, information on training and marketing of product was considered most important. Moreover, in small numbers informal sectors needed information on loan, pricing of products, transport, competitors and government policies. Additionally, they needed information on record keeping and repairs of tools and equipment in the trade. The study drew the survey population to represent the nation population sample. Stratified sampling from six Ugandan districts comprised 660 respondents. Interview schedule, observation and photography were used in data collection. Matsveru (2013) in the context of Namibia and from the perspective of Pastors found that they needed information for counseling, community development, preaching, evangelism, teaching public relation and leading a service.

A study conducted by Njoku (2004) on the information needs and information-seeking behaviour of fishermen in Lagos state Nigeria found that the most important information needed by fishermen includes modern fishing skills and facilities, sea situation and location for big catches. Further, the fisherman in Lagos needed information on where and how to obtain credit facilities,

marketing of fish for maximum profit, as well as information on the subject of government policies and modern storage and processing facilities. This study used survey research design while the population of study comprised five hundred (500) fishermen from different communities in Lagos. The study adopted cluster sampling technique, and interview and questionnaires were used to collect data.

In a related study (Ikoja-Odongo & Ocholla, 2003) on information needs and information seeking behaviour of artisan fisher folk of Uganda; A number of problems such as death of fisher folk in lake, water hyacinth, and floating islands were factors that motivated the need for information. Moreover, cost of equipment, illiteracy, hygiene postharvest management and natural enemies were other problems. This study adopted survey method with respondents consisting of 92 fisher folk (fishermen, fishmongers and fish processor), 2 boat builders, 4 fisheries extension agents, 8 fish guard, and 12 chairpersons (fishermen). The sample of fisher folk were extracted from a national sample of 602 entrepreneurs in the informal sector. Interview, observation and photograph tools were used to collect data.

Khayesi (2011) in a study of health care information needs for retirees in Nakuru district in Kenya found they had different information needs. The nature of the information need was attributed to geographical location (urban and rural), environment, and level of education. Mchombu (2000) investigated information needs of women in small business in Botswana. The results of the study showed that women needed information in all aspects of business activities which would enable them to discover appropriate suppliers, products, equipment and material. They also needed information on standards and the country's industrial requirements as well as materials specifications. Structured interviews were administered to women who owned small business and institutions that served women in business. Likewise, in Kenya a study by Odi, Otike and Kiplang'at (2012) revealed that women constantly needed information related to their daily activities of farming, business, education and training. The study was conducted using a survey research method and qualitative approach. Data were collected using structured and semi-structured face to face interviews.

Similarly, Mooko (2005) conducted a study on the information behaviour of rural women in Botswana. The results of the study revealed the information needed by women who live in rural areas either as single heads of household or married depends on the family situation. The findings showed that the most situations that lead women to seek for information were home-based care and health service for their family members; followed by training and job opportunities for themselves and their children. Moreover, women needed information concerning taking care of livestock as well as how to obtain seeds during planting season time. Other information needed was regarding government policies, regulation and procedures. Additionally rural women in Botswana required information concerning law, financial as well as information on basic needs such as school uniforms for the children and disabled child or elderly person who need assistance. The study adopted snow-balling a non-probability sampling procedure to select sixty women residing in the three villages in Botswana. Interview and focus group discussion techniques were used to collect data.

The findings from a study on information needs sources and information seeking behavior of rural women in Badagry Lagos, Nigeria by Blessing (2007) discovered that fertilizer and seed was the most important information (93.5%) rural women needed; followed by information on children and family relationship (78.5%). Furthermore, information on health (65%), housekeeping and house holding maintenance (43.5%), as well as new product (22%) were also needed by rural women in Badagry. The study adopted descriptive survey method of investigation using simple stratified random sampling technique. Interviews, questionnaires and observations were used as tool to collect data.

Likewise, Bakar (2011) surveyed information seeking behaviour of rural women in Malaysia, the results of the study showed that, availability of money is the most important information need by rural women in Malaysia. The women also believed that information on child education, religion and food were highly important. Additionally, women in Malaysia needed information on health services. The study adopted a survey research method while a sample of eighty women was selected using convenient sampling technique to choose households of the villagers. Furthermore, questionnaires were used to collect data although only fifty one of the samples of women returned the questionnaire.

The reviewed literature shows that women in urban settings have different information needs compared to those in rural areas perhaps due to their different socio-economic status and the environment. Moreover, understanding the information needs of rural women is a challenge as they perform several activities simultaneously and consequently their information needs change with time. It is therefore important to carry out studies on information behavior of rural women so as to understand their needs, environment and their lifestyle, for the reason that they make significant contribution to the economic development and their needs always keep changing.

3.3.2 Studies on Information Behavior in Tanzania

In Tanzania a number of studies have investigated information needs and information seeking behaviour of information users based on their occupation, geographical location, and subject interest. Kateule, Katundu and Sife (2004) for example used questionnaires, interview schedule and personal observation as a data gathering instrument to study Parliamentarian's access to information in Dodoma Tanzania. It was found that parliamentarians mainly needed information on political and policy (60%), general news (25%), scientific and technological information (10%) as well as (5%) entertainment information.

Norbert and Lwoga (2012b) investigated information seeking behaviour of physicians at the public hospital in Tanzania. The results of the study showed that, physicians needed specific medical information; above all they needed information on patient care, rather than research. Further physicians wanted information about education processes. About 259 physicians participated in this case study research at Muhimbili National Hospital. A structured questionnaire was used to collect data. In the same vein, the information seeking behaviour of library users in a changing library environment was the subject of the study carried out by Msuya (2003). The findings showed that, law reports and legislation are the most consulted type of materials by law staff at the University of Dar es Salaam. Data collection methods were questionnaires and interview. Likewise, Sife (2004) attempted to examine information needs and seeking behavior of Tanzania forestry researcher in the electronic environment. Results showed

that information needed by forestry researchers depends on their field of specialization (agro forest, forest ecology, forest soil, forest management).

On the other hand, Isowe (2007) investigated information needs and information seeking behaviour of small-scale coffee farmers in Moshi rural district. Her study revealed that, farmers needed information on how to decrease production costs, financial information, sources of loan, market information as well as agricultural technology. Combination of techniques (questionnaires, interview and focus group discussion) was used to collect data from fifty six (56) respondents. Similarly, Siyao (2010) investigated the agricultural information needs and information seeking behaviour of Small-Scale Sugarcane Growers (SSSG) in Tanzania with a gender perspective. He found that SSSG needed information on harvesting schedule, tons harvesting, transportation, dates of payment and actual payment. He further pointed out that, information on fire outbreak, new farming practice, where to purchase agricultural inputs (fertilizer and herbicides) market situation and availability of credit were also needed. Eighty three (83) respondents from three villages and five institutions participated in this study. Data were collected using structured questionnaires, face to face interviews, focus group discussion and personal observation.

A study on access to and usage of information among rural communities conducted by Mtega (2012) in Kilosa district Morogoro region in Tanzania showed that, majority of rural communities (more than 70%) needed information on health, political, civil and leisure. The (65%) of respondents needed information on agricultural husbandry practices, (60%) stated a need for market information and other (54%) needed information on farm inputs; While less than (35%) expressed their information need on academic, credit and international news. A total of hundred respondents were randomly chosen from five villages. In depth interview and observation techniques were used to collect data. Ndenje-Sichalwe (2004) on her part attempted to examine information needs of women in small scale businesses in Dar es Salaam region. It was found that, majority of women (50%) needed information on business skills and opportunities, (22.5%) indicated need for information on news in general. Moreover, (10%) needed information regarding markets and (5%) needed information on science and technology.

Based on literature reviewed above it seems that, most of the studies on information behavior have been conducted within various disciplines in Tanzania. It is also noted that, little progress has been made in understanding the challenges of information need and the way rural communities seek and utilize information. Moreover limited studies have been done covering information behaviour of rural women involved in Small and Medium Enterprises (SMEs) in central Tanzania.

3.4 Information Sources/Resources and Channels of Communication

Information sources are tools that are used to meet the information needs of different groups of users. Bates (2006:1035) mentioned that “anything human beings interact with or observe can be a source of information”. Kaye (1995) in discussing sources of information, formal and informal classified information sources by format, status and location; He clarified that under format information sources includes oral vs documentary, textual vs audio-visual or multimedia and paper based vs electronic. With regard to status information sources contain personal vs impersonal, formal vs informal as well as published or open vs unpublished or confidential. He pointed out that the location of information sources can either be internal or external. According to Aina (2002) information sources are consulted on a subject, theme, an event, a date, a number, a place or even a word. Information users (rural women in SMEs) obtain needed information from variety of sources, although some of the sources are costly and or difficult for a person or group of people to acquire and utilize. Therefore, in order to provide useful information to the community it is very important for the information providers such as Government and Non-Governmental Organizations (NGOs) to understand various information sources and channels of communication.

All over the World several studies reported that different information sources both print and non-print have been used by various group of readers. Francis (2005) for instance reported that, textbooks were preferred source of information for teaching by social science faculty at university of West Indies, followed by journals and monograph. Furthermore, it was pointed out that, respondents preferred current issues of journals and databases. Members of faculty of social science were found to prefer journal articles as well as book chapters. Most of respondents relied on the library while others on subscriptions to print journal articles. Otike (1999) in contrast

found that in addition to journal and reports, lawyers in England preferred information sources from law reviewed articles, judgment in law reports and issues raised in textbooks. Haglund and Olsson (2008) in an investigation of the impact of university libraries on changes in information behavior among academic researchers, in three universities in Stockholm Sweden found that respondents relied a lot on electronic information, while most young university researchers used Google for everything, and had very little contact with library.

Along the same line a study by Al Mughairi (2006) examined information behavior of researchers at Sultan Qaboos University in Loughborough. The result of the study showed that, the social sciences researchers considered the book as the most important information channel. Furthermore, majority of researchers considered journal articles as the most popular method used as a source of information. Like any other studies, the International Computer Library Center 'OCLC' online 2002 cited by Williams and Rowlands (2007) reported that full-text articles were used most often, while electronic books and online reference were used least often by university students for their assignment as a source of information in United Kingdom, though some students used their library's print resources. Moreover, Majid, Anwar and Eisenschitz (2000) did a study on information needs and information seeking behavior of agricultural scientists in Malaysia. They concluded that, books and journals, agricultural scientists relied on primary sources and review articles. Scientists also preferred exchanging recent information on professional meeting, talks and workshops. In addition, current contents, abstract and indexing services were considered relatively less important. Sources such as books, reports, patents and bibliography, as well as theses and dissertations were considered least important in getting current information. In Taiwan, Chen (2014) studied information needs and information sources of family caregivers of cancer patient and revealed health care professionals especially physicians were their primary and preferred information sources.

Several studies have investigated information resources/sources and channel of communication among rural communities especially women. Bakar (2011) reported that family, friends and magazine are the main source of information used by rural women in Malaysia on issues such as food, child education and health. Bakar also found that information sources on home beatification were obtained from magazine, family members, friends, television and radio.

Furthermore, women relied on information sources available on the Internet (online periodicals/magazine, email and e-books) to communicate their needs.

Mooko (2005) noted that women in three villages in Botswana relied more on medical practitioners as a common source of information. She further found that the minimum amount of information sources used were printed sources, political leaders and sales representatives. On the other hand, Matsveru (2013) revealed that, pastors in Namibia sought information from formal sources such as bible translation, bible concordances, and bible commentaries when they did not find particular information. They also used informal sources such as experienced pastors and the Holy Spirit.

In the context of Tanzania several studies have been conducted on sources, resources and channels of communication used in various disciplines. Manda (2008) for example states that, students in three Universities accessed a wide range of sources of sexual reproductive health information, but the actual use was concentrated and limited to only three major sources which were radio, television and friends. Manda reported that specialized sources of information such as health workers and brochures/ leaflets were rarely used. Meanwhile, Norbert and Lwoga (2012a) revealed that Physicians at Muhimbili National Hospital preferred to seek information from the formal sources, which included printed textbooks, electronic resources as well as printed journals. Sife (2004) found that forest researchers mostly relied on printed sources. Furthermore, researchers were found to depend on their institutional libraries as well as international and government organizations. Another study by Msuya (2003) revealed that, law reports and legislation were the most consulted source of information by academic staff from faculty of law at University of Dar es Salaam (UDSM). Msuya further argued that apart from the UDSM library they had other formal sources of information such as faculty of law library (75%), High Court library (62.5%), British Council library (31.2%), Attorney General's Chambers library (25%), USIS library (12.5%), other libraries (31.2%), informal sources of information such as mass media (81.2%), visits to government ministries and organizations (75%), person to person consultation (62.5%) and other sources such as meeting, internet cafes and workshops (37.5%).

Similarly, Elia (2006) reported from a study on information seeking behaviour of University of Dar-es-Salaam (UDSM) of students in an electronic environment that, students preferred to use print resources when searching for information. These results concurred with those from a study by Malekani (2006) carried out on a comparison of information needs and information seeking behavior of students of the Open University of Tanzania (OUT) and those of Sokoine University of Agriculture (SUA). Findings revealed that the OUT students relied mainly on print books and journals whereas SUA students use both print and electronic resources. Similarly, Kateule *et al.*, (2004) reported that frequently members of parliament relied on books, television and newspapers as a source of information, with very few using the Internet. Apart from parliament library findings show that, parliamentarians also utilize government departments, mass media, public libraries and NGOs as a resource centers. Manda and Nawe (2008) and Manyerere (2009) maintained that the use of online information resources has a positive impact on various academic and research activities (research proposal submission, research proposal funding, journal article publishing and research report writing).

In the context of rural areas, Mtega (2012) revealed that, there were several sources of information used by rural communities in Kilosa district, among them radio was reported as the most used (97%), and more than (60%) reported using face to face communication. Mobile phones, television sets, newspapers and magazine were also noted as the most used sources of information. Furthermore, the results of the study showed that library and internet were not used by the majority. Ndenje-Sichalwe (2004) observed that the important means of transmitting information to women involved in SMEs are regular meetings, training and seminars/workshops. Another study by Siyao (2010) showed that both (formal and informal) sources were used by SSSG as a source of information. For instance SSSG preferred to seek information by consulting other growers, listening to radio and attending farmer's association meetings. Further, SSSG were found to mostly rely on relatives, friends, neighbors, fellow farmers as well as agricultural inputs vendors as a source of information. Isowe (2007) noted that, coffee farmers in Moshi prefer to seek information from members of families, friends and agricultural extension officers than from written sources. Similarly, Corno (2007) in a study conducted in rural Tanzania found that patients rely on informal health providers that include family homes, self-care or no care, practitioner's, and pharmacy rather than formal health providers such as hospitals, clinics,

dispensaries, and health centre even if the informal failed to treat their illness in the previous years.

The reviewed literature in this section seems to suggest that both informal and formal sources of information are very important to the various groups of people. The sources of information most used are dependent on level of education, age, sex, work related and surroundings. In addition, literature showed that rural women used both formal and informal information sources presumably because of the many responsibilities carried by women at home.

3.5 Challenges Faced by Women Entrepreneurs in Seeking, Accessing and Using Information

Majority of women the world over suffer from limited access to information. Besides, the lack of access to information is the third most important challenge faced by women after poverty and violence against women (Primo, 2003). A paper on Gender and information for rural development by Dimitra (2003) presented in Austria found that, frequently rural women did not have access to the information they needed. Furthermore, it was noted that normally rural information centers were located in places that women were not comfortable going to. Meanwhile, the United Nations (2002) states that, when it comes to paying for information access, women are less likely to have extra income. A Report for the Secretary General presented at the UN General Assembly stated that, rural women were mainly vulnerable to trafficking because they have more limited access to information related to education and training, in various aspects (United Nations, 2005). Like any other continent around the World, majority of women in sub Saharan Africa lack access to information. Mchombu (2000) found that many women lacked basic information on small-scale businesses, and most of them were not aware of their information needs and how information can support their business activities. Similarly, Purrini (2011) believed that women dwelling in rural communities in Ghana were marginalized and had limited access to information. In the same vein Gundu (2006) stated that, women in Zimbabwe have limited access to information sources due to inappropriate level of literacy. In recent years Bakar (2011) pointed out that, lack of skills among rural women in accessing Internet sources and finance is a challenge in seeking for information. In this regard, Jacobs and Herselman (2006) argued that, in this global age those who are unable to access the internet (like

majority of rural women) are ever more disadvantaged in their access to the business information.

In the context of Tanzania Siyao (2012) in a study of barriers to accessing agricultural information found paucity of agricultural extension officers (54%), lack of library and information centers (50%), lack of farmers' associations, and lack of good leadership (45%). Moreover, lack of seminars, workshops and training programs (44%) are among other barriers. Siyao further pointed out that, unknown sources of information (39%), lack of simple reading materials (37%), lack of agricultural demonstrations (32%) and growers (27%) were other barriers. Similarly, Isowe (2007) argued that challenges faced by Tanzania coffee farmers in Moshi region in accessing information includes; too much information, high price, time, and language constraints. These findings concur with Ndenje-Sichalwe's (2004) that women involved in SMEs did not have enough time to search for information. Additionally, Kiondo (1998) noted that majority of rural women face challenges in accessing productive resources (land, education, credit and information).

Based on reviewed literature in this section it seems that, women particularly those in rural areas face various challenges when seeking, accessing and using information. Such challenges include among others illiteracy, time constraints, high price, language, skills, etc. Therefore there is a need to address issues affecting information seeking, access and use by rural women in Tanzania and beyond.

3.6 Women and Development

The concept of development leads to multiple definitions by various scholars. For instance, Oxford advanced learners dictionary (2010) defines development as the gradual growth of something so that it can become stronger and advanced. At the same time Friedman (2012) defines development as the process of economic or social transformation that is based on complex cultural and environmental factors and their interactions. In the context of psychology Cherry (2014) defines development as the growth of humans throughout the life span from conception to death. According UNDP (2008) development is about leading long and heartily

lives; being acknowledgeable to have access to the resources needed for respectable standard of living and being able to participate in the life of the community. Munthre and Juan (2010) define development as movement from one level to another, usually with same increase either in number, size or quality of some kind. Therefore, development is a complex concept, with many different meanings and sometimes controversial interpretations. UNDP (2008) in the context of Tanzania social and economic development of rural communities should be prioritized, since majority of people (80%) live in rural areas where poverty is widespread (Stevenson and St-Onge, 2005). Development of any rural communities is a positive indicator for development of the nation (World Gender Report, 2012).

In order to achieve development, full participation of women is critical. Moyo (2013) emphasises that women constitute the bulk of the labour force in the farming sector; are heavily involved in subsistence farming, live mostly in the rural areas and are the country's poorest. This makes their participation in land processes more compelling. Failure to incorporate women in such processes impacts negatively on their development. Dibie and Dibie (2012) explained that in offering women the opportunity to access economic resources as well as to disentangle their identities from those of their families they can contribute immensely to sustainable development process of Africa. Furthermore, public, private sectors and NGOs in Africa need to introduce variety of management programs as a policy at the national and regional government levels in order to engage talented women in its process of seeking sustainable development.

Despite the importance of development in all stages of human being, there are several issues that hinder women's development. Moyo (2011) in Moyo (2014) observed that patriarchy, culture and tradition had a negative effect on their development in most African countries. Moyo further explained that culture has made women to believe that issues of development and decision making are masculine, meaning that they are the preserve for men. Mtshali (2000) asserts that monitoring and evaluation are essential aspects of rural development projects, since planners of rural development programmes gather a considerable amount of information on the needs of rural communities. Moreover, Mtshali stresses that in spite of the importance of monitoring and evaluation, usually planners neglect effective monitoring and evaluation of progress made in achieving the objectives. In addition monitoring and evaluation is equally significant to the

assessment of people's needs. Stevens (2010) in a study showed that, development is a political concept because it is about good governance. We can move faster and more confidently towards development if women are in more productive and decision-making roles. UN (2012) believes that women organizing and calling for change, have taken place within many different types of communities, since they have organized at all levels (from grassroots to national and international). Pacchiotti and Robles (2012) state that, in sub-Saharan Africa much of economic activities are in the hands of women because they are particularly overrepresented in remunerated jobs in agriculture and informal SMEs. Development projects have been found to do best when women's role and needs are factored into the project design from the start (IFAD, 2011).

When women are economically and socially empowered they become a potential for change, sadly if they are not empowered it is not just women who are back but also their families, their communities, as well as the national economy (IFAD, 2012). As the Swahili saying goes "*Wanawake ni jeshi kubwa*" (women are a large army). Warth and Kaporanova (2012) reported that women profited more than men from the progress in economic and social development. This is in line with OECD (2008) view that in recent decades a large share of economic growth in OECD area has become high from employing more women. Moreover, at national and global level economic growth depends on women's fuller use of their skills and qualification as well as joining labor force. In south India it is reported that women play significant roles in sericulture industry in which sericulture helps women to be very active in the community development process (Kasi, 2013).

IFAD (2011) emphasized that inequalities that exist between men and women make it difficult for women to fulfill their potential. Moyo (2014) also claimed that violence against women, illiteracy and time constrains also has a negative impact on women's health so their participation in development is hampered. Although in Tanzania there are still problems facing women towards full involvement in the development process (allocation of resources, decision-making at various levels) still women contribute in different ways in development activities. Mmasa (2013) reported that rural women involved in agricultural activities play an important role in domestic and socio-economic society. Agriculture no doubt is a principle source of livelihood for the

Tanzanian population. Furthermore, the policy on women in development in Tanzania is explicit that, women are a very important component of the society in bringing about societal development (URT, 1992). ILO (2008) noted that Tanzanian women entrepreneurs have proven that they are the main force for development not only within their communities but also they make important contribution to their country socio-economic well-being. Primo (2003) agrees that in the most developing countries women represent the main economic force.

Based on literature reviewed in this section it seems that, lack of progress in empowering women may be at the heart of failure to go forward on development, because women empowerment is a key process in reaching gender equality and through that the nation will attain sustainable development.

3.7 Women in SMEs: A Global Review

The development of Small and Medium Enterprises is an essential element in the growth strategy of most economies. SMEs not only contribute significantly to improved living standards, they also bring about substantial local capital formation and achieve high levels of productivity and capability (Udechukwu, 2003). Furthermore, the informal sector such as SMEs is one avenue that has been observed to be contributing highly to the creation of employment opportunities, economic development and empowerment especially for women (Jiyane and Zawada, 2013). Through empowerment less powerful individuals experience social change enabling them to actively change their lives and communities (Metcalf, 2011).

All over the world there is no accepted definition of SMEs but different people in different countries define the concept according to different variables such as measure, feature, size and level of development of a particular business enterprise (URT, 2002; Banda; Mutula and Grand, 2004). SMEs are usually defined as firms with fewer than 500 employees, although a number of countries including those in the European Union use a lower cut-off point of 250 (Organizational for Economic Co-operation and Development - OECD, 1997). In the context of South Africa Mutula and Brakel (2006) assert that SMEs employ 100-200 workers, and have turnover of 5 Million Rands per year {1US\$=15.22Rand}. The government of Uganda classifies SMEs as

business firms employing 5-50 people (small scale) and 51-500 people (medium scale) (Okello-Obura, Minishi-Majanja, Cloete, and Ikoja-Odongo, 2008).

The Uganda Investment Authority (UIA) (2008) classifies SMEs as a micro enterprise when it has a maximum of four employees, annual sales or revenue turnover of maximum twelve Million Ugandan Shillings and total assets of maximum twelve million Ugandan Shillings {1US\$=3355Ushs}. A small enterprise is in contrast defined as an enterprise employing maximum of fifty people; with annual sales or revenue turnover of maximum 360 (three hundred and sixty) million Ugandan Shillings and total assets of maximum 360 million Ugandan Shillings. A medium enterprise on the other hand is defined as an enterprise employing more than fifty people; annual sales/revenue turnover of more than 360 million Ugandan Shillings and total assets of more than 360 million Ugandan Shillings.

In Ghana Venture Capital Trust Fund Act (2004) defined SMEs as firms which employ not more than 100 (hundred) persons and whose total asset base, excluding land and building does not exceed the cedi equivalent of \$1 million in value. In Nigeria the National Council of Industry (2003) cited in Etuk, Etuk, & Michael (2014) categorizes enterprises based on three criteria: size, number, of employees, total cost including working capital but excluding land. Consequently Micro enterprises employ 1-10 people and has less than 1 Million Naira; Small enterprises employ 11-35 employees with annual turnover of between 1 Million and less than 40 Million Naira; Medium enterprises employ 36-100 employees with annual turnover of 40 Million and less than 200 Million Naira; Large enterprises employs from 101 people and above with annual turnover of 200 Million and above (Etuk and Etuk, 2014) {1US\$=198.91Naira}. Likewise, the government of Tanzania classifies SMEs according to sector, employment size, and capital investment in machinery. A micro is one with fewer employees than 5 employees and annual turnover of 5 Million Tanzanian shillings (Tsh), small enterprises with 5-49 employees and annual turnover of Tsh 5 million, medium enterprises with 50-99 employees and annual turnover of Tsh 200 million, and large scale enterprises with more than 100 employees and annual turnover of Tsh 800 million {1US\$=2178Tshs}. Therefore, in this particular study SMEs will mean a business that is privately owned or operated with small number 5-49 of workers and

relatively low in quantity of sales with capital investment from 5-200 million (URT, 2002; ILO, 2005).

Udechukwu (2003:8) describes the three common features of SMEs as follows; first, SME is either individual proprietorship or partnership. Moreover, their true ownership structure is one-man or partnership. Secondly, most SMEs have labour-intensive production processes, centralised management and have limited access to long-term capital. Their access to short-term financing is limited and sometime attained at a penal rate of interest and other conditionality. Lastly, many SMEs are over-dependent on imported raw materials.

UN (2001) separates SMEs in two major groups namely: strong SMEs and weak SMEs. Strong SMEs accordingly UN tends to be located in urban and peri-urban centres and are usually registered. In contrast weak Small and Medium Enterprises have a tendency to employ less than five people, mostly family members, are usually not legally registered, apply simple and relatively backward technology in production. Jiyane and Zawada (2013) describe the informal sector (SMEs) as heterogeneous which makes it difficult to quantify its profile due to the nature of its existence. Furthermore informal sector entrepreneurs are often characterised by low levels of skills, limited access to organised markets, and low and unstable incomes. They also lack knowledge and skills in business management.

Inspite of the challenges that face SMEs the world over, they play an important role in economic development and job creation. Globally they are universally recognized as engines of growth and development for instance URT (2002) notes that, SMEs all over the world are known to play a major role in social economic development. OECD (1997) reported that SMEs make up over 95 per cent of enterprises and account for 60 to 70 per cent of jobs in most OECD countries. SMEs are accountable for creating the large number of non-farm employment and income opportunities in relatively poorly developed areas and require small capital and little sophisticated managerial and technical skills (United Nations Industrial Development Organization-UNIDO, 2003). SMEs are easy to afford and manage by people in rural areas where expertise may be limited.

In developed countries it is reported that, Women-owned SMEs are growing at a faster rate than the economy as a whole in several OECD countries (OECD, 1997). The potential of women-owned SMEs for job and wealth creation, as well as innovation, is increasingly focusing the attention of policy makers on this sector. From the same source it is reported that, in the United States, in the last several years, the number of firms created and managed by women has grown twice as fast as those set up and managed by men. According to the Japan Small Business Research Institute (JSBRI), cited by the same source, 23.3 per cent of private Japanese firms are set up by women (2.56 million of 11 million). Further, in Germany, women in the new German *Länder* have been responsible for the creation of one-third of new firms since 1990, representing 1 million jobs and US\$15 billion in turnover per year. Moreover, in France and the United Kingdom, one out of four firms is headed by a woman. Additionally, in Canada, women own and/or operate 30.3 per cent of all firms, and the number of women led firms is increasing at twice the national average. This trend is also evident in other OECD countries: in Australia, one-third of existing firms are now owned and managed by women, while in the Netherlands and Denmark, one-third of new enterprises are held and managed by women. Additionally, in Latin America women own between one-third and one-half of all small rural enterprises.

Several studies in the context of sub-Saharan Africa with regard to the involvement of women in small business enterprises are well documented. IFAD (1994) states that, high percentage of small scale businesses that cater to local needs are owned by women. This is in line with ILO (2008) which states that large numbers of women are involved in entrepreneurship and the majority of them operate micro and small scale enterprises. There also various studies showing the role of SMEs in economic growth, job creation and poverty alleviation (URT, 2002; UN, 2008; ILO, 2003; Mutula, 2005).

Similarly, Ceglie and Dini (1999) reported that, SMEs produce fifty percent of the country's industrial output and also provide employments for twelve percent of the rural and thirty four percent of urban labor force. Furthermore, Tushabomwe-Kazooba (2006) states that in Uganda by 2002 small scale enterprises were employing approximately 2,000,000, and serving about 6,000,000 people at business and household level. Likewise, in Tanzania SMEs contribute significantly to employment creation, income generation and stimulation of growth in both urban

and rural areas (URT, 2002). ILO (2003) points out that 128 Tanzanian women entrepreneur in SMEs have created 983 jobs, of which 752 are full-time paid jobs. Therefore, it is generally accepted that SMEs play an important role in alleviating poverty especially in developing countries (UN, 2008; Hamisi, 2011; Maliti and Mnenwa, 2008; Okello-Obura *et al.*, 2008; UN, 2009).

ILO (2008) states that, in most developing countries women owned and operated business have played an important role in stimulating economic growth and increased new job opportunity. Mfaume and Leonard (2004) believe that majority of people particularly women entered SMEs because of lack of adequate education background. This is in line with Ndenje-Sichalwe (2004) who states that, women in Tanzania did not understand English language used in some books and newspapers. Siyao (2010) revealed that females in Tanzania are poor attendees of farming association meetings and are characterized by fear or inability to ask others. In this regard, majority of women in developing countries like Tanzania are engaged in small-scale business enterprises possibly due to the lack of insufficient education background and poverty, as a result it is difficult to find formal employment.

Findings from UNIDO (2003) showed that women carry the burden of poverty, particularly those living in rural areas in least developed countries and Sub-Saharan Africa. Similarly, Siringi (2011) notes that, poverty affects people across the gender divide, even though there are number of studies indicating the growing number of women in SMEs. OECD (1997) mentions some barriers to women owned SMEs such as access to capital - since women tends to be risk-averse and borrow less capital than men; women are less likely to seek and counseling and expert advice possibly due to their business sizes; sometimes they are unaware of the existence of the services. Furthermore, women frequently lack networks that would enable them to penetrate new markets and make easy business development know-how.

Moreover, women running small business enterprises face a wide range of problems, including the lack of capital, basic business skills, and market (Rahman, Sayeed, Sarker, Alam & Rahman 2007). Mutula (2005), ILO (2004), ILO (2003) and Tushabomwe-Kazooba (2006) agree that most women involved in SMEs experience gender bias in the socio-economic environment in

which they operate. They also lack information on business managerial skills, education and marketing. Likewise, Ndenje-Sichalwe (2004) reveals that women in SMEs in Tanzania face a number of problems including high cost of production, finance, lack of business skills, markets, technology and access to relevant information.

Based on literature reviewed in this section it seems that, women involved in SMEs are contributing a lot to the development in both developed and developing countries. Therefore, there is a need to acknowledge and recognize their efforts, in view of the fact that failure to value women's work is a major barrier to attain development.

3.8 Gender Perspective of Information Behavior

World Health Organization (WHO) (1998) describes gender as a characteristics, roles, and responsibilities of women and men, girls and boys, which are socially constructed. WHO further states that, gender is related to how we are perceived and expected to think and act as women and men because of the way societies is organized not because of our biological differences. Health Canada (2000) refers to gender as the array of socially constructed roles, and relationship, personality traits, attitudes, behaviour values, relative power and influence that society ascribes to the two sexes on a differential basis. Tanzania Gender Networking Programme (TGNP) (2006) defines gender as the social relationship/role and responsibilities of women and men, the expectations held about the characteristics, aptitude, and likely behavior of both women and men that are learned and change over time and vary with and between cultures.

This study mainly focuses on women rather than men in an endeavor to reach gender equality by empowering women to ensure that both women and men participate as equal partners in productive and reproductive life. Basically, where gender inequality exists it is women who are disadvantaged in relation to decision-making, access to social resources and information. Gender equality and women's empowerment do not mean that men and women become the same. Gender equality is an important component for sustainable economic development. In the Primo study cited previously in this chapter, it was demonstrated that, the engagement and involvement

of women in the information society on an equal footing with men will directly contribute to improving the livelihood of people.

All over the world research studies have been carried out which examine gender perspective in different group of users. Willis, Kumar, Mohanty, Singh, Singh, Baqui ... & Darmstadt (2009) for instance conducted a study on gender differences in perception and care-seeking for illness of newborns in rural areas in India. The results showed that, household with female newborns used cheaper public care providers whereas those with male preferred to use private unqualified providers to deliver more satisfactory care. On the other hand, during the neonatal period care-seeking for girls is neglected compared to boys.

Weiser (2004) explored gender differences in Internet use patterns and Internet application preferences. The results showed that male use the Internet mainly for the purposes related to entertainment and leisure whereas women use it mostly for interpersonal communication and education assistance. Lim and Kwon (n.d) found that, women tended to use Internet for communication compared to men who use Internet for entertainment and news information. Lim and Kwon went further and noted that, men engaged in broader range of activities while women went online for narrower range of topic.

A similar kind of study was conducted by Maghferat and Stock (2010) at gender specific information search. The study revealed that women behaved cautiously in choosing search sources. In contrast men tried to use professional information services as well as search engines despite the difficulty in formulating the search and carrying out the search. Steinerove and Susol (2007) on their part examined user's information behaviour - a gender perspective. The results indicated that women apply collaboration information use, while men prefer individual information seeking. On the other hand Kim, Lehto and Morrison (2007) maintained that in terms of online channels female attached more value to channels like general Websites and official destination Websites than their male counterparts. In addition females also gave higher rating to the value of printed materials. This latter issue is also noted by Royal (2008) who examined two gendered sites that displayed stereotypical gender roles, and found that gambling,

business, and sports were themes popular in the site designed for men, while the category of home and family care were often used in the site intended to women.

Another study by Eriksson (2014) investigated gender perspective as trigger and facilitator of innovation. The findings revealed that gender perspective assisted the school staff to identify the necessary improvements to the school environment for the girls and boys. In addition three problem areas were identified that had gender implications they included stress; the process of setting learning goals and interacting with a mentor; and grades. For example, girls reported high levels of stress in relation to their study. Meanwhile both girls and boys found that goal setting and interaction with their mentors needed improvement, but in somewhat different techniques. Boys had lower overall grades than girls. Therefore, starting with the local surveys, the school drew up an overarching goal for the gender mainstreaming project, stating that girls and boys would get equal education and equal chances. Regarding mentorship the impression created was that the form and content of regular contact with mentors was diverse within the school. Eriksson (2014) revealed that there was also a logic that contact with mentors functioned differently for girls and boys, frequently resulting in unlike levels of attainment. Lastly, concerning stress management course Eriksson found that girls often wanted to do well in all areas but many of them in their school were high achievers and reported high levels of stress.

In Sri Lanka the study by Fernando (2012) about a social constructionist perspective of gender stereotyping at work revealed several things. Respondents considered women to be less capable and informed than men. According to Fernando demonstrating expertise involves boldly and aggressively flaunting ones' skills, credentials and experience in order to provoke envy or admiration from others. Fernando (2012) found that respondents spoke about how men have all the time been considered as better leaders in the organisations than women. Women did not consequently expect to obtain top management posts due to this mind-set. Women from the public sector felt sexism was more prevalent in their organisations in comparison to the private sector.

Fernando (2012) also stated that women attempting to shield themselves from the negative career repercussions of gender stereotypes. They therefore women in the public sector avoided applying

for senior jobs in organisations which were known to stereotype women as less capable than men. They instead aimed for departments which had a high female representation at top positions. Fernando also found that women used their children or child as an excuse to leave work earlier than their male colleagues. The marginalisation of women made them display masculinity characteristics typically related with men such as aggressiveness and competitiveness. Women reported about how they actively performed masculinity (Irvine and Vermilya, 2010; Knights and Kerfoot, 2004) in order to overcome perceptions that good leaders are male and masculine.

Balderson and Broderick (1996) in investigation behaviour in teams: exploring occupational and gender differences observed that in terms of gender it was interesting that women perceive themselves significantly more so than men. This finding is attributed to the fact that women are less often than men in formal positions of leadership. Another study on gender perspective, Gonzalez-Alvarez and Solis-Rodriguez (2011) studied discovery of entrepreneurial opportunities. The results revealed that the percentage of women is higher than the men one, this trend is reversed in the higher levels of education. Moreover more than 57 percent of men considered they have the necessary skills to start up an entrepreneurial activity while only 45 percent of women have this perception. In addition, Gonzalez-Alvarez and Solis-Rodriguez observed men discovered more entrepreneurial opportunities than women.

Klyver (2011) in discussing gender differences in entrepreneurial networks: found that female focal entrepreneurs are more likely to include female and family members who are not partners. Also, it was found that female focal entrepreneurs would more likely involve female family members while male focal entrepreneurs would more likely involve male family members. In addition, the study showed that females and males are equally likely to obtain emotional support whereas females are more likely to deliver it.

Heimrath and Goulding (2001) investigated Internet perception and use: a gender perspective. Authors observed several gender differences among students at Loughborough University and members of the public at libraries in Loughborough and Slough. The findings showed that in the public libraries it appeared that women were the heavier Internet users at 80 per cent compared

with 50 per cent of the men surveyed. The findings in the university revealed men's usage patterns were both more intensive and more erratic than those of their female counterparts. Majority of respondents commented that whereas men use the Internet regardless of educational or career background, women users on the other hand tend to be educated. On the purposes for which they used the internet, male's uses were in gaming, business, competitions, computer software updates and professional awareness, while females used the internet for shopping, banking, news and various types of information searching.

Heimrath and Goulding (2001) found that the male respondents from the University generally expressed confidence in the usefulness of the Internet in the workplace. About 68 per cent agreed or strongly agreed that, the Internet is a time-saving tool in the workplace. Female views were divided with only 47 per cent agreeing or strongly agreeing with the statement on the usefulness of the internet. Female respondents from the University expressed some reservations regarding the effectiveness of the Internet in the workplace. In the public library survey, only males gave negative responses about the usefulness of the Internet in the workplace however both gender groups were generally positive in their attitude towards the Internet. In addition, the opinions of the University students on the worth of the Internet as a communication instrument were generally positive. Around 90 per cent of males and 78 per cent of females strongly agreed or agreed that the Internet is important for communication purposes.

Heimrath and Goulding (2001) revealed that among the public library respondents the results were quite surprising given the other findings discussed earlier. The female respondents were considerably more negative in their attitude towards the Internet as a communication instrument. Furthermore when considering the Internet as a communication medium female interviewees tended to focus on personal experience whilst males tended to address the impact of Internet communication in general. The Internet was overwhelmingly considered a valuable tool for education by both sets of respondents and gender differences were small.

Michie and Nelson (2006) examined psychological barriers to careers in information technology and to determine whether those barriers still exist for women in comparison to men. The results showed that the males reported significantly higher levels of self-efficacy and passion for

computing than did the females. As it was also expected the male participants reported significantly lower levels of confidence in the capabilities of women than did the female participants. Michie and Nelson found that there was virtually no difference in attitudes toward the capabilities of women and males.

In China Liu and Huang (2008) investigated gender differences in the online reading environment. They observed that female readers have a stronger preference for paper as a reading medium than male readers, whereas male readers exhibit a greater degree of satisfaction with online reading than females.

The literature reviewed in this section provides a glimpse of gender perspectives of information behaviour. With results showing that women presence in the new communication space still lags behind their men counterparts.

3.9 Summary of Literature Review

This chapter reviewed related empirical and theoretical literature in books, book chapters, journal articles, conference proceedings and technical reports based on research questions, key variables of the theory that underpinned the research and broader issues around the research questions. Focus in reviewing the literature was based on the following themes: information behaviour, information sources/resources and channel of communications, challenges in seeking, accessing and using information; women and development, SMEs and women; gender perspective of information behaviour. The literature on each of these themes was reviewed covering first the global context followed by the regional or local context. The gaps identified in the reviewed literature were isolated.

In general, the literature reviewed revealed that in developed countries and also in developing world there is paucity of studies on rural women involved in small scale entrepreneurship. It was also revealed that extant studies address the problem of information behavior from academic perspectives. In sub-Saharan Africa the reviewed literature showed that women in urban settings seemed to different information needs compared to those in rural areas. This could be attributed to different socio-economic status and the environment. Therefore results on studies that have

been concentrated in urban areas on this subject cannot be generalized to rural areas in making policy and practical interventions. Moreover, there is need to regularly track the information needs of rural women because they keep changing with time.

In the context of Tanzania literature reviewed seems to show that, most of studies on information behavior have been conducted within various disciplines. It was also apparent that, little progress has been made in understanding the challenges of information need and the way rural communities seek and utilize information. Moreover, limited numbers of studies have been done covering information behaviour of rural women involved in Small and Medium Enterprises (SMEs) in central Tanzania. The outcome from the current study is expected to create awareness among policy makers about the need to integrate information components in development strategies especially those involving women entrepreneurs in rural settings.

The reviewed literature on Sources of information and channel of communication suggest that both informal and formal sources of information are very important to the various groups of people. The sources of information mostly used were dependent on the level of education, age, sex, work related and surroundings. In addition, the literature showed that rural women used both formal and informal sources of information presumably because of the many responsibilities carried out by women at home. On the challenges faced by women, reviewed literature seems to suggest that, women particularly those in rural areas faced various obstacles when seeking, accessing and using information. Such challenges included among others illiteracy, time constraints, high price, language, skills, etc.

The literature reviewed in this chapter shows lack of progress in empowering women to become active partakers in development. SMEs provide them with an opportunity if well supported to contribute effectively to national development in both developed and developing countries. The literature reviewed from the gender perspective of information behavior reveals that women are lagging behind their male counterpart in accessing and using information to improve their livelihood. The next chapter presents the research methodology used to investigate the research problem in this study.

CHAPTER FOUR

RESEARCH METHODOLOGY

4.1 Introduction

Research methodology is a systematic way to solve a problem; it is a science of studying how a study is to be carried out (Kothari, 2004). It is the procedure by which researchers go about their work of describing, explaining and predicting phenomena. Greener (2008) asserts that research methodology is more about researcher's attitude to and understanding of research and the strategy he or she chooses to use to answer research questions. Research methodology is aimed at providing a work plan of research, to deal with research methods as well as to consider the logic behind the methods we use in the context of our research study. Furthermore, it is aimed at explaining why we are using a particular method and technique and why we are not using the other methods, so that research results are evaluated either by researcher or by other people (Gupta and Gupta, 2011).

The nature of the problem to be investigated is determined by the type of research method. Aina (2002) declares that, research methodology is an important component of the research process. MacDornald and Headlam (2008) assert that the effective research methods are the tools by which information is gathered. Without the appropriate design and use of research methods, researchers are unlikely to collect quality information and as such create an unstable foundation to any review, evaluation or future strategy.

The purpose of this study was to investigate the information behaviour of rural women involved in Small and Medium Enterprises (SMEs) in Manyoni and Chamwino Districts of Central Tanzania. The study sought to address the following specific research questions; what is the information behaviour of rural women involved in SMEs? What channels of communication are used by women to seek for information to meet their business needs? What information resources are used to seek and satisfy their information needs? What skills do women have to effectively identify and access information? How is the information sought by women involved

in SMEs used? What challenges are faced by women in seeking and using information? How do the women use available information?

This chapter is organized in ten thematic sections: 4.1.1 Site of the study, 4.1.2 Dodoma Region, 4.1.3 Singida Region, 4.1.4 Chamwino District, 4.1.5 Manyoni District, 4.2 research paradigm, 4.2.1 interpretive and positivist paradigm, 4.2.2 interpretive paradigm 4.3 research design, 4.3.1 quantitative, qualitative and mixed approach, 4.3.2 qualitative approach, 4.4 population of study, 4.5 sampling procedures, 4.5.1 focus group discussion, 4.5.2 interview, 4.6 data analysis strategies, 4.6.1 Nvivo computer software, 4.6.2 thematic analysis 4.7 validity and reliability, 4.8 ethical consideration 4.9 summary.

4.1.1 Site of the study

Tanzania is located in Eastern Africa. It is bordered by Kenya and Uganda to the North, Rwanda, Burundi and the Democratic Republic of Congo to the West and Zambia, Malawi and Mozambique to the South (Wade, Mwasaga, and Eagles, 2001). The country's eastern border lies in the Indian Ocean which has a coastline of 1,424 kilometres (km). The official capital of Tanzania is Dodoma which is located 309 km west of Dar es Salaam. Dar es Salaam is the country's commercial capital and is also the major seaport for the county's serving its landlocked neighbours (Kironde, 1993; Walker, McLarty, Kitange, Whiting, Masuki, Mtasiwa, & Alberti, 2000). Other big urban centres in Tanzania include Arusha, Moshi, Tanga, Mwanza, Morogoro, Mbeya, Iringa, Tabora, Kigoma, Shinyanga and Zanzibar.

Zanzibar is a part of Tanzania. Zanzibar consists of two main islands of Unguja and Pemba, and the total surface area of Zanzibar is 2,654 square kilometre (sq. km). Unguja the larger of the two islands has an area of 1,666 sq. km, while Pemba has an area of 988 sq. km. The Islands are located 40 km off the mainland coast of East Africa in the Indian Ocean. The two main islands are 40 kilometers apart, separated by 700 meters deep Pemba Channel (Ali, Deen, Khatib, Enwere, von Seidlein, Reyburn, ... & Clemens, 2010; Knopp, Mohammed, Ali, Khamis, Ame, Albonico, ... & Rollinson, 2012). Therefore, Tanzania has a total area is 945,087 sq. km including 61,000 sq. km of inland water (URT, nd).

Tanzania has a tropical type of climate and is divided into four main climatic zones particularly: the hot humid coastal plain; the semi-arid zone of the central plateau; the high-moist lake regions; and the temperate highland areas. In the highlands, temperatures range between 10°C and 20°C during cold and hot seasons respectively. The rest of the country has temperatures usually not falling lower than 20°C. The hottest period spreads between November and February (25°C - 31°C) whereas the coldest period is often between May and August (15°C - 20°C). The climate of the islands of Zanzibar is tropical and humid (URT, n.d; Tadross and Johnston, 2012)

Tanzania has been described as one of the most diverse country in Africa and this is reflected in the fact that there are more than 120 local languages spoken in the country. Swahili is the national language that is widely spoken while English is the official language of education; administration and business. Local people are native African 99 per cent (of which 95 per cent are Bantu consisting of more than 120 tribes) and the remaining 1 per cent consisting of Asians, Europeans, and Arabs. Most of the population is Christian and Muslim with a small number of Hindus and atheists (URT, 2012).

Generally, Tanzania culture is a product of African, Arab, European and Indian influences. Traditional African values are being consciously adapted to modern life, although at a much slower pace among the Maasai.

The 2012 census survey (The 2012 Population and Housing Census, PHC) show that Tanzania has a population of 44,928,923 of which 43,625,354 reside on Tanzania Mainland and 1,303,569 reside Zanzibar. Tanzania is a developing country and its economy depends heavily on agriculture. The sector accounts for more than 40% of GDP, provides 85 per cent of the country's exports and employs 80 per cent of the total workforce. Apart from the agricultural sector, tourism, mining and small scale industries are increasingly contributing to the national economic growth. (URT, 2012)

4.1.2 Dodoma Region

Dodoma is one of Tanzania's thirty administrative regions, also is a capital city of Tanzania. Dodoma means "sunk" in the Gogo language. According to 2012 census the region had a population of 2,083,588. The main tribes of the region are the Wagogo, the Warangi, and the

Wasandawi. The Dodoma region lies in the heart of Tanzania in the eastern-central part of the country. The region which is primarily semi-arid covers an area of 41,311 square kilometres. Dodoma is bordered by the Manyara region to the north, the Singida region to the west, the Iringa region to the south, and the Morogoro region to the southwest. Dodoma is connected by trunk road to Dar es Salaam on the coast. A roads lead to Kigoma through Tabora in the west and to the north to Mwanza. Dodoma lays along the Great North Road a major infrastructural network of Africa which connects Cairo to Cape Town. The central railway of Tanzania passes through the city of Dodoma which is also served by Dodoma Airport.

4.1.3 Singida Region

Singida is one of the regions of Tanzania. Singida region is located below the equator between latitude 3052° and 7034°. Longitudinally the region is situated between 33027° and 35026° east of Greenwich. To the north it shares borders with Shinyanga region, Arusha and Manyara and on the east borders Dodoma. To the south it shares borders with Iringa and Mbeya while on the west there is Tabora region. The region forms part of the semi-arid zone of Tanzania which experiences low rainfall and short rainy seasons which are often erratic, with fairly widespread drought in one year out of four. Total rainfall ranges from 500mm to 800mm per annum with high geographical, seasonal and annual variation.

Singida town is 700 kilometers from the commercial port city of Dar es Salaam, and 330 kilometres from the capital town Dodoma. Singida region is divided into three administrative districts with three district councils and one town council namely, Singida, Iramba, Manyoni and Singida urban. The three districts cover an area of 49,341 square kilometres equivalent to about six per cent of the total land area of Tanzania mainland. The region is divided into twenty one (21) divisions, eighty five (85) wards and three hundred forty six (346) villages and represented by seven electoral constituencies. There are ten indigenous tribes in Singida region namely, Nyiramba, Nyaturu, Kimbu, Gogo, Isanzu, Taturu, Sukuma, Mang'ati, Barbaig and Hadzebe. The latter two have a Nilotic or Nili-Hamitic descendance probably migrated into the region from Northern Africa or the Nile valley through South Sudan or Ethiopia and Somaliland while

the other eight tribes are of Bantu original from Ethiopia, Lake Victoria, Congo, Southern Africa and Upare Mountains (Mary and Majule, 2009; Awadh, 2007; Swai and Ndidde, n.d).

The economy of Singida region is predominantly rural with well over 95 per cent of its population engaging in substance land based production. The main productive sectors in the region are agriculture, livestock, natural resources, mining, industry and trade. Livestock is the second most important resources for the region's economy. Most of people own livestock and depend on them for their livelihood. Industrial production and commercial activities in the region are still minimal and contribute very little to the region's GDP. The region has great potential for business and establishment of small scale industries, especially rural industries which can utilize local materials and can depend on existing local skillst (URT, n.d).

4.1.4 Chamwino District

Chamwino is among the seven administrative districts in Dodoma region. Chamwino district was established in the year 2007 after splitting the Dodoma rural district into two districts namely Chamwino and Bahi. Chamwino district is located on the eastern side of Dodoma region, bordered on the west by Bahi district and Dodoma district, on the north by Kondoa district, on the east by Kongwa and Mpwapwa districts while on the South it shares borderwith Iringa rural district. Chamwino district is dominated mainly by Gogo tribe. Other tribes existing in the district are Nguu, Rangi, Maasai, Sandawe, Barbaigs and Mbuwi (Chamwino District Social-Economic Profile, 2010).

Administratively Chamwino district is divided into five divisions namely, Itiso, Chilonwa, Mvumi, Makang'wa and Mpwayungu with a total of 32 wards, 78 villages and 773 hamlets. The district is further divided into two parliamentary electoral constituencies, Chilonwa and Mtera constituencies. Of the 32 wards in the district 8 are included in this study. They are Haneti, Majeleko, Buigiri, Manchali, Muungano, Mvumi Makulu, Makang'wa and Mpwayungu (Chamwino District Social-Economic Profile, 2010). Figure 4.3 below shows the wards that are included in this study in Chamwino district.

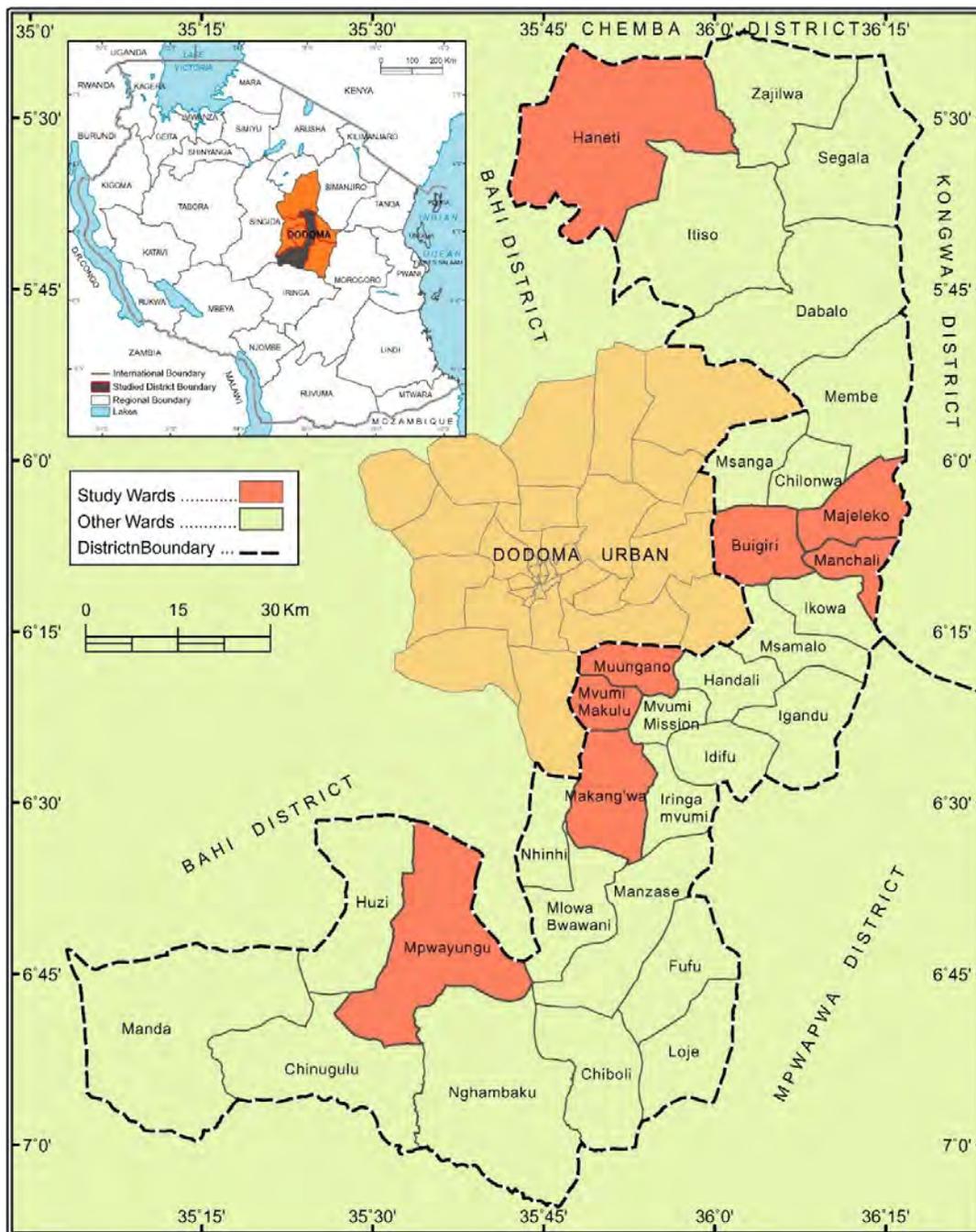


Figure 4.1: Chamwino District Shows Study Wards (Source: UDSM Catographic Unit, 2014)

4.1.5 Manyoni District

Manyoni is one of the six districts in Singida region. The others are Singida rural, Singida urban, Iramba, Mkalama and Ikungi. Like Chamwino, Manyoni district has a large number of women

living in rural areas compared to the other four districts (URT, 2013a). Manyoni district has the largest share of the land area (58%) (URT, 2006) and is the oldest compared to other districts in Singida. About 85% of the district area is occupied by forest and game reserves (Rungwa, Muhesa, and Kizigo) the other 15% is used for residential and agricultural activities.

The district is located below the equator between latitudes 5° 30' and 7° 34' longitudes, the district is situated between 33° 27' and 35° 26' east of Greenwich. It borders district of Bahi (Dodoma region) in the east, Tabora and Sikonge district (Tabora region) in the west, Chunya district (Mbeya region) in the south west, Singida district (Singida region) in the north, Iringa district (Iringa region) in the south east and Kondoa district (Dodoma region) in the north east. The main indigenous ethnic groups in Manyoni are the Gogo, Kimbu, Nyaturu, Taturu, Sukuma, Barbaig and Nyiramba (Manyoni District Profile, 2013).

Administratively Manyoni district has 2 parliamentary constituents, 5 divisions, 30 wards, 99 villages and 356 hamlets. Of the 30 wards in the district, 5 are included in the current study; these are Manyoni, Kintinku, Mkwese, Itigi majengo and Sanjaranda. Figure 4.4 below shows study wards in Manyoni district.

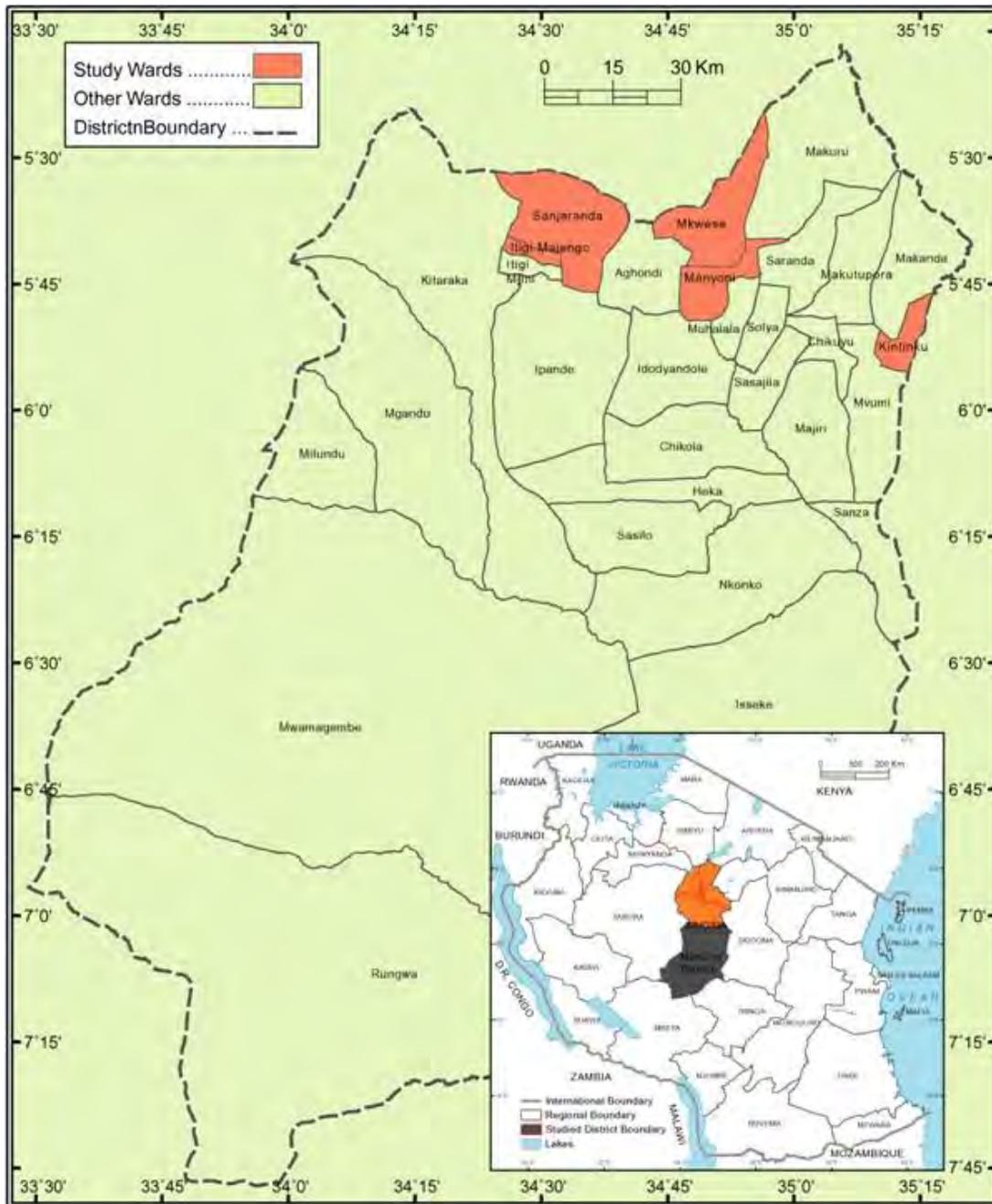


Figure 4.2: Manyoni District Shows Study Wards (Source: UDSM Cartographic Unit, 2014)

4.2 Research Paradigm

Research paradigm is also known as research philosophy. The word paradigm originated from the Greek word “paradeigma” which means pattern (Thomas, 2010). Paradigm is a term often used in social sciences, but it can lead to confusion because it tends to have multiple meaning (Saunders, Lewis and Thornhill, 2009). For instance, Kinash (2010) defined paradigm as a matrix of beliefs and perceptions. A different meaning provided by Jonker and Pennink (2010) as cited by Wahyuni (2012) is that paradigm is a set of fundamental assumptions and beliefs as to how the world is perceived. A paradigm serves as a thinking framework that guides the behaviour of the researcher. According to Bhattacharjee (2012) research paradigms are often hard to identify, because they are implicit, assumed, and taken for granted. However, recognizing paradigm is key to making sense of and reconciling differences in people’ perceptions of the same social phenomenon.

Oxford Advanced Learner’s dictionary (2010:1101) defines paradigm as a typical example or pattern of something. On the other hand, Saunders *et al.*, (2009) define paradigm as a way of examining social phenomena from which particular understanding of these phenomena can be explained. Similarly, Plack (2005) defines paradigm as a set of basic beliefs that represent the worldview. Paradigm in this regard defines the nature of the world and individual’s place in it, and helps to determine the criteria used to select and define research inquiry. Paradigm therefore refers to standards and rules that guide a researcher’s beliefs and actions.

A paradigm not only provides a means for clearly articulating the results of research, but also allows others to quickly understand context of the research (Burke, 2007). According to Rubin and Rubin (2012) the assumption of research paradigm is to guide a study as well as to enable a researcher to explain the methods s/he is using in the study. In the same vein Plack (2005) noted that, paradigm in research is used to guide scientific inquiry, not only in the manner in which the study is performed, but also in how the researcher defines truth and reality as well as how researcher comes to know truth and reality. Plack goes on that paradigm guides the type of research questions, the methodology approach to the investigation and criteria for assessing the truthworthiness of the investigation. Furthermore, paradigm shapes how we perceive the world (Ha, 2011).

Paradigms help scientific communities to limit their discipline. Paradigms therefore assist scientists not only to create roads of enquiry, formulate questions, select methods with which to examine questions, define areas of relevance but also to create or establish meaning (Kuhn, 2012). This thinking is in line with Jonker and Pennink (2010) who state that in any domain people pose paradigms in order to guide their acts and behaviour. Thus, every research topic may lend itself to a possible research paradigm and researcher requires locating study within a research paradigm. Every researcher has different beliefs and ways of viewing and interacting within their environments.

In social science research there are two popular paradigms positivist and post-positivist. Positivist paradigm is based on the works of the French philosopher Auguste Comte (1798-1857). This was the dominant scientific paradigm until the mid-20th century. It holds that science or knowledge creation should be restricted to what can be observed and measured. Positivist paradigm tends to depend exclusively on theories that can be directly tested (Bhattacharjee, 2012). In the mid-late 20th century, positivist philosophy led to the development of post-positivism. Post-positivism argues that individuals can make reasonable inferences about a phenomenon by combining empirical observations with logical reasoning. Post-positivists view science as not certain but probabilistic that is based on many contingencies, and often seeks to explore these contingencies to understand social reality better (Bhattacharjee, 2012). Bhattacharjee further asserts that, the post-positivist camp has further split into subjectivists, who view the world as a subjective construction of our subjective minds rather than as an objective reality, and critical realists, who believe that there is an external reality that is independent of a person's thinking but we can never know such reality with any degree of certainty.

4.2.1 Interpretive and Positivism Paradigms

Interpretism and positivism are useful paradigms to the information profession. Positivists and interpretivists differ in their assumptions. Positivists believe that reality is fixed, direct measurable and knowable. In contrast, interpretivists assume that reality continuously changes and can be known only indirectly through the interpretation of people (Rubin and Rubin, 2012).

Bhattacharjee (2012) observes that interpretive and positivist study differs in several other ways. For instance, positivist research employs random sampling, where cases are chosen randomly from a population, for purposes of generalizability, while interpretive research employs a theoretical sampling strategy, where study sites, respondents, or cases are selected based on theoretical considerations such as whether they fit the phenomenon being studied. Consequently, appropriateness samples and small samples are considered acceptable in interpretive research as long as they fit the nature and purpose of the study, but not in positivist research.

Another difference between interpretism and positivism according to Myers (1997) is that interpretive studies generally attempt to understand phenomena through the meanings that people assign to them, thus interpretive analysis is general and contextual. Also, interpretive interpretations tend to focus on language, signs, and meanings from the perspective of the participants involved in the social phenomenon, contrary to statistical techniques that are employed heavily in positivist study. Furthermore, in positivist study the researcher is considered to be external to and independent of the research context and is not supposed to bias the data collection and analytic procedures, whereas the role of the researcher receives critical attention in interpretive research.

Once a paradigm is chosen it acts as a set of lenses for the researcher, since it allows the researcher to view the field work within a particular set of established assumptions (Burke, 2007). In this regards, Walsh (2001) states that, it is important that paradigm is chosen to guide a particular study to link ideas and beliefs about knowledge. Saunders, Lewis and Thornhill (2009) on their part assert that, the researcher is usually influenced by practical considerations. However, the main influence is likely to be researcher's particular views of the relationship between knowledge and the process by which it is developed. Therefore, it is essential for a paradigm to be there because it sets out the world view of the researcher and the reasons for the methods so as to ensure that the methods are well grounded and justified. In this view, the current study used interpretive paradigm because it seeks to understand meanings attached to women experience in striving to meet their information needs and information seeking behavior.

4.2.2 Interpretive Paradigm

The words interpretivists, naturalistic and constructivism are used interchangeably in this study, as they seem to have a same meaning. Rubin and Rubin (2012) assert that, naturalistic person emphasizes that all meaning is sifted through people's prior experience. Constructivists on the other hand believe that people construct their understanding of the external world.

Interpretive paradigm is based on the belief that knowledge is something that people create continuously. Thomas (2010) states that, interpretive paradigms are constantly being created, changed, modified and developed through interaction. Moreover, interpretive paradigm according to Cohen and Crabtree (2008) is based on the assumption that social reality is not singular or objective, but is rather shaped by human experience and social context. The paradigm also assumes that social reality is always negotiated within cultures, social settings, and relationship with other people. Bisman (2002) cited in Krauss (2005) emphasized that there are differences between people's perceptions of reality and reality. Likewise, Dobson (2002) asserts that the critical realist agrees that knowledge of reality is a result of social conditioning and so cannot be understood independently of the social actors involved in the knowledge derivation process. Therefore, the aim of interpretive research according to Jansen and Davis (1998) is to increase understanding through answering how and why questions.

Although interpretive is useful paradigm in information studies and is appropriate to increase understanding in various studies, Bhattacharjee (2012) asserts that interpretive paradigm has its own set of challenges. Among them are; first, interpretive study requires well-trained researchers who are capable of seeing and interpreting complex social phenomenon from the perspectives of the embedded participants and reconciling the diverse perspectives of these participants, without injecting their personal biases or preconceptions into their inferences. Second, given the heavily contextualized nature of inferences drawn from interpretive research, such inferences do not lend themselves well to replicability or generalizability. Third, interpretive research may sometimes fail to answer the research questions of interest or predict future behaviors. Fourth, the investigation tends to be more time and resource intensive than positivist study in data collection and analytic efforts. Finally, all participants may not be equally credible, unbiased, or knowledgeable about the phenomenon of interest, which may lead to

misleading or false impressions. Inadequate trust between participants and researcher may hinder full and honest self-representation by participants, and such trust building takes time. It is therefore the job of the interpretive researcher to see hidden agendas and understand the true nature of the problem. Furthermore, Prasad and Prasad (2002) demonstrated that other types of interpretive research are also rigorous as positivist research. However, their rigor necessarily needs to be judged by criteria that are markedly different from those used in conventional empirical research.

Despite the sets of challenges discussed above, interpretive paradigm enables a researcher to collect data in natural settings. The naturalistic researchers according to Walsh (2001) tend to look for details to a particular situation or at a specific group of people such as rural women involved in SMEs. Walsh further goes on that, naturalistic researchers try to gain awareness and appreciation of how particular individual or groups of people view and experience the world. Similarly, Thomas (2010) states that, human beings have consciousness which enable them to think and feel. In this regard, human being is viewed as a most plausible data gathering instrument

Moreover, interpretivists argue that human being is not like substance. They believe that, one cannot define a general invisible rule that manages all human behaviour. Instead, human behaviour must be observed and interpreted according to the individual's meaning or reasons for action, and also through rules that have been consensually granted upon and validated by people in society (Plack, 2005). In addition, interpretivists interpret the reality through a sense making process.

Jansen and Davis (1998) discussed the advantages of interpretive research as follows:

- In the selection of participants, interpretive researchers do not rely on specific numbers for their generalizations. In the same vein Glesne and Peshkin (1992) assert that the strategy of participant selection in qualitative research rests on the multiple purposes of illuminating, interpreting and understanding on the researchers own imagination and judgment.

- In interpretive studies the interpretation involves more than researcher's ideas about the meaning of the findings, since interpretive research captures the meaning that the participants give to their experiences. In other words, interpretive paradigms are well suited for exploring hidden reasons behind complex interrelated or multi-faceted social processes.
- In interpretive research the data analysis is directed by the intent to capture descriptive stories of the participants' lived experiences to increase understanding rather than to provide explanations (Polkinghorne, 1995). Thus, they can also discover interesting and relevant research questions and issues for follow up research.
- Reading a narrative text allow others to get an insiders' views of that experience and increase their understanding (Denzin, 1989).
- In interpretive research, the meaning of the findings is consonant with the purpose of interpretive method to describe and interpret lived experience, and the findings from lived experience are more holistic. Therefore, they are also appropriate for studying context specific, unique or idiosyncratic event or processes.
- Interpretive paradigms are often helpful for theory construction in areas with no or insufficient a prior theory.

In this way, the current study seeks to understand events from rural women involved in SMEs perspectives, and not to discover cause relationship among them. Therefore, the idea of the investigation is not only to interpret and construct meaning from the individual and social constructions, but also to attempt to understand subtle and unique differences in human behaviour (Plack, 2005).

There are several principles of interpretive research, which according to Bhattacharjee (2012) should be followed in researches that are:-

- **Naturalistic inquiry**- the study investigates social phenomena within natural settings.
- **Researcher as instrument**- researcher often is fixed within the social context that is investigated.

- **Use of expressive language-** the study documents the verbal and non-verbal language of respondents and the analysis of such language are vital component of interpretive analysis.
- **Interpretive analysis-** the study interpretes observation through the eyes of the participant embedded in the social context.
- **Temporal nature-** researcher often understands and makes sense of a dynamic social process as it clarifies over time.
- **Hermeneutic circle-** interpretive interpretation is an iterative process of moving back and forth from piece of text to the context. Such process of moving back and forth continues until theoretical saturation is reached.

4.3 Research Design

Research design is the conceptual structure within which research is conducted. Creswell defined research design as a plan and procedure that span the decision from broad assumptions to detailed methods of data collection and analysis (Creswell, 2011). Research design is a comprehensive plan for data collection in an empirical research project (Bhattacharjee, 2012). In other words research design is a blue print for empirical research.

Walsh (2001) notes that, the aim of research design is to plan and explain how a researcher would find answers to his/her research questions as well as how researcher would put his/her research strategy into action. In the same vein Trochim (2004) asserts that, research design is used to structure the research and to show how all of the major parts of the research project (the sample, treatments, measurements, and methods of assignment) work together to try to address the central research questions. Bryman and Bell (2015) state that, research design relates to the criteria that are employed when evaluating research, it is thus a framework for a generation of evidence that is suited both to the research questions and to a certain set of criteria in which the researcher is interested. In this regard, interpretive design seeks subjective interpretations of social phenomena from the perspective of the subjects involved. Therefore, the contribution or

role of research design in research is not only to ensure that facts obtained enable researcher to answer initial question as clear as possible, but also to provide for the collection of relevant information with small amount of money, and time as possible.

The current study adopted survey research design. Survey can be anything form a short of paper-and-pencil feedback form to an interview one-to-one in-depth interview (Hill, Knox., et al. 2005). According to Fraenkel, Wallen & Hyun (1993) survey research attempt to obtain data from members of a population to determine the current status of that population with respect to one of more variables. The purpose of survey investigation is to provide scientific gathered information to work as a basis for researchers for their conclusion. The survey research adopted in the current study so as to asses thought, feelings and opinions from rural women involved in small and medium enterprises. Not only that, survey research is one of the most important areas of measurement in applied social research. Trochim & Donnelly (2001) also assert that the broad area of research survey encompasses any measurement procedures that involve asking questions of respondents. Today survey research is used by different groups, for instance psychologist and sociologist often use survey research to analyse behaviour. In the current study the use of survey enabled to gather a variety of opinions from the respondents of different villages, wards, districts of the two semi-arid regions of central Tanzania where majority of rural women engage themselves in SMEs.

4.3.1 Quantitative, Qualitative and Mixed Method Approaches

Basically, the distinction between quantitative and qualitative research is in the structure of the respective research. Walliman (2011) asserts that quantitative and qualitative methods are appropriate for case study designs, and multiple methods of data collection are often applied. Family Health International (2011) emphasises that, quantitative and qualitative research methods basically differ in various issues. Quantitative and qualitative research methods differ in their analytical objectives, the types of questions they pose, the types of data collection instruments they use, the forms of data they produce as well as the degree of flexibility built into study design. However, the key difference between quantitative and qualitative methods is their flexibility.

Quantitative research uses numbers rather than words (qualitative). Quantitative research according to Kothari (2004) is based on the measurement of quantity or amount. It is applicable to phenomena that can be expressed in terms of quantity. Quantitative approach is a means for testing objectives theories by examining the relationship among variables. As a result variables can be measured typically on instruments, so that numbered data can be analyzed using statistical procedure (Creswell, 2011). On the other hand, Hunt (2003) defines quantitative research as the honoured scientific method, it is about prediction, generalizing a sample to a large group of subjects and using numbers to prove or disprove a hypothesis. Therefore, numerical items of information are often referred to as quantitative. Cohen, Manion, and Morrison (2007) note that for quantitative data, a precise sample number can be calculated according to the level of accuracy and the level of probability that researchers require in their work. In general, quantitative methods are fairly inflexible and are normally used when a researcher needs to generate primary data from a large number of sources to answer his or her research question (MacDornald and Headlam, 2008).

The advantage of qualitative research according to Family Health International (2011) is in flexibility, as it allows for meaningful comparison of responses across participants and study sites. Quantitative approach to research is likely to associate with deductive approach to test theory, usually using number of facts and therefore a positivist or natural science model and an objectivist view to the objects studied (Greener, 2008). Walliman (2011) explains the advantages of quantitative data that can be measured, more or less accurately because it contains some form of magnitude, usually expressed in numbers. Also the researcher can use mathematical procedures to analyse the numerical data that may be simple, such as counts or percentages, or more sophisticated, such as statistical tests or mathematical models. Furthermore, Walliman (2011) clarifies that even though some forms of data are obviously expressed as numbers, others which seem remote from quantitative measures can also be converted to numbers. For instance, people's opinions about the performance of political parties look difficult to quantify. But if a set choice of answers is given in a questionnaire then the researcher can then count the numbers of the various responses and the data can then be treated as quantitative.

The examples of quantitative data are census figures (such as population, income, and living density), economic data, (share prices, gross national product, and tax regimes), as well as performance data (sport statistics, medical measurements, and engineering calculations). In addition, all measurements in scientific endeavour are all typical examples of quantitative data (Walliman 2011). In contrast the mixed approach dwells in the middle because it incorporates both elements of quantitative and qualitative approach. According to Creswell the mixed methods is an approach to inquiry that combines both quantitative and qualitative forms. As a result it is more simply collecting and analyzing both kinds of data (Creswell, 2011). Therefore, in order to achieve objectives in this study, qualitative design was deemed more appropriate. The selection of a research design is normally based on the nature of the research problem, the researcher's personal experiences as well as the spectators of the study.

4.3.2 Qualitative Approach

The qualitative approach is used in the current study because it is consistent with interpretive paradigm. Besides, it seeks to investigate rural women's feelings and attitude towards their information behaviour. A qualitative approach to research is likely to be associated with inductive approach to generate theory, often using an interpretivist model that allows the existence of multiple subjective perspectives and constructing knowledge rather than seeking to find it in reality (Greener, 2008).

Walliman (2011) in discussing research methods states that qualitative investigation depends on careful definition of the meaning of words, the development of concepts and variables, and the plotting of interrelationships between these. Concepts such as affluence, happiness, comradeship, and loyalty are real and detectable, even if they are difficult to record and measure. Family Health International (2011) describes qualitative research as that that usually seeks to understand a given research problem or topic from the perspectives of the local population it involves. Furthermore, qualitative research is especially effective in obtaining culturally specific information about the values, opinions, behaviors, and social contexts of particular populations.

Qualitative research is also concerned with qualitative phenomenon that is phenomena relating to or involving quality or kind (Kothari, 2004). According to Kothari qualitative research is important especially in the behavioural sciences where the aim is to discover the underlying motives of human behaviour. Through such research, the researcher can analyse the various factors which motivate people to behave in a particular way or which make people like or dislike a particular thing. Since this type of research aims at discovering the underlying motives and desires, using in depth interviews. Other techniques of associated with qualitative research according to Kothari are word association tests, sentence completion tests, story completion tests and similar other projective techniques. Qualitative research is also designed to find out how people feel or what they think about a particular subject or institution.

The strength of qualitative research is attributed to the fact that qualitative research has not only the ability to provide complex textual descriptions of how people experience a given research issue, but it also provides information about the human side of an issue such as the frequently contradictory behaviors, beliefs, opinions, emotions, and relationships of individuals or group of people. Qualitative methods are also effective in identifying intangible factors, such as social norms, socioeconomic status, gender roles, ethnicity, and religion whose role in the research issue may not be readily apparent (Family Health International, 2011). The most common methods of qualitative research are participant observation, in-depth interviews, and focus groups. However each method is particularly suited for obtaining a specific type of data. For instance Participant observation is appropriate for collecting data on naturally occurring behaviors in their usual contexts. While in-depth interviews are optimal for collecting data on individuals' personal histories, perspectives, and experiences, particularly when sensitive topics are being explored. Focus groups are effective in eliciting data on the cultural norms of a group and in generating broad overviews of issues of concern to the cultural groups or subgroups represented (Family Health International, 2011).

Cohen, Manion, and Morrison (2007) assert that in a quantitative study there is heterogeneity in the population, where a larger sample must be selected on some basis that respects that heterogeneity. However, in qualitative research it is more likely that the sample size will be small. Sample size might also be constrained by cost in terms of time, money, stress,

administrative support, the number of researchers, and resources. Walliman (2011) emphasizes that qualitative data cannot be accurately measured and counted, and are generally expressed in words rather than numbers. Examples of qualitative data are observation notes, interview transcripts, literary texts, minutes of meetings, historical records, memos and recollections, and documentary films. Some are recorded very close to the events or phenomena, whilst others may be remote and highly edited interpretations, consequently assessments of the reliability must be made. Lastly, qualitative data usually rely on human interpretation and evaluation and cannot be dispassionately measured in a standard way (Walliman, 2011).

A number of scholars agree that qualitative research is the method of choice when richness of data is required. For instance, Al Mughairi (2006) argues that, in order to get better understanding of the information behaviour, the research questions posed need to be qualitatively designed. Thomas (2010) states that this method attempts to study the everyday life of different group of people such as rural women engaged in SMEs in their natural settings.

Furthermore, the qualitative approach is frequently used to answer questions about the complex nature of phenomena, usually with the purpose of describing and understanding these phenomena from the participant's point of view. Qualitative methods provide an insight into how people make sense of their experience. Harwell (2011) however laments that qualitative methods focus on discovering and understanding the experience, perspectives and thoughts of participants. In this regard qualitative method tends to create data that contain peoples' own spoken or written and observable behaviour.

The aim of qualitative research according to Ramasodi (2009) is to give clear and detailed account of actions as possible so that one can get a better understanding of one's world. Bashir, Afzal, and Azeem (2008), state that qualitative studies are tools used in understanding and describing the world of human experience. They further assert that, it is impossible to escape the subjective experience, as researchers maintain humanity throughout the research process. According to Leedy (2005) qualitative approach serves the purpose of evaluation, and in so doing provides the means with which a researcher can judge the effectiveness of particular policies, practice or innovations.

The advantages of qualitative methods are usually the fact that one can ask mostly open-ended questions, which give participants the opportunity to respond in their own words, rather than forcing them to choose from fixed responses.” Furthermore, open-ended questions have the ability to evoke responses that are meaningful and culturally salient to the participant, unanticipated by the researcher, rich and explanatory in nature. Another benefit of qualitative methods is that they allow the researcher the flexibility to probe initial participant replies that is, to ask why or how. In addition, qualitative methods are typically more flexible as they allow greater spontaneity and adaptation of the interaction between the researcher and the study participant (Family Health International, 2011; Joubish, Khurram, Ahmed, Fatima, and Haider, 2011).

Therefore, qualitative method was found to be a more appropriate approach in the current study because it would provide a deeper understanding of emerging patterns of information behaviour of rural women involved in SMEs in Tanzania.

4.4 Population of Study

Usually in any study, the researcher knows what kind of information he/she wants, who has the information and where to find that person. According to Enon (1998) the people that a researcher has in mind from whom she/he can obtain information are called population. In other words the full set of cases from which sample was taken is called population (Saunders *et al.*, 2009). Even if the researcher knows his/her targeted population, it is very important to have a sampling frame. Sampling frame is an objective list of the population from which the researcher can make his/her own selection (Denscombe, 2007). On their part Saunders *et al.*, state that the sampling frame is a complete list of all cases in the population from which the sample is drawn. For the purpose of the current study, Community Development Office maintains a register of groups of women involved in Small and Medium Enterprises (SMEs) in Chamwino and Manyoni districts in Tanzania. The register of rural women groups was therefore used as a sampling frame for the study.

From a population of 481, a sample size of 217 in Chamwino and Manyoni districts was drawn based on Saunders, Lewis and Thornhill (2012) model of selecting sample sizes. Saunders *et al.*, (2012) provides a rough guide to different minimum sample size of population given a 95 percent confidence level for different margin of error. As reflected in the table shown below, if the study population is 500 a sample size will be 217 at 5 per cent margin of error. Table 4.1 below shows sample sizes for different population based on Saunders *et al.* (2012).

Table 4.1: Sample Sizes for Different Population

Table 6.1 Sample sizes for different sizes of population at a 95 per cent level of certainty (assuming data are collected from all cases in the sample)

Population	Margin of error			
	5%	3%	2%	1%
50	44	48	49	50
100	79	91	96	99
150	108	132	141	148
200	132	168	185	196
250	151	203	226	244
300	168	234	267	291
400	196	291	434	384
500	217	340	414	475
750	254	440	571	696
1000	278	516	706	906
2000	322	696	1091	1655
5000	357	879	1622	3288
10000	370	964	1936	4899
100000	383	1056	2345	8762
1000000	384	1066	2395	9513
10000000	384	1067	2400	9595

(Souece: Saunders et al., 2012:266)

4.5 Sampling Procedures

Sampling is the process of selecting the participants, and people selected are called sample. It is not possible that everyone among the accessible population can participate to the study. Thus, the researcher would plan of a small proportion to participate in a particular study.

A three-stage sampling technique was used to draw the sample. Dodoma and Singida regions were purposively selected. Singida and Dodoma districts are located in central Tanzania. These

regions are among the poorest and the most drought-prone areas in Tanzania (URT, 2006; URT, 2005 as cited by Mary, 2009). For these reasons, it was assumed that studying information behaviour of rural women engaged in SMEs in central Tanzania would assist in developing interventions to help economic growth, job creation and poverty alleviation.

Secondly, the choice of Chamwino district for this study was based on the fact that, Chamwino is leading in terms of having a large number of rural women compared to other districts in Dodoma region that accounted for 161,554 (URT, 2013b:79). Therefore it was assumed that studying information behaviour of rural women involved in SMEs in Chamwino district could provide a good representation of research problem in Dodoma region. Chamwino was also selected because the district was recently carved in 2007 from Dodoma rural district. Therefore being a newly established district, it faces a number of challenges in social, economic and demographic information. In contrast Manyoni was selected for the study for being a larger and long established district. It would therefore provide a good comparison with Chamwino district was recently established.

With these two districts SMEs (Poultry and Kiosk) were purposely selected due to the fact that majority of women are engaged in these businesses. Purposive sampling is a type of sampling in which the researcher selects samples based on a certain purpose (Enon, 1998). Using the community development officer who is responsible for managing women groups involved in SMEs in each district, group leaders for women involved in poultry and kiosk were identified. With the help of these group leaders, women were purposively identified and categorized by business they were involved in (poultry or kiosk).

Based on relative sample sizes which were calculated from the population distribution in the two study areas, 11(4 poultry and 7 kiosk focus groups were formulated in Chamwino) and 7 (5 poultry and 2 kiosks focus groups were formulated in Manyoni) respectively. Each focus group discussion comprised 12 respondents; the appropriate number of people a focus group can hold (Krueger, 2006). Dorner, Godman and Calvert (2015) states that, “once the general nature of the groups is determined, typical practice is to invite 8-12 participants for broader topic”. Strydom, Fouche and Delport (2005) affirm that focus group discussion creates a process of sharing and

comparing responses among the participants. Thus, the study population comprised women involved in poultry and kiosk business which are predominant enterprises in the two districts of Chamwino and Manyoni in central Tanzania. The sample sizes in Chamwino and Manyoni districts were selected proportionately as shown in Tables 4.2 and 4.3 respectively based on population sizes.

Table 4.2: Sample Size and Focus Groups Formation in Chamwino

Business	Population (Chamwino)	Proportionate sample size (population/481*217)	No of Focus groups (sample/12)
Poultry	116	52	4
Kiosk	194	87	7

Table 4. 3: Sample Size and Focus Groups Formation in Manyoni

Business	Population (Manyoni)	Proportionate sample size (population/481*217)	No. of Focus groups (sample/12)
Poultry	136	61	5
Kiosk	35	15	2

This study used focus group discussion and semi-structured interview to collect data from the respondents.

4.5.1 Focus Group Discussion

A focus group method is a focused group interview where the researcher as a facilitator records the conversation using video or audio recording and note book. A focus group confines itself to a specific topic on which discussion is to be held, rather than a whole a series of questions (Greener, 2008). Neville (2007) asserts that focus group discussion normally takes the form of opinions, from a selected group of people on a particular and pre-determined topic.

Focus groups are not generally used for explanatory or descriptive research, but are more suited for exploratory research (Bhattacharjee, 2012). They explore the joint construction of meaning around a topic and show how group dynamics and interaction work in it. According to Bhattacharjee focus group involves bringing in a small group of subjects normally six to ten people at one location, and having them discuss a phenomenon of interest for a period of 1.5 to 2 hours. Focus groups were formed by the researcher with the assistance of women group leaders. The group leaders were identified with the help of District Community Development Officials (DCDO) in each district. Simple random sampling technique was used to select respondents involved in the study, this technique helped to reduce biases (Enon, 1998).

Focus group discussion are useful to obtain detailed information about personal and group feelings, perception and opinion, they can also provide broader range of information, they offer opportunity to seek clarification, and additionally they can save time and money compared to individual interview (Gray, 2004). Focus group discussion was chosen because of its fitness to research of this nature. Strydom, Fouche and Delport (ibid) hold that focus group discussion creates a process of sharing and comparing among the participants. Also participants selected have certain characteristic in common that relates to the topic of focus group, the researcher creates them for a well-defined purpose and they produce large amounts of concentrated data in a short period of time. Figure 4.1 below shows discussion with Ukombozi women group.



Figure 4.3: Focus Group Discussion at Myumi Makulu Village

There are other several advantages of focus group discussions. They are generally considered cheaper and quicker than organizing several individual interviews (Dorner, Godman and Calvert, 2015). They are also according to Greener (2008) more suited for providing an environment where issues can surface in much freer way than in an individual interview. Besides, focus group discussions provide. Additionally, they offer useful way of bringing issues to the surface that might not otherwise have been discovered (Neville, 2007). Denscombe (2007) states that, discussion in a focus group is triggered by a stimulus, the stimulus might be some shared experience that the group members bring to the session from their personal surroundings. Furthermore, the group can frequently make people bolder in advancing their view.

Despite the advantages of focus group discussion, Greener (2008) discussed some disadvantages of focus groups. They are not easy to run as the researcher must ensure good standards of communication and respect are encouraged. Too much control from the researcher may make focus group difficult for a free flowing discussion to construct the meaning and relevant views. At the same time too little control from the facilitator may lead to limited time

4.5.2 Interview

Semi-structured interviews were used to collect data from group leaders (group leader in charge of a certain number of women in a village) involved in poultry and kiosk SMEs. The semi-structured interview was used to gain a detailed picture of participants' beliefs about or perception or accounts of phenomenon under study. Gray (2004:215) opines that, "Semi-structured interviews are non-standardized and are often used in qualitative analysis. Strydom, Fouche and Delport (2005) state that, interview is a predominant method of data collection in qualitative research. Interview is an interactional event, and interviewers are deeply and unavoidably implicated in creating meaning that apparently reside within participants. In addition semi-structured interview allows probing of views and opinion and additional questions may be asked. The purpose of conducting interviews is to collect information from a single person through a systematic and structured format (WBI Evaluation Group, 2007). Myers and Newman (2007) assert that unstructured interview provides an incomplete script to be filled by the respondents. The researcher prepares some questions beforehand and there is a need for improvisation.

Several authors in various fields have described advantages of interviews. Denscombe (2007) observes that one-to-one interviews are easy to arrange, easy to control, and also easy to transcribe when recorded. Also in interviews, large amount of data can be collected in a short period of time (Dorner, Godman and Calvert, 2015). Interviews normally allow for more focused discussions and follow-up questions. Also interviewees may offer information in interviews that they would not offer in a group context. Furthermore, interviews can be an excellent source for stories and context and the interviewer can observe the non-verbal behaviors of an interviewee (WBI Evaluation Group, 2007).

Minter (2003) points out that, interviews have direct feedback from interviewee, and the researcher is assured the answers are from the person intended. Besides conducting interview, the researcher can use observation as another evaluation method by recording what researcher physically observes during interview. An interview also yields rich data, details and new insights, and there is room for probing verbal and non-verbal prompts.

Semi-structured interview allows interviewees to speak their minds and is also suited in discovering things about complex issues. Humphrey and Lee (2004) assert that semi-structured interviews are beneficial due to the flexibility in designing and refining the interview guides, and in actually conducting the interviews. Denscombe (2007) is of the view that semi-structured interview allows interviewees to use their own words and develop their own thoughts. The semi-structured interviews were also used in this study because of relatively low level of education among rural women. In addition, various authors (Hannabuss, 1996; Burton, 2000; Manion & Marrison, 2000; Robson, 2002; Cohen & Crabtree, 2006; Chilimo, 2008) pointed out that:

- Interview is much more suitable for people with limited literacy (like rural women);
- When conducting interview researcher is able to answer questions concerning the purpose of the study and any misunderstanding experienced by the respondent;
- Interview enables more to be said about the topic;
- Interview has larger response, since respondents become more involved and hence more motivated.

In spite of the advantages of interview discussed above, they also present several challenges. For an instance Minter (2003) states that too much flexibility can result in inconsistency across interviews. Also, interviews are time consuming in terms of training, conducting, and analyzing because of large amount of data that can be generated in short amount of time. Furthermore, interviewer needs to be prepared to ensure understanding subject matter and also developing confidence to conduct the interview. Moreover, interviewer error or bias is another disadvantage. For instance, tone of voice, appearance of interviewer, and gender may lead to error or bias. WBI Evaluation Group (2007) says results of multiple interviews may contradict each other or be difficult to analyze. Nevertheless the advantages of interviews outweigh the disadvantages and for this reason, interviews were used in this study. In addition interviewing is the most widely used method to collect qualitative data. Figure 4.2 below show interview session with Misani group leader.



Figure 4.4: Interview at Iloilo Village

4.6 Data Analysis Strategies

Data gathered through focus group discussion and semi-structured interview were analyzed using computer software (Nvivo version 7) as well as thematic analysis approach. This involved reducing masses of data to meaningful and manageable pieces of information relating to themes of information behavior.

Lacey and Luff (2001) state that with qualitative data analysis the mass of words generated by interviews, focus group discussion and observational data needs to be described and summarised. Unlike quantitative analysis, which is statistics driven and largely independent of the researcher, qualitative analysis is heavily dependent on the researcher's analytic and integrative skills and personal knowledge of the social context where the data is collected (Bhattacharjee, 2012). The emphasis in qualitative analysis is "sense making" or understanding a phenomenon, rather than predicting or explaining. A creative and investigative mindset is needed for qualitative analysis, based on an ethically enlightened and participant-in-context attitude, and a set of analytic strategies.

There is no one right way to analyse qualitative data, there are several approaches available, although much qualitative analysis falls under the general heading of thematic analysis (Lacey and Luff, 2001). For instance hermeneutic analysis, this is a special type of content analysis where the researcher tries to “interpret” the subjective meaning of a given text within its socio-historic context. Another type is content analysis; this is the systematic analysis of the content of a text in a quantitative or qualitative manner. Grounded theory, also one of the techniques for analyzing text data is an inductive technique of interpreting recorded data about a social phenomenon to build theories about that phenomenon. Lastly, standard software programs, such as NUD*IST, Atlas Ti, NVivo, and QDA Miner, can be used to automate coding processes in qualitative research methods. These programs can quickly and efficiently organize, search, sort, and process large volumes of text data using user defined rules. Even though there different types of techniques as discussed above, the current study used Thematic analysis and Nvivo version 7 to analyse data.

4.6.1 Nvivo Computer Software

Nvivo computer software was developed in Australia in 1999 by the same company known as NUD*IST (Lacey and Luff, 2001). The strength of Nvivo is that it is user friendly, has good modelling facility, can include hyperlinks to Internet and has great flexibility.

The analysis started with careful listening to the audio records several times to gain a sense of the material as the whole. The audio records were then transcribed, translated during the field visit. Collected raw data from the interviews and FGDs were transcribed, sorted and categorized into different themes relating to the specific objectives of the study. All sorted data were carefully read to obtain the general sense of information and overall meaning in relation to the study’s objectives. All data were organized into categories and coded based on the established themes. Participants’ views were analyzed to obtain their perceptions, understanding and meaning attached to a given subject in a given context. Nvivo Version 7 Computer software was used to code, sort, categorize and analyze the data.

By using Nvivo, analysis of qualitative data became easier and yielded more detailed results. The software indeed reduces a great number of manual task and gives a researcher time to discover tendencies, recognize themes and derive conclusion. Hilal and Alabri (2013) point out that there are five important tasks which Nvivo analysis does.

- Managing data: by organizing a number of muddled data documents, which includes surveys, notes of observation, interviews and focus group discussion transcripts.
- Managing ideas: In order to understand conceptual and theoretical issues generated in the course of the study.
- Query data: by posing several queries of the data and utilizing the software in answering these queries. Results of queries are saved to allow further interrogation and querying and searching becomes part of an ongoing enquiry process.
- Modeling visually: by creating graphs to demonstrate the relationship between conceptual and theoretical data.
- Reporting: by utilizing the data collected and result found to formulate transcript reports about the study concluded.

4.6.2 Thematic Analysis

Historically, thematic analysis is a conventional practice in qualitative research which involves searching through data to identify any recurrent patterns. Thematic analysis is defined by Braun and Clarke as a method of identifying, analysing and reporting patterns within data (Braun and Clarke, 2006)

Thematic analysis is considered the most appropriate for any study seeking to discover interpretation (Alhojailan, 2012). Furthermore thematic analysis is used to analyse classification and present themes that relate to data. As a result, there is a possibility to link various concepts and opinions of the learners and compare with the data that has been collected at different time and in different situation during the study.

By using thematic analysis, usually researcher or analyst moves back and forth between data and new concepts. This means that the researcher involves processes of induction and deduction,

whereby induction creates themes and deduction verifies them. Inductive approach according to Neville might lead a researcher to arrive at a new definition of the word or not. Further this approach can be very time consuming, but the reward might be in terms of arriving at a fresh way of looking at the subject. While Deductive approach offers researcher a relative easy and systematic way of testing established idea on a range of people (Neville, 2007). The Table 4.4 below illustrates the sources of data of each research question and the data analysis strategies.

Table 4.4: Summaries the Data Sources and Data Analysis Procedure for Each Question

Research questions	Data source	Data analysis approach
What are the information needs of rural women involved in SMEs?	Interview, focus group discussion	Thematic analysis Nvivo
What channels of communication are used by women to seek for information to meet their business needs?	Interview, focus group discussion	Thematic analysis Nvivo
What information resources are used to seek and satisfy their information needs?	Interview, focus group discussion	Thematic analysis Nvivo
What skills do women have to effectively identify and access information?	Interview, focus group discussion	Thematic analysis Nvivo
How is the information sought by women involved in SMEs used?	Interview, focus group discussion	Thematic analysis Nvivo
What challenges are faced by women in seeking and using information?	Interview, focus group discussion	Thematic analysis Nvivo
How do the women use available information?	Interview, focus group discussion	Thematic analysis Nvivo

4.7 Validity and Reliability

Reliability and validity, jointly called the “psychometric properties” of measurement scales, are the yardsticks against which the adequacy and accuracy of our measurement procedures are evaluated in scientific research (Bhattacharjee, 2012). According to Bhattacharjee a measure can be reliable but not valid, if it is measuring something very consistently but is consistently measuring the wrong construct. Similarly, a measure can be valid but not reliable if it is measuring the right construct, but not doing so in a consistent manner. Therefore, reliability and validity are both needed to assure adequate measurement of the constructs of interest.

Validity means the extent to which the data accurately measures what they were intended to measure, while reliability means the extent to which data collected method will provide consistent findings if replicated by others. These definitions are supported by various scholars such as Enon (1998) and Walsh, (2001). They state that validation means obtaining what we want to measure. While reliability means that degree of consistency demonstrated in the study.

Validity and reliability of data collected depends with the questions asked within the instruments. To ensure a reasonable level of validity and reliability in the current study, the researcher conducted a pilot study to pre-test the instruments. Pre-testing and review of data collection instruments provided a chance for the researcher to improve questions. Bhattacharjee (2012) points out that pilot testing is usually overlooked but extremely vital part of the research process, for the reason that it helps detect potential problems in research design and or instrumentation and ensures that the measurement tools used in the study are reliable and valid measures of the constructs of interest. Pre-testing of data collection instruments was undertaken in Upendo group comprising ten rural women at Matumbulu in Dodoma municipal which was not part of the sample of study. Prior to conducting the study the researcher presented the data collection instruments to the District Community Development officers (DCDO) to review. Also, all data collection instruments were translated into Kiswahili language which is the Tanzania national/official local language.

4.8 Ethical Consideration

When undertaking research, researcher frequently is required to seek information from individuals or groups of people. In that way it is very important to ensure that no harm (physical, psychological, emotional or social) occurs to the voluntary participants.

To ensure ethical compliance, consent of the respondents was sought and informed of the purpose of the study and were given the option of participating voluntarily. Permission was also sought and granted from the relevant authorities (Chamwino and Manyoni district council) in Tanzania responsible for research. The ethical code of UKZN was complied with. The information collected was used for study purposes of research only and was not divulged to third parties.

Various authors (Dickens & Cook, 2003; Smith, 2003; Guillemin & Gillam, 2004; Walford, 2005; Bell, 2014) present principles of research ethics that include:

- **Voluntary participation and harmlessness:** Subjects in research project must be aware that their participation in the study is voluntary, that they have the freedom to withdraw from the study at any time without unfavourable consequences and they are not harmed as results of their participation or non-participation in the project. All participants in the current study received and signed an informed consent form that clearly explained their right to or not participate and right to withdraw from the research, before their responses in the study were recorded.
- **Anonymity and confidentiality:** Anonymity implies that the researcher or reader of the final research report cannot identify a given response with a specific respondent. So as to protect respondent' interests and future well-being, researcher protects the identity of respondents in a study. Further, researcher guarantees confidentiality, that data will be aggregated such that individuals cannot be identified.
- **Disclosure:** The researcher provides some information about the study such as who is conducting the study, for what purpose, what outcome was expected and who will benefit from the study.

- **Analysis and reporting:** Researcher also has ethical obligation to the scientific community on how data is analysed and reported in their study. The researcher promised respondents to disseminate research findings to them.

4.9 Summary

This chapter discussed research methodology that was used to investigate the research problem of this study. The chapter presented research paradigms: interpretive paradigm, positivist paradigm, and post-positivist paradigm as well as qualitative quantitative and mixed methods approaches. The chapter provided the motivation for the choice of interpretive paradigm and qualitative approach to underoin the study. The chapter further described in detail the study population, sampling procedures. The chapter also discussed the study site, data collection procedures and instruments, qualitative data analysis, validity, reliability and the pretesting of instruments as well as research ethics. The next chapter presents findings of the information behaviour of rural women involved in SMEs.

CHAPTER FIVE

DATA ANALYSIS AND PRESENTATION OF FINDINGS

5.1 Introduction

The aim of the data analysis and presentation of findings chapter in doctoral study is to transform the data collected into credible evidence about the development of the intervention and its performance (ICAP, 2009). The purpose of the current study was to investigate information behaviour of rural women involved in Small and Medium Enterprises (SMEs) in Manyoni and Chamwino districts of central Tanzania. The study sought to address the following research questions: What is the information behaviour of rural women involved in SMEs? What channels of communication are used by women to seek information to meet their business needs? What information resources are used to seek and satisfy their information needs? What skills do women have to effectively identify and access information? How is the information sought by women involved in SMEs used? What challenges are faced by women in seeking and using information?

The chapter is organised around themes of research questions, theory and broad issues around the research problem. The chapter presents research findings collected through semi-structured interviews and focus group discussions on rural women involved in poultry and kiosk businesses in Chamwino and Manyoni districts in central Tanzania. With the assistance of two research assistants who were trained during the pilot study, the researcher conducted eighteen focus group discussions and ten semi-structured interviews. Most of the interviews and focus group discussions were conducted at the village offices. Each interview took between forty minutes to one hour, while focus group discussion took between eighty minutes to two hours. Denscombe (2007) explains that usually focus group discussion last about one and half to two hours. They tend to last longer than one to one interviews mainly because there are more people involved and more opinion to be aired. The interviews and focus group discussions were transcribed. From these transcriptions the information behaviour, channels of communication, information sources, rural women's skills, the use of available information and challenges women faced when seeking for information were identified.

The findings are presented using descriptive and inferential statistics on the following themes information need, channels of communication, information sources, skills women have to identify and access information, the use of the available information, and the challenges faced by women when seeking information. The findings of focus group discussions and interviews on similar themes are integrated to ensure coherence and avoid unnecessary repetition.

5.2 Demographic Profiles of Respondents

In this section the profiles of women involved in two businesses (poultry and kiosk) in Chamwino and Manyoni districts are described. The profiles described include age, education level, marital status, as well as business group's status. The profiles variable was not part of the objectives/ research questions/ broader issues of the research problem. However, this is included to provide a deeper understanding of factors that influenced information needs and information seeking characteristics of the rural women involved in SMEs in the two districts.

5.2.1 Age of Respondents

Respondents were asked to state their age range; findings showed that the ages of respondents involved in these two businesses in both districts (Chamwino and Manyoni) ranged from eighteen to sixty five years (18-65). Findings in general showed that among 162 rural women entrepreneurs, the most common age was 31-45 years 90 (55.5%), followed by 18-30 years 51(32%). Results showed that 19 (12%) entrepreneurs were in the age category 45-60 years and only 2(1.2%) women were aged 61 and above.

Specifically, results indicated that among 78 rural women involved in poultry business more than half 41(52.5%) were under the age of 31-45 years. Followed by 26 (33.3%) in the 18-30 age category, nine (11.5%) were aged 46-60 and only two (2.5%) were aged 61 years (see results in Figure 5.1). Moreover, findings revealed that over three quarters 67 (86%) of all respondents involved in raising chicken poultry were also engaged in other businesses such as buying and selling maize, selling burns, horticulture, extracting salt and sewing.

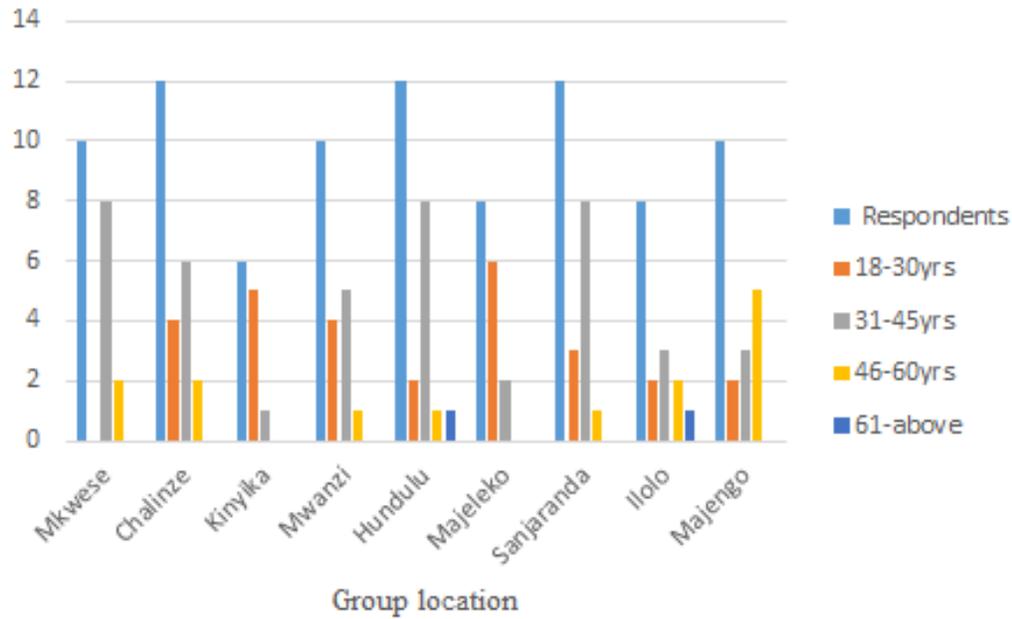


Figure 5.1: Respondents Age (Chamwino and Manyoni) Poultry (N=88)
 (Source: Field data, 2014)

Furthermore, findings showed that among 74 rural women conducting kiosk business, more than half 49 (66%) were between the age of 31-45 years, followed by 25 (34%) women under age of 18-30 and 10 (13.5 %) of them who aged between 46-60 years. The results also showed that there were no entrepreneurs above the age of 60 in kiosk business. Figure 5.2 below sums age of respondents in kiosk business.

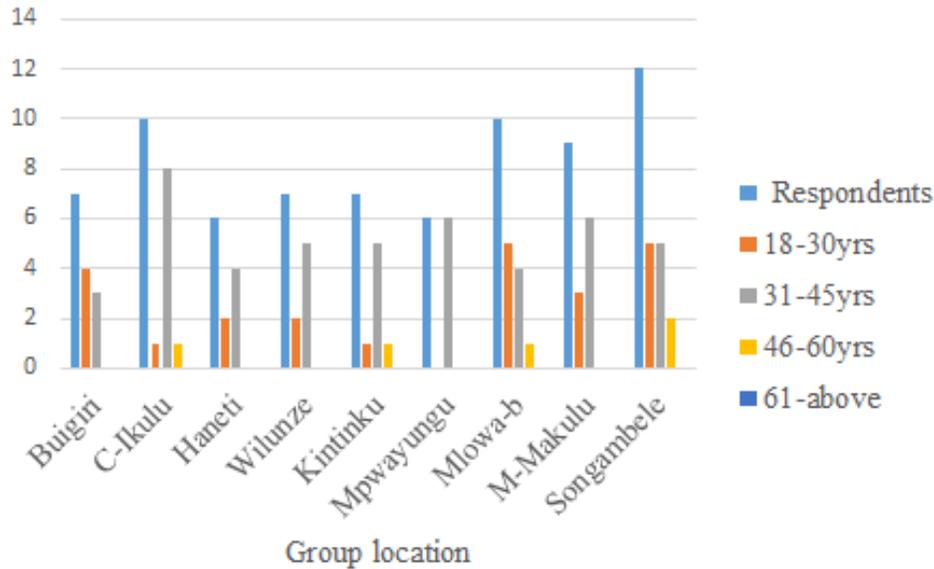


Figure 5.2: Respondents Age (Chamwino and Manyoni) (N=74)
(Source: Field data, 2014)

Results also indicated that apart from conducting kiosk business, 17 (23%) of the respondents were involved in other activities such as horticulture. It was reported by the group leader of women entrepreneurs that her group cooked and sold food once in a week during auctions as well as in social (burial ceremony and wedding) or and government events. Therefore, when there were no social and government events they performed normal household's chores in their homes including and cultivating their farms. Findings further revealed that only one (1.3%) of respondents was a government employee.

5.2.2 Education Level of Respondents

Respondents were asked to state their education levels. Findings from FDGs and semi-structured interviews showed that education level of rural women involved in poultry and kiosk businesses in Chamwino and Manyoni districts varied from those who had never attended school to those who had college level of education. Results further showed that among the one hundred and sixty two (162) respondents, majority of them 128 (79%) had basic education (standard one to seven). 18 (11%) respondents had never attended school, 13 (8%) respondents attended form one to form four. Findings also showed only three (2%) of respondents had a college education. Figure 5.3 below illustrates the results from FDGs.

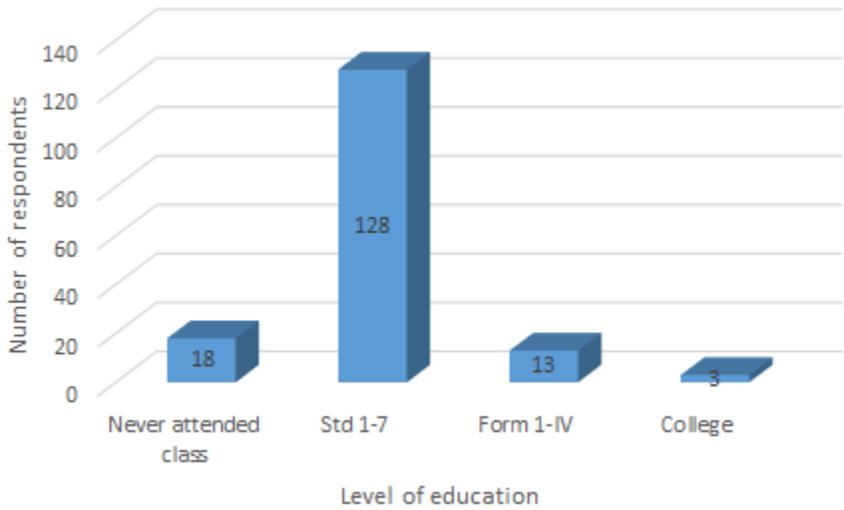


Figure 5.3: Education Level of the Respondents (N=162)

(Source: Field data, 2014)

With regard to the reason why some rural women never attended school, it was reported that historically most of women did not get a chance to pursue further education but instead stayed at home to cultivate the fields, look after children or cook for their families. For those women who did not pursue secondary education, two reasons were noted. The first reason was that majority of them were distracted continuing with secondary education due to pregnancy or early marriage. The second reason was that parents did not invest a lot in girl’s education than they did for boys.

5.2.3 Marital Status of Respondents

Analysis of marital status of the women was considered to get an understanding of whether this variable influenced their involvement in SMEs or how it affected their information needs, seeking and sharing. Results showed that more than half 98 (60.4%) of women entrepreneurs in both business (kiosk and poultry) were single, followed by more than a quarter of them 50 (30.8%) who were married. Findings also showed those widowed were 10 (6%) and those divorced were only four (4.2%). The results also showed that though majority of women were not married, all of them had children. One responded noted:

[Here in this village most households have no fathers, the mothers have to tackle all family responsibilities. For example, when a child passes school leaving examination to

proceed for further education, we as mothers fail to meet the fees because we have no husbands to give us support. FDG \MMM-T-P02]

The women depended on SMEs for their families' livelihood. Table 5.1 below summarises the marital status of the respondents.

Table 5.1: Marital Status of Respondents (N=162)

Activity	Group location	Marital status				Total Sample
		Single	Married	Divorced	Widowed	
Poultry	Mkwese	8	-	-	2	10
	Chalinze	6	6	-	-	12
	Kinyika	4	2	-	-	6
	Mwanzi	7	2	-	1	10
	Hundulu	7	4	-	1	12
	Majeleko	6	2	-	-	8
	Sanjaranda	6	4	1	1	12
	Iloilo	4	2	1	1	8
	Majengo	8	2	-	-	10
Frequency and percentage		56(63%)	24(27%)	2(3%)	6(8%)	88 (100)
Kiosk						
	Buigiri	5	2	-	-	7
	C-Ikulu	3	5	1	1	10
	Haneti	4	2	-	-	6
	Wilunze	6	1	-	-	7
	Kintinku	1	5	-	1	7
	Mpwayungu	3	3	-	-	6
	Mlowa B	7	3	-	-	10
	M-Makulu	6	2	-	1	9
	Songambebe	7	3	2	-	12
Frequency and percentage		42(56%)	26(35%)	3(4%)	3(4%)	74 (100%)
Grand total of frequency and percentage		98(60.5%)	50(31%)	4(2.5%)	10(6%)	162(100%)

(Source: Field data, 2014)

5.2.4 The Women Group's Length of Experience in Conducting Business

Understanding the length the women groups had been in business was investigated. Findings showed that over three quarters 148 (91%) of the women entrepreneurs had business experience of between one to seven years. Another six (4%) respondents had above 21 years of business experience, followed by five (3%) entrepreneurs who had 8-14 years of experience in business and lastly three (2%) respondents had 15-21 years' experience in business.

Overall, results showed that majority of rural women entrepreneurs involved in poultry and kiosk business in both districts (Chamwino and Manyoni) had low business experience of one to seven years. Figures 5.4 and 5.5 below show the length of experience in conducting business in poultry and kiosk respectively.

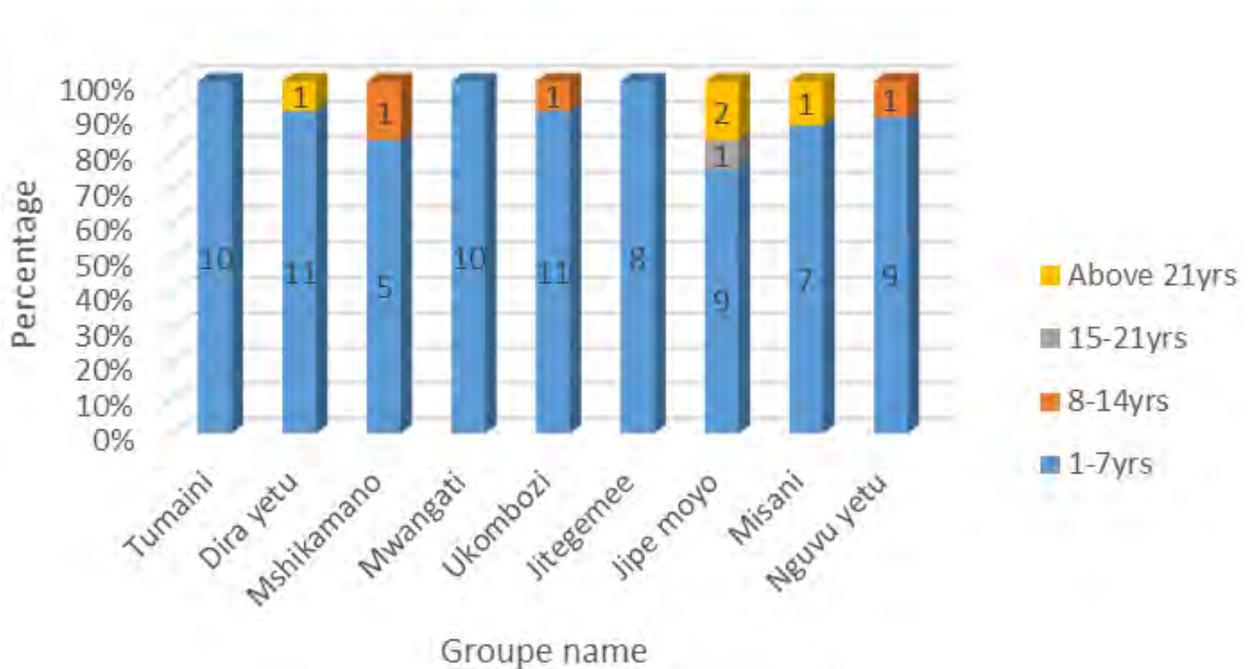


Figure 5.4: Length of Women Entrepreneurs' Experience in Poultry Business
(Source: Field data, 2014)

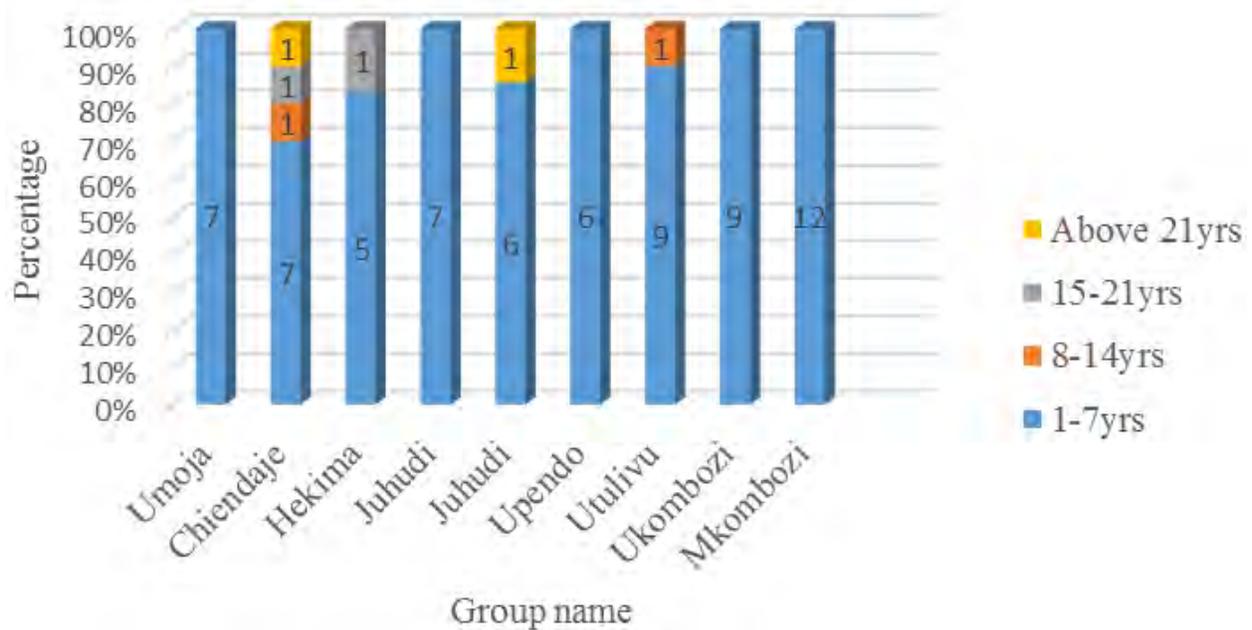


Figure 5.5: Length of Women Entrepreneurs Experience in Kiosk Business
(Source: Field data, 2014)

5.2.5 Registration Status

The SMEs registration is necessary to enable community development officers to identify and reach them in order provide support services such as advice on how to manage their groups and providing small loans. SMEs not registered may not benefit from the support provided by community development office. Findings showed that some of the benefits obtained by the registered groups included getting tenders from government to supply cooked food, participating in business social forums, accessing knowledge from experts; and being visited by guests from within and outside the country for the purpose of learning.

Findings further showed that all seven visited women business groups in Manyoni district were registered while in Chamwino district three groups were not registered among eleven groups visited (see results in Table 5.2). The main reason reported by the group leaders as to why in Chamwino district some groups were not registered was that, the groups had only been recently formed and were still in the process of being registered. Chamwino is a newly established district compared to Manyoni district

Table 5.2: Registration Status of the Women Groups (Chamwino and Manyoni Districts) (N=18)

Chamwino			Manyoni		
Group name	Business type	Status	Group name	Business type	Status
Upendo	Kiosk	Registered	Juhudi	Kiosk	Registered
Hekima	“	Registered	Mkombozi	“	Registered
Utulivu	“	Not registered	Jipe moyo	Poultry	Registered
Umoja	“	Not registered	Mshikamano	“	Registered
Chiendaje	“	Not registered	Mwangati	“	Registered
Juhudi	“	Registered	Tumaini	“	Registered
Ukombozi	“	Registered	Nguvu yetu	“	Registered
Dira yetu	Poultry	Registered			
Misani	“	Registered			
Ukombozi	“	Registered			
Jitegemee	“	Registered			

(Source: Field data, 2014)

5.2.6 Number of Women Entrepreneurs in Each Group

Total number of visited women entrepreneurs groups from two districts (Chamwino and Manyoni) was 18. The findings showed that eight (44.4%) groups had 10 members in each group, followed by three (17%) groups which had 12 women in each group, and another three (17%) groups which had 15 members in each group. Results showed that the other remaining four groups had 18, 20, 25, and 30 members in each group respectively.

Although it was reported by a group leader of Dira yetu that her group was split into two sub groups after its membership reached 50, it was found that only two (11%) groups had more than 24 members each. The total number of members in each group seems small in relation to the government classification of SMEs, whereas a small enterprise is defined to have 5-49 members and medium enterprises to have 49-99 members. Figure 5.6 illustrates total number of rural group's membership.

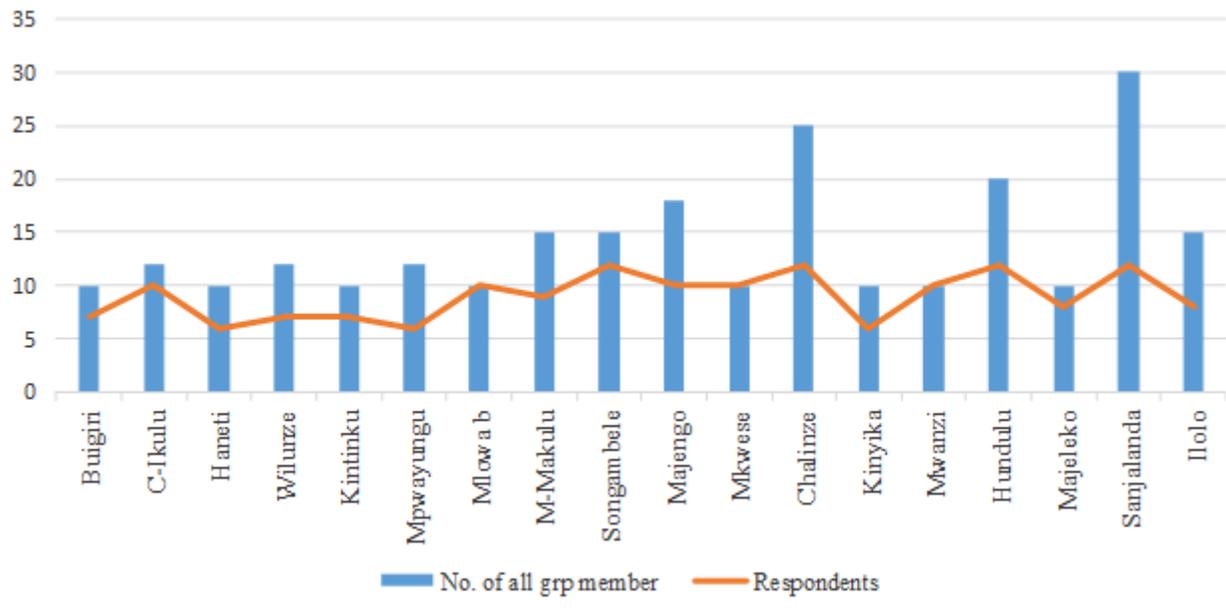


Figure 5.6: Total Number of Women Entrepreneurs in Each Group (N=18)
(Source: Field data, 2014).

The results in Figure 5.6 above show that there was a good representation of respondents in each group, since in most of the groups more than half of the women participated in the study.

5.2.7 Motivation for Establishing SMEs by Women Groups

It was assumed that most of the SMEs groups formed by women emanate from a certain motive(s). Therefore, respondents were asked to state the motive behind the establishment of their groups. Findings showed that poverty was a major motivation for establishing SMEs groups by women in the two districts studied. The respondents also explained that because of their limited education, they could not gain access to formal employment in government or private sector. They were also motivated into SMEs by the need to raise income to assist them pay fees for their children, buy food, clothing and medicines for their families. Some respondents indicated that they could not depend on their husbands for livelihood because such husbands often did not want to take parental responsibility.

5.3 Information Needs of Rural Women Involved in SMEs

This section presents information needs of rural women involved in Small and Medium Enterprises (SMEs). Respondents were asked to elucidate their information needs. All 162 (100%) respondents (poultry and kiosk) said they needed information on family care issues such as getting food, shelter, and clothing, school fees for their children, treatment and domestic hygiene.

Respondents identified information about chicken medicine as being important by all five (100%) group leaders including the nine women groups. They noted that at times their chicken are tormented by disease and as a result die rampantly. They felt that to improve chicken farming they needed to know and understand chicken medicine. One responded noted:

“When chicken get eye diseases we take baby jelly (baby care) and smear them and they get cured but others die. In other circumstance we use herbs to treat the chicken ... some chicken may get cured while others die.... in other scenarios we take the tablets for “trachoma” grind them and give them ... some get cured and others die.”

The findings also revealed that the most information needed by five (100%) interviewed group leaders of kiosk business, and six (66%) women groups was information on where to get reasonable price of goods such as rice, cooking oil, wheat flour, beans, beef, sugar and charcoal or fire wood. The need for information on pricing of charcoal was motivated by the fact that by and large rural entrepreneurs did not use gas or electricity to cook, but instead depended on fire wood and charcoal. Moreover, in rainy season people do not cut down trees for firewood and charcoal. In that regard the cost of charcoal increases from between 6,000 and 7,000 to 20,000 Tanzania shillings {or 12 US\$} per 90 kilograms bag.

All 10 (100%) group leaders and five (55%) poultry business groups as well as two (22%) of kiosk business groups identified information about markets as another important information need. The respondents noted that they needed market information about where to sell their products such as chicken, eggs and cooked food. They were particularly concerned about accessing ready market for cooked food to ensure it was not left to get spoiled. The respondents noted that in some cases they were forced to sell food on credit to avoid it getting spoiled and

thus incurring loss. They further explained that sometimes they gave food to customers on credit but often it was never paid for. One of the respondents observed:

'The dilemma is that we can't take them to court because the lost time and money will exceed the cost of the food. It is also not practical to report creditors to the police because of bureaucratic process of reporting thus wasting our time for business.'

The respondents noted that because of lack of guaranteed market, clients want to buy each chicken for Tsh 6,000 or Tsh 7,000 which is a wholesale price. Such prices are very low and do not even offset the price of purchasing the chicks and their care/food for four or five months which cost between Tsh. 9,000 and Tsh 10,000. The lack of information on markets caused the women to sell chicken at a very low price compared to their market price including transport costs. Moreover, because of lack of market information, rural women spent lots of time looking for customers by walking around with chicken sometimes with limited success. Sometimes the women were forced to seek market in town to sell their commodities such as eggs. Even then, the revenue received was still low when transportation costs such as hiring a motorbike (*bodaboda*) at Tsh 10,000 in 28km journey from Mkwese to Manyoni town is taken into account.

Majority eighth (80%) women group leaders from both business (kiosk and poultry) and 17(89%) women groups observed that they needed information to empower them economically by accessing low-interest loans and capital to improve their businesses and eliminate poverty. One respondent noted:

[We request the government to find stakeholders... to assist us financially...so that we village women can overcome the economic hardships we face]

The women conducted business in difficult situations without startup or limited capital. For instance, they often started a business with a capital base of Tsh. 50,000 {30US\$} and this did not enable them to grow their businesses fast. It was observed that when women did not have money for buying commodities, they instead went to the shopkeeper they trusted to take goods on credit and repaid back after they sold the goods. The poultry groups explained that the other challenge they faced related to the feeds they gave their chicken which did not have requisite

ingredients like sunflower seed cakes. They were therefore forced to rely on maize barns. A concern was also expressed that the women lacked milling machines and as a result they travelled as far as Manyoni town 28 kilometres away to get maize bran.

The women groups also stated that they lacked formal places for doing their business, especially places for cooking food for sale. The rental places they used were prone to frequent increases despite the fact that the premises were poorly maintained. The women were also concerned with municipal health by-laws and regulations, because the law enforcement agencies often subjected them to be penalties for doing business in unauthorised places. One woman in one of the group had this to say:

[Recently, we were told to buy plastic tables and chairs because the health officer does not approve the use of benches... this directive is difficult for us to implement because it involves additional expense which our small businesses cannot sustain CMW JV 01]

The women expressed concern that they operated in open places without shedding and whenever there was wind or rain the charcoal gets soaked. Figure 5.7 below shows cooking taking place in an open space.



Figure 5.7: A woman Entrepreneur Cooking in an Open Space
(Source: Field data, 2014)

It was also reported that some of the women used government buildings for cooking food for sale. Often some of these buildings did not have the toilets. Further, a concern was expressed that village government did not seem to value rural women engaged in SMEs as no support was provided to such businesses at all. One woman had this to say in this regard:

[Generally, we are very constrained... the village government is taxing us and demanding other contributions from us, but does not address the problems we face and when we forward our problems to them they do not give us the necessary support FGD\CMM-U-V-FGD 02]

Another woman noted: *some of the village leaders are very corrupt...kupata haki yako mpaka upite nyuma ya mlango wa ¹TAKUKURU “translated as to get your right you must go through the back door of TAKUKURU” FGD\CMMb-U-V-FGD 05]*

The other information need for the women involved in the SMEs in the two businesses (kiosk and poultry) that was expressed is training, on how to run business in general so that they can make profit. They believed that training would enable them grow their businesses. The respondents said they needed training to cover cooking and serving food for different functions like wedding ceremonies, parties and big events.

The women also expressed the need for training on how to do baking as majority of them were only skilled in cooking conventional food such as rice, stiff porridge, vegetables and more. They needed also training on how to cook traditional and international food including decorating of such food that would be served to visitors from abroad. The other training need they expressed included hospitality, good customer care and to be able to attract customers. One woman retorted:

[We need special training on cooking and decorating the food so that our business can grow just beyond cooking and include decorations to enhance the food tenders we

¹ TAKUKURU in full is Taasisi ya Kuzuia na Kupambana na Rushwa. Translated to mean Bureau for Prevention and Combating of Corruption

receive... food decorations are obtained from other sources by our customers. Training us in decorating food would help raise our income. FGD\CMMp-U-V-FGD 07]

The other training needs expressed by women involved included how to detect poultry diseases symptoms, treatment and chicken feed. Training on frequency of feeding the chicken, types of feeds for different age of chicken was also expressed. The women also expressed the need for training on modern ways of poultry keeping in order to improve chicken farming. These needs arose out of the challenge that most chicks did not survive as majority died after only a few days thus impacting negatively on income from the poultry business. One woman expressed her opinion saying:

[We need training on how to construct a poultry house, because iron roofed poultry houses we are using are believed to reduce number of eggs laid though this is not based on any proven science.]

The women expressed the need to visit other businesses within the country and the region to learn from the best practices on how to improve their businesses. They felt that visiting other well performing businesses elsewhere will open their eyes to learn more and expand their business beyond chicken rearing. Moreover it was stated that educating a woman would help raise family income and improve the living standards of the family.

Rural women in poultry business also expressed training need in modern poultry keeping (how to ensure chicks of good quality, how to prepare chicken feed, etc.). Most women shared their houses with chicken since they did not have resources to build chicken rearing sheds that would allow free movement of the chicks in a well aerated environment. The Figure 5.8 below shows some of the chicken reared by one of the women.



Figure 5.8: Local Chicken
(Source: Field data, 2014)

Furthermore three (33%) groups of kiosk business owners expressed the need for entrepreneurship information. They believed that entrepreneurship information was crucial to equip them with relevant skills of their jobs. Another three (16%) groups stated that, they needed information on how to get water since water was a scarce resource in their villages. Some women reported that they bought water at 500 to 700 Tanzania shillings for a gallon of 20 liters. With little rain and with taps often dry there need for help from government in this regard was expressed. They noted that sometimes they have to get water four kilometres away in a village called Udimamba. Moreover, lack of water also means they cannot cultivate vegetable gardens yet vegetables are important component of menu that customers prefer. Figure 5.9 below summarises the information needs of women involved in kiosk and poultry business.

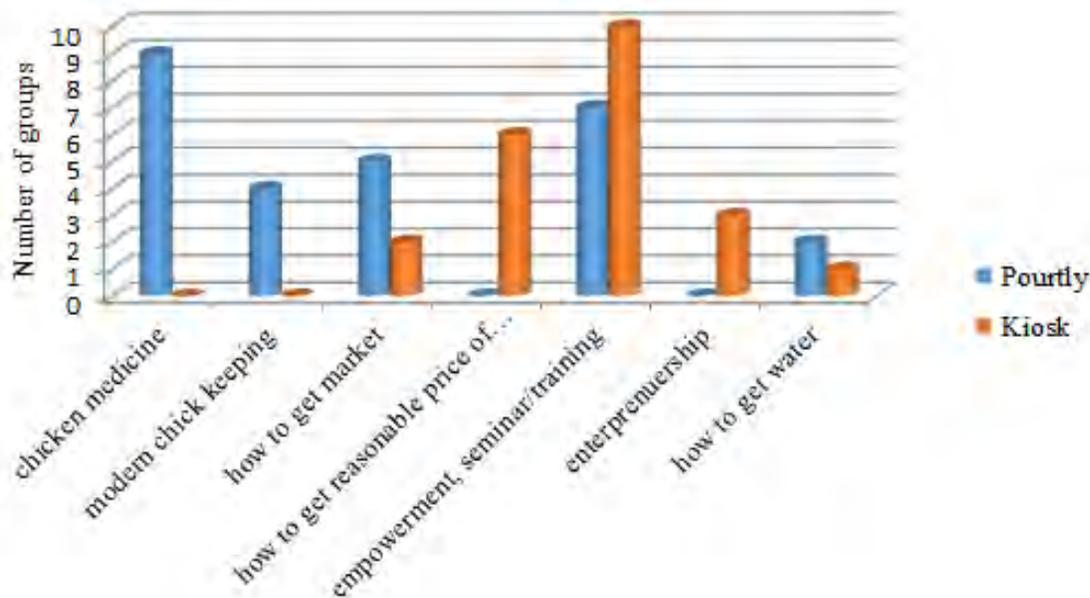


Figure 5. 9: Information Needs of Women Entrepreneurs (Kiosk and Poultry) (N=162)

(Source: Field data, 2014)

5.4 Channels of Communication

This section presents the results on channels of communication used by respondents when they seek and share or transfer information. Communication channel is a very important tool in facilitating the provision, access and exchange of information. Based on multiple response, results showed that 10 (100%) group leaders interviewed and 16 (89%) women groups pointed out that mobile phone was the main channel of communication despite the fact that not all of the group members owned mobile phones. The mobile phones were often shared to facilitate communication. The group leaders often delivered information face to face to those women without cell phones. It was reported that mobile phones were helpful as they saved travelling time. Mobile phones were also useful to the women because they used them to buy and get goods or commodities from the shopkeeper. They also used the mobile phone to find out the prices of goods from different supplies in town. The women also received business information from Community Development Officers, veterinary officers and from their group leaders occasionally through mobile phone.

The second most important channel of communication that was used by women was group meetings. Majority of the groups 15 (83%) usually held one day meeting in a week to discuss the progress of the business, receive important information concerning their business from their leaders, and exchange ideas on various family issues.

The other channel of communication that was identified by rural women as a means of communication was visitation to each other especially where the women did not have mobile phones. The visitation was useful in seeking and sharing information among the women. A testimony from one group leader is telling:

We inform one another by using mobile phones...and sometime we visit each other because we are all neighbours... in some instances we send people to those who do not have mobile phones... If they do not find them... they write a note and leave it at home... or if there is a child at home they leave the note with the child. Interviews\CMC-D-P-INT 02]

Two (20%) of group leaders indicated that sometimes they write a note in order to communicate with their group members. Leaders usually use this channel of communication to disseminate information which do not need conversation. For instance, informing the members to attend a meeting.

Respondents were asked if they used other technologies such as computers to seek and access information. Findings showed that all 162 (100%) women did not use computers to seek and access information. Very few respondents, three (2%) from different groups indicated that they knew the importance of the computer technology although they did not own or know how to use such computer. They pointed out that they needed computers to enable them maintain records about their business. Many reasons were given why the women did not use computers to seek and access information. Among the reasons included the fact that, computer is a new technology, they do not have money to buy them, they do not have skills, they just see them with young people (they thought computer is for the new generation technology), and for some computers were televisions. All in all majority of the women did not know that they can use the computer to

communicate. Table 5.3 shows the communication channels used by women involved in kiosk and poultry businesses. The findings are from multiple responses.

Table 5.3: Communication Channels (N=162)

	FDG %	INT	%	
Mobile phone	15	89	10	100
Talk to the group	15	85	8	80
Visit a friend/neighbour	8	44	6	60
Write a note	-	-	2	20

Source: (Field data, 2014)

5.5 Information Resources Used

The third theme focused on investigating information resources used to seek and satisfy information needs of rural women involved in SMEs. The question sought to the following questions what types of information resources are available that you use to seek information? What types of information sources satisfy rural women information needs? The results showed that rural women involved in poultry and kiosk businesses used both (formal and informal) sources of information such as information centres, livestock officers, friends, neighbour and group leaders.

The findings further showed that rural women involved in SMEs consulted informal information sources more than formal sources of information to satisfy their information needs. All 162 (100%) women sought information from among themselves - friends, neighbours, or group leaders. They also sought and shared information when they visited each other or when they met once a week in a group. Respondents also sought information through conversations and charting with friends.

5.5.1 Formal Sources of Information

This subsection provides results concerning formal sources of information resources used. Three (60%) of group leaders as well as more than half of the women groups, seven (78%) involved in poultry business mentioned livestock officer as a source of information they used. Rural women dealing with poultry sought and received information from livestock officers in various ways. For instance, if they needed any advice concerning poultry keeping they asked Village Executive Officer (VEO) to contact the veterinary officer to assist them. They sometimes acquired information from posters, brochures or leaflets from livestock officers. This implies that VEO is a link between rural women groups and livestock officers as well as Community Development Officers (CDOs).

Moreover, only one (5%) women group from Chamwino district used information centres as sources of information. In Chamwino district there were more than fifteen villages with information centres. These villages included Iloilo, Muungano, Handali, Higandu, Chinoje, Nghahelezi, Mnase, Mgunga, Ikowa, Makoja, Buigiri, Chamwino Ikulu, Majeleko, Chinangali and Manchali. On the other hand, there were no information centres in villages that were visited at Manyoni district.

As to why respondents had limited use of information centres, four reasons were given. The main reason was that most of the time information centres were closed, because there was no permanent person (except volunteers) who was responsible for providing services in the centres. Secondly most rural women were often busy and did not have time to visit the centres. Third, the centres were located far from where people lived and this made travelling and using the centres difficult. For example, in Chalinze village where most of small business groups are located the information centre is built near the main road (Dar-Dodoma) which is 4 kilometres far from the village.

Another reason why the information centres were hardly used by women entrepreneurs was because such centres lacked appropriate information materials. Findings further showed that most of the information centres had only magazines, brochures, and leaflets regarding health, political issues and laws. It was reported that information that they expected to get in the

information centres such as poultry keeping and cookery book was lacking. They felt that the information centres would probably be more used once their businesses grew bigger and attracted people from outside the region.

It would seem that women entrepreneurs did not know the importance of the information centres and they also did not have skills on how to use information centre. In Chamwino Ikulu village a woman noted:

[It is true that there is an information centre here... but we just see the sign board only that the centre exists... we have never been involved and do not even know what the centre does. FGD\CBC-CK 03:R3

Figure 5.10 shows one of the information centres which was open during the time the researcher was conducting focus group discussion at Iloilo village. This centre has only one shelf and most of publications in the information centre are pamphlets, magazines, brochures and very few books. The subjects covered in most of these publications include legal matters, political issues, health and gender.



Figure 5.10: Information Centre in Iloilo Village
(Source: Field data, 2014)

The Table 5.4 below shows some of the titles of the publications within the information centre at Iloilo village. All the titles housed at the centre are in the Kiswahili language to facilitate access by rural women.

Table 5.4: Titles of the Publications

-
1. *Sheria za urithi na sharia*
 2. *Ifahanu sharia mpya ya kuzuia na kupambana na rushwa*
 3. *Mimi na bajeti*
 4. *Sheria ya ajira na mahusiano kazini*
 5. *Rasimi ya katiba ya Jamuhuri ya Muungano wa Tanzania 2014*
 6. *Katiba ya Jamuhuri ya Muungano wa Tanzania 1977*
 7. *Mwongozo wa mafunzo ya utambuzi wa jinsia kwaajili ya waajili vyama vya wafanyakazi, NGO, CBO, na wanajumuiya wengine*
 8. *Sheria ya wanyamapori 2009*
 9. *Mambo muhimu kuhusu sharia ya mtoto Na.21ya mwaka 2009*
 10. *Kauli mbadala*
 11. *Silaha na umiliki wake*
 12. *Uzazi salama na wajibu wetu*
 13. *Uongozi na maendeleo*
 14. *Local voice and right in practice*
 15. *Kuelewa mchakato wa bajeti Tanzania*
 16. *Ahadi za serikali iv*
 17. *Yajue magonjwa yanayozuilika kwa chanjo*
 18. *Utaratibu wa kuanzisha vikundi*
 19. *Viashiria vya kijinsia*
 20. *Wanawake ni chachu ya maendeleo kumuwezesha mwanamke ni kuiendeleza haraka jamii*
-

(Source: Field data, 2014)

5.5.2 Informal Sources of Information

This subsection presents results on informal sources of information used by rural women entrepreneurs. The results showed that all 162 (100%) respondents sought information from among themselves - friends, neighbours, or group leaders. They also sought and shared information when they visited each other or when they met once a week in a group. Majority of respondents 135 (83%) also sought information through conversations and chatting with friends. Women who were dealing in food vending often visited and observed what their colleagues were doing in cooking and learned from them. They also asked each other where to find commodities with cheap prices. They also shared information on how to deal with their chickens when they were sick. One respondent had this to say:

[To be honest... in our village we do not have formal information sources... we are guided by ourselves using common sense. FGD\MMK-MP 05: R3]

Moreover, 62 (74%) women in kiosk business mentioned another information source as auctions and shopping areas. Usually rural women in SMEs sought information by passing in different shops (meat shops and markets) where they sold chicken and other food stuffs. For instance, they sought information about chicken sales from vendors (hawkers) who pass by the streets, and sometimes they followed them to their places to seek for information. It was also reported that, most of the information they sought was often inaccurate. Consequently they were ripped off especially when they sold their chicken low price only for the same chicken to be sold by the buyer at exorbitant prices.

5.5.3 Information Resources on Financial and Legal Advice

The study's findings showed that the main financial source of information was Rotating Savings and Credit Association (ROSCA) and Village Community Bank (VICOBA). These were followed by the financial institution such as Foundation for International Community Assistance (FINCA), Small Enterprises Agency (SEDA), and Promotion of Rural Initiative and Development Enterprises Limited (PRIDE). In addition, findings indicated there were very few women who mentioned CDOs, and Banks as sources of financial information. Findings further revealed that women were wary about borrowing from the banks because of high interest rates of between five to ten percent. With regard to information for legal advice, results showed that only a few women used ten-cell leader and local chairperson to seek for information on legal advice. The majority of respondents did not seek information on legal advice.

5.6 Skills Women have to Identify, Access and Use Information

This section presents findings about skills that women possessed for identifying, accessing and using information. Respondents were asked what skills they possessed to effectively identify and access information. Findings showed that apart from reading and writing more than half, six (60%) group leaders and 145 (89.5%) women did not have other skills for accessing and using

information. Three (30%) leaders stated that five years ago they were taught how to vaccinate their chicken, and one (10%) group leader explained that she was trained on how to access village information from their village notice board. Table 5.5 below summarises the results on this query. The findings are from multiple responses.

Table 5.5: The Skills Challenges in Identifying, Accessing and Using Information (N=162)

I do not have skills
I have never got training. It's our personal experiences only
I have never attended any training on how to search for information
I have never received any training on identifying and accessing information.
Honestly, we basically use our own experience.
We do things according to our experiences, we don't have skills
They do not have any skills on seeking information.
We have never been trained
We never had any training concerning information searching
I do not have any skills for finding information
We have never received any training, we do it locally
I do not have any skills for information searching and use.
In fact we are not very good in seeking information.
We do not have any skills that is why we are stuck when we are doing business
We have just local skills.
We have never trained and we do not have any skills
We do not have any skills of seeking information other than inquiring from the leaders and themselves

(Source: Field data, 2014)

5.6.1 The Role of Group Leaders in Identifying and Accessing Information

This subsection presents findings concerning the role of group leaders in assisting women entrepreneurs to identify and access information. The aim of this question was to probe if group

leaders made any contribution towards helping women entrepreneurs to access information. The findings showed that majority of group leaders did not have great role in assisting their members to access and use information. It was noted that eight (80%) of the group leaders acted as a link between members of the group to VEO and CDO. Their responsibility was mainly to communicate with VEO and or CDO to find solution about issues that were affecting women entrepreneurs well as circulating information to group members from the village leaders. One group leader stated:

[My responsibility is to communicate with the VEO to get the information to give my group members. Interviews\CMC-D-P-INT 01]

The statement above shows that group leaders did not have any great support in assisting group members to identify and access information. Their role was confined to receiving and circulating information from government officers and or village leaders.

5.7 The use of Available Information

This section presents findings about how rural women used the available information they sought. It was important to understand if the available information was appropriately used to assist women in their business. The findings revealed that, all 162 (100%) respondents shared the available information to carry out various assignments. For example, most of the poultry business groups shared knowledge on how to use traditional medicine to cure their chicken. On the other hand, kiosk business groups shared information on how to prepare food for different functions and groups of people.

5.7.1 Quality of Information

Qualitative aspect of information with regard to adequacy, currency and accuracy is crucial for decision making. Findings showed that the information available to the women entrepreneurs was not enough; it was often outdated and incorrect. For instance the women could be told by their leaders that visitors would be coming and were asked to prepare food and the like, but the visits would not happen thus occasioning them to lose income.

Occasionally, the information they got was not appropriate. For instance when they contacted the veterinary officer for help he may provide information or respond late. Similarly, a letter sent to communicate certain information urgently is delayed and delivered much later after the event has happened.

Moreover, respondents were quite concerned that in most cases, information they were given was not authentic. For example in 2014 the women were told to form groups and contribute Tsh. 40,000 [24US\$] each, so that each member would get a loan of Tsh. 400,000[240US\$]. This information turned out to be a scam. When time to receive loans came they each only got Tsh. 200,000 [120US\$] each. One respondent noted:

[In some cases the information communicated is incorrect...for example, one time we are asked not to store chicken medicine in refrigerator... but in our village several chickens died ... because they were vaccinated with medicines that were not stored in refrigerators. FGD\CMH-UP 03:R8]

5.8 Challenges Faced by Rural Women in Seeking Information

The study sought to determine the challenges faced by rural women when seeking information. This question intended to seek answers to: difficulties faced by women when seeking information; and how they overcome the challenges faced. The findings showed that 158 (97.5%) women mentioned inability to buy airtime for their mobile phones to communicate. It was reported that most of the time they failed to seek information on time because they did not have airtime in their mobile phones.

In another situation 87 (54%) respondents stated that, rural women were busy and did not have enough time to seek for information.

One responded noted:

[Usually I wake up at 5.00 am ... I wake up my children and prepare them for school... later I clean my house (sweeping and washing utensils). When I finish these activities I prepare tea and food for my business... I sell food until evening hours. The business

depends on the availability of customers... sometimes I sell until 10.00pm. Apart from this work I also take care of my children by showering them, cleaning their clothes, and fetching water... etc. (laughter) I have to perform all these tasks, they are my responsibilities. FGD\CBB-U-V-FGD 04]

Another respondent weighed in saying:

[Apart from poultry keeping, I sell burns, I wake up at 04.00 am and start processing the flour and by 6.00am I start burning them until 07.00am... When I finish burning them I start doing cleanliness inside and outside the poultry shade... Then I prepare tea, clean the utensils, and water my garden before I go to find the food stuff for lunch and dinner. I make sure that I have given food and water to the chickens. In the afternoon I inspect the poultry to know if they still have water and food... Then I go to find fire wood, and fetch water. In fact I have a lot of work to attend to; I do not have time to rest. FGD\MMM-M-P-FGD 03]

The testimonies above indicate that apart from small business they are doing, the women have a lot of work to accomplish at home. They pointed out that they do not have time to relax, because each day there are the first to wake up and there are the last ones to go to bed.

Furthermore, 71 (44%) entrepreneurs of both kiosk and poultry businesses do not know where to seek and get various information, since in their village they do not have information centres or libraries. Results showed that, when women needed information in their groups they went to VEO for help. Besides both districts had only one veterinary officer each and it is difficult to find them when you need help as they have a large area to cover. This sometimes results in the death of chickens.

Another challenge mentioned by 58 (36%) of the women was network failure that causes the use of mobile phones in seeking information difficult. As a result they fail to communicate and this affects business especially in securing tenders. Moreover, not all parts of Mpwayungu village for instance have network coverage. One has therefore to walk to certain places to make a call. The Chairperson of Upendo group explained during interview:

[The big challenge for us is communication... for instance when we get a message at the right time it is easy for us to order items from town... where at least the food materials prices are a bit cheaper for us to sell at profit. However when a message reaches us late we encounter a problem of accessing low foodstuff prices. This leads us to make little profit. So you can see that the earlier we do preparations for our businesses the cheaper we get our purchases]

Lack of electricity was another challenge stated by 49 (30%) of women. It was revealed that some of the villages where there was no electricity only very few women used solar power. This affected the charging of the mobile phones thus affecting communications. In case where solar power is available for charging the mobile phone, the charges are so high. For example, it costs 300 to 500 Tshs to recharge one mobile phone. In addition one has to travel from Kinyika village to Manyoni town which is 16 kilometres away just to charge a phone. Additionally, mobile phone recharge vouchers are unavailable in the village, when you find them they are sold at elevated price of 600 instead of 500, or 1,200 instead of 1,000 (Tsh).

Another 15 (16%) women entrepreneurs at Chamwino district stated that, they faced challenges when they sought information especially given that often the information centre is closed. Results showed that, the information centres were available in Chamwino district, but the big challenge was that they opened rarely. As to why information centres seldom open, it was said no staff are available to provide services at the centres instead they rely on volunteers. Furthermore, the information centres lacked relevant materials concerning SMEs especially poultry and kiosk businesses. The challenges facing kiosk and poultry business are summarised in Figure 5.11 below.

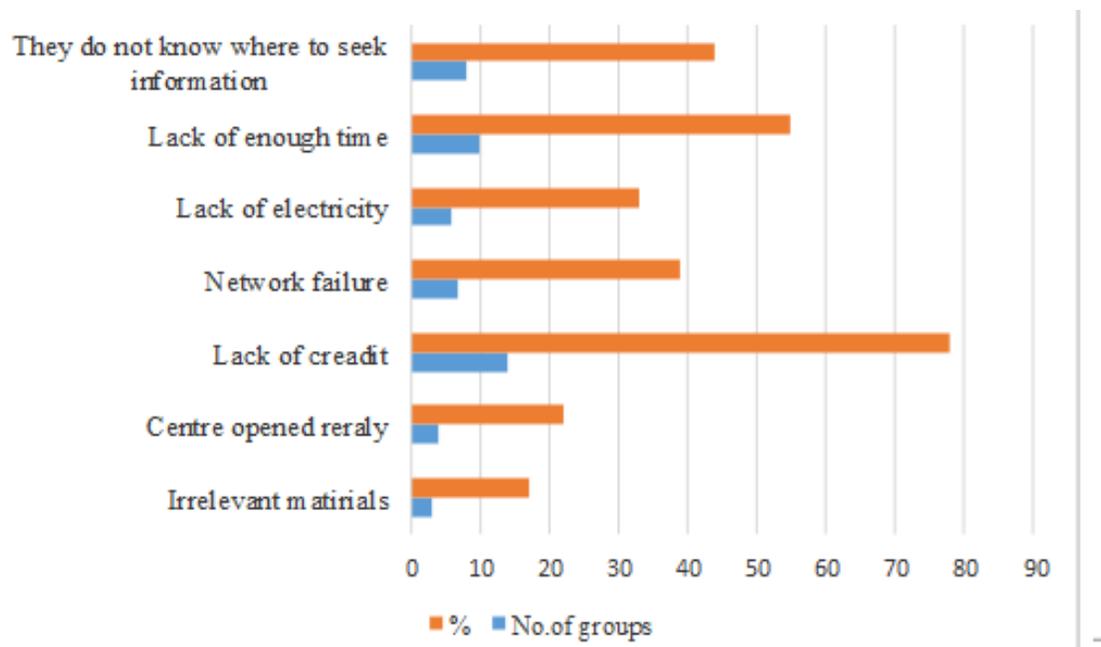


Figure 5.11: Challenges Faced by Women when Seeking for Information (N=162)
(Source: Field data, 2014)

5.8.1 Suggested Solutions to Address the Challenges Facing Women Entrepreneurs

Respondents were asked to make suggestions of how the challenges discussed above could be resolved. The aim of this question was to understand what rural women think should be done to reduce if not to eliminate challenges they encounter. Findings revealed majority of respondents needed to be empowered, in terms of being provided capital, loans of low repayment interest and training. Women entrepreneurs believed that low interest loan would enable them grow their businesses. They also believed that education on how to run their business would enable them to advance their business.

Secondly, 32 (48%) respondents from 67 in Manyoni district suggested that government should build information centres. While 51 (31%) in both districts suggested the government should provide information materials on SMEs written in Kiswahili language and in simple format. Moreover qualified people should be employed to provide the information for them to access accurate, and sufficient information to grow their business. Third, 32 (22%) of the women entrepreneurs suggested that, government should build infrastructure such as roads, electricity in rural areas. Rural women involved in kiosk and poultry believe that the traveling cost will be

reduced if the government build road infrastructure. Moreover, 21 (13%) of respondents asked that the government should provide electricity in their places of business to lower communication costs. Six (6%) of women in Chamwino suggested that the village office should be open all the time, and village meetings be held frequently at least once in every three months. It was also proposed by 10 (10.5%) women doing kiosk business at Chamwino district that the district officials should enable them secure tenders for cooking during government events.

5.9 Summary of Findings

This chapter analysed and presented findings of the current study. The findings revealed that the general information needs of rural women involved in SMEs include; business information needs, channels of communication, information sources/resources; skills needs to identify, access and use information, the use of available information.

The findings revealed that the ages of respondents involved in these two businesses in both districts (Chamwino and Manyoni) ranged from 18-65 years. The most common age was 31-45 for 90 (55.5%) of women, followed by those in 18-30 years who were 51(32%). Results showed 19 (12%) entrepreneurs were aged 45-60 and only two (1.2%) women were aged 61 and above. This chapter illustrated that among the one hundred and sixty two (162) respondents, over half of them 128 (79%) had basic education (standard one to seven), 18 (11%) had never attended school, 13 (8%) had attended form one to form four, and only three (2%) had college education.

Moreover, more than half 98 (60.4%) of women entrepreneurs in both business (kiosk and poultry) were single, followed by 50 (30.8%) who were married. Findings also showed widowed women were 10 (6%) and only four (4.2%) were divorced. Further, the findings showed more than three quarters 148 (91%) of entrepreneurs had limited business experience of between one to seven years, followed by six (4%) who had experience of 21 years and above, five (3%) had 8-14 years of experience and three (2%) had 15-21 years of experience in business. In addition, eight (44.4%) groups had 10 members in each group, followed by three (17%) groups with 12 entrepreneurs, and another three (17%) groups had 15 members. The other four remaining groups had different numbers in each group of 18, 20, 25, and 30 members respectively. The findings revealed that poverty was a major motivation for establishing SMEs groups by women in the two districts.

The findings indicated that all respondents needed information concerning family care, getting food, shelter, clothing, and school fees for their children, treatment as well as domestic hygiene. For poultry entrepreneurs information on chicken medicine was considered vital all five (100%) group leaders and nine groups. With regard to information needed by kiosk business five (100%) leaders supported and six (66%) groups needed information on where to get reasonable price of goods such as rice, cooking oil, wheat flour, beans, beef, sugar and charcoal/ fire wood.

The findings based on multiple responses revealed that 10 group leaders (100%) and 16 (89%) groups respectively mentioned that mobile phone was the main channel of communication, followed by 15 (83%) groups who mention weekly meetings. The other channel of communication that was identified by rural women was visitation to each other. Therefore rural women involved in poultry and kiosk businesses used both (formal and informal) sources of information. This result concurs with Wilson 1981 model which states that in order to satisfy the need, the user makes demands on either formal or informal information sources. The findings also revealed that apart from reading and writing six (60%) group leaders and 13 (72%) groups did not have other skills for accessing and using information.

Several challenges were identified that faced the women. For example 158 (97.5%) women from 14 (78%) groups mentioned difficulties of communicating with mobile phones due to lack of airtime and poor network connectivity. Other challenges included limited time to seek; lack of knowledge where to seek and get various information; information centres remaining closed. As to how these challenges could be addressed, the respondents suggested that they should be empowered through training; government should provide them with start-up capital or low interest loans. The next chapter (Chapter Six) discusses and interprets the research findings.

CHAPTER SIX

DISCUSSION OF THE FINDINGS

6.1 Introduction

This chapter discusses and interprets research findings presented in chapter five. The purpose of the discussion chapter is to explain the meaning of findings and why they are important, without appearing arrogant condescending or patronizing (Hess, 2004). The current study investigated information behaviour of rural women involved in Small and Medium Enterprises (SMEs) in Chamwino and Manyoni districts of central Tanzania. The study sought to address the following research questions:

- 1) What is the information behaviour of rural women involved in SMEs?
- 2) What channels of communication are used by women to seek information to meet their business needs?
- 3) What information resources are used to seek and satisfy their information needs?
- 4) What skills do women have to effectively identify and access information?
- 5) How is the information sought by women involved in SMEs used?
- 6) What challenges are faced by women in seeking and using information?

The chapter is organised around the themes of the research questions and key variables of information behaviour models theoretical lenses that have been used to underpin this study. The discussion of these aspects is preceded by demographic profile of respondents. This chapter discusses and interprets the findings, using relevant literature. This chapter discusses findings on the demographic profile of respondents, age of respondents; education level of respondents, marital status of respondents, length of work experience in business, registration status of the women groups; number of entrepreneurs in each women group, motivation of establishing SMEs by women groups, and Poultry and kiosk business. The other themes covered in this chapter include: information needs of rural women involved in SMEs, information seeking; channels of communication, mobile phones, group meetings visitation and note writing, information resources used, formal information sources, reasons of limited use of formal information resources, information resources on financial and legal advice, skills women have to identify

access and use information, use of available information, challenges faced by rural women in seeking information, interventions to address the challenges facing women entrepreneurs and summary.

6.2 Demographic Profile of Respondents

This section provides discussion of the demographic profile of rural women from two businesses (poultry and kiosk) in Chamwino and Manyoni districts. The demographic profiles discussed include age, education level, marital status, the group's length of experience in conducting business, registration status, number of respondents in each group, as well as motives of establishing SMEs by women groups.

6.2.1 Age of Respondents

The aspect of age was studied because it was thought to have an impact on the involvement of women entrepreneurs in SMEs especially with regard to seeking and using sources of information.

The findings revealed that the age of rural women in the SMEs sector ranged from 18 to 65 years. Specifically, results indicated that among 78 rural women involved in poultry business slightly more than a half 41 (52.5%) were under the age of 31 to 45 years and only two (2.5%) were aged 61 and above years. Furthermore, findings showed that among 74 rural women conducting kiosk business, more than half 49 (66%) were between the ages of 31 to 45 years as depicted in figures 1 and 2 respectively of this thesis. Therefore, the common age of rural women involved in Poultry and kiosk business was 31 to 45 years.

These results concur with those of Mchombu (2000) who in a study of information needs of women in small businesses in Botswana, found that the majority were relatively young in the age category of 25 to 55 years while only 3.5% of were above the age of 55 years. Similarly, Lwoga, Ngulube and Stilwell (2010) in their study examined information needs and information seeking behaviour of small-scale farmers in Tanzania, and found that the mean age of the respondents was 48. In addition, almost three quarters of respondents (74.6%) were between the ages of 29

and 68. In the same vein Savolainen (1995:270) in a study on everyday life information seeking among industrial workers found that the age of the informants varied from 29 to 61 years; while the mean age was 48. Therefore, the majority of informants were in the middle-age category. In a similar way Lwoga and Norbert (2012a) in a study of information seeking behaviour of physician in Tanzania, revealed that most respondents were aged between 21 and 30, followed by those respondents with ages 31–40, and those of ages 41–50 (7%), few respondents were aged above 51 years (1.9 %). Otike (1999:30) in a study to investigate the information needs and information habits of lawyers in England found that all participants were above the age of 30. Gundu (2006) found that (87.5%) of black women entrepreneurs in Kariba were less than 50 years old.

From the foregoing discussion, it would seem majority of women entrepreneurs involved in SME businesses are of middle age and are actively involved in seeking, accessing and sharing information with other entrepreneurs within and outside the group.

6.2.2 Education Level of Respondents

The education of the respondents was thought to have an impact on information seeking, sharing, and use. The findings revealed that historically most women in the villages that were investigated did not get a chance to pursue further education (secondary, college or university education) but stayed at home to cultivate the fields, look after children and cook for the family. For those who had primary education it was reported that, majority of them were distracted from continuing with their secondary education due to pregnancy or early marriage. In addition parents did not invest a lot in girl's education than they did for boys. Education level of majority of rural women in the study varied from those who had never attended school to those who had college level of education. Results further showed that more than three quarters of women entrepreneurs 128 (79%) had basic education (standard one to seven).

These findings concur with those of Bernard, Delle and Ngapala (2014); Lwoga, Ngulube and Stilwell (2010); Mtega (2012); and Mchombu (2000) which indicate that majority of women involved in SMEs were generally literate since they had primary, while very few had tertiary

education. Dutta (2009) cited in Siyao (2012:4) in his study about barriers accessing agricultural information in Tanzania with a gender perspective, found that lack of education was the primary obstacle to meet information needs of the working poor in developing countries. The National Strategy for Growth and Reduction of Poverty (NSGRP) (2005) explains that illiteracy remains high in Tanzania with, about 28.6% of Tanzanians not able to read and write in any language. Moreover, there is more illiteracy among women at 36% than men at 20.4%.

Odini (1995) in the context of Kenya found that the level of illiteracy was very high, especially in the rural areas, where 80 per cent of the population lived. He concluded that illiteracy remains a major hindrance to information use in the country among the rural poor especially women. Similarly, a study carried out by United Nations (UN) (2005:9) found gender inequalities in access to education in rural areas of developing countries. Moreover, approximately 60 per cent of the illiterate people in the world are women, with only 69 per cent of women over the age of 15 being literate, compared to 83 per cent of men (UN, 2005:9) The low education level of rural women involved SMEs business decreases their ability to seek, and use information in their business.

6.2.3 Marital Status of Respondents

The findings revealed that more than half 98 (60.4%) of women entrepreneurs in both business (kiosk and poultry) were single, 10 (6%) were widowed and four (4.2%) were divorced. This implies that majority of rural women involved in SMEs businesses are responsible for providing large part of their income to support themselves and their families. These findings concur with those of Mulder, Shellenberger, Streiegel, Jumper-Thurman, Danda., ... and Hager (2009) which revealed that the women are heading 46% of rural households, and among these families 27% are living below the poverty level compared to 9% of male-headed rural families in rural America. Often such women are sole households' heads. Mchombu (2000) in a study done in Botswana on information needs of rural women found that 65.5% of women were single (divorced, widowed and separated). In contrast a study by ILO (2003) in big cities in Tanzania showed that most of the women entrepreneurs 63% were married while 25% were single and 19% divorced respectively. The ILO study covered 128 women entrepreneurs from three big cities in Tanzania.

This difference with the results of the current study may be attributed that the geographical coverage were different, i.e. urban and rural respectively.

6.2.4 The Length of Work Experience in Business

Business work experience in such areas as searching for market information, pricing of the products and accessing funds matter contributes a lot to the success of a business. Abor and Biekpe (2009) state that long business experience and size of the firms are very important factors in influencing SMEs' access to finance. Often newer and smaller firms are discriminated against when applying for external finance.

The findings of the current study showed that, only three (2%) of respondents had high business experience of 15 to 21 years, while over three quarters 148 (91%) of entrepreneurs had low business experience of one to seven years. These findings concur with those of Mfaume and Leonard (2004) in their study about small business entrepreneurship in Dar es Salaam-Tanzania. They found that more than a half of respondents (57%) stayed in entrepreneurship for one to five years. Onugu (2005) in discussing problems and prospects SMEs in Nigeria found that majority of the firms die within their first five years of existence, another smaller percentage goes into extinction between the sixth and tenth year, thus only about five to ten percent of young companies survive, thrive and grow to maturity. Otike's (1999) study also found that, half of respondents had less than six years' experience, most of which were in the age of 21 to 30. The remainder had six to 20 years' experience. These findings seem to suggest that majority of rural women entrepreneurs tend to have limited business skills and capital which hinder growth and long term sustainability of their small business.

6.2.5 Registration Status

Registration is one of the most important criteria that is used by the government of Tanzania to recognize the formal status of an SME. Registered SMEs of women entrepreneurs enjoyed certain benefits such as getting tenders from government to supply cooked food, participating in

business social forums, accessing knowledge from experts; and being visited by guests from within and outside the country for the purpose of learning.

The findings showed that all seven visited women business groups in Manyoni district were registered, while in Chamwino district among eleven visited groups eight of them were registered. The main reason reported by the group leaders as to why in Chamwino district some women groups were not registered was that, the groups had only been recently formed and were still in the process of being registered. Chamwino is a newly established district compared to Manyoni district.

6.2.6 Number of Entrepreneurs in each Women Group

The United Republic of Tanzania (URT) (2002) defined SMEs as a business that is privately owned or operated with a small number of workers and has relatively low quantity of sales. The government of Tanzania classifies business firms (including SMEs) as follows: Micro enterprises, one to four employees with an annual turnover of five Million Tanzanian shillings (Tshs). Small enterprises, five to 49 employees with an annual turnover of Tsh 5 Million; Medium enterprises, 50-99 employees with an annual turnover of Tsh 200 Million; Large scale enterprises, have over 100 employees with annual turnover of Tsh 800 Million. Similarly, the government of Uganda classifies SMEs as business firms employing five to 50 people (small scale) and 51 to 500 people for medium scale enterprises (Okello-Obura, Minishi-Majanja, Cloete, and Ikoja-Odongo, 2008).

The findings of the current study showed that among 18 visited women SMEs groups in both districts (Chamwino and Manyoni) eight (44.4%) had 10 members in each group. This was followed by three (17%) of groups which had 12 women in each group, and another three (17%) had 15 members in each group. Results showed that the other remaining four groups had 18, 20, 25, and 30 members respectively in each group. One of the group leaders of Dira yetu reported that her group had two sub groups because its membership had reached 50. However, it was found that only two (11%) of the groups had more than 24 members each. Nevertheless, there

was good representation of respondents in each group, since in most of the groups more than half of the women participated in the study.

6.2.7 Motivation of Establishing SMEs by Women Groups

Motivation refers to reasons that underlie behavior that is characterized by willingness and volition. Intrinsic motivation is characterized by personal enjoyment, interest, or pleasure, whereas extrinsic motivation is governed by reinforcement contingencies (Lai, 2011:2). Motivation within individuals tends to vary across subject areas, and this domain specificity increases with age (ibid). It was assumed that most of the SMEs groups formed by women emanate from a certain motive(s). Respondents were asked to state the motive behind the establishment of their groups. Findings showed that poverty was a major motivation for establishing SMEs groups by women in the two districts studied. The respondents also explained that because of their limited education, they could not gain access to formal employment in government or private sector. They were also motivated into SMEs by the need to raise income to assist them pay fees for their children, buy food, clothing and medicines for their families. Some respondents indicated that they could not depend on their husbands for livelihood because such husbands often did not want to take parental responsibility.

Kamanzi and Namabira (2013) found that the common answer when women were asked why they engaged in SMEs their common answer was that they needed to feed the family and take the children to school. This was contrary to the finding by ILO (2003:19) that most of the women entrepreneurs were engaged in business as a way of creating employment for themselves. Other motivations why women engaged in SMES included supplementing income, security, and enjoyment of the work they were doing, to use their competencies, and do business as a hobby. Similar findings were reported by Makombe (2006) that women started business, to earn income after retrenchment or wean themselves from depending on their husbands. Other women as reported by Makombe started a business in order to assist their husbands financially. Makombe (2006) observed the women acknowledged that but wife and husband should be breadwinners. Osman *et al* (2011) asserted that majority of women are inspired by the “pull factors” such as personal satisfaction and business passion as opposed to the “push factors” -economic

depression, unemployment and dissatisfaction with former jobs. The majority in this current study found that poverty was a major motivation for establishing SMEs groups by rural women.

Poverty at the broadest level can be conceived as a state of deprivation prohibitive of decent human life (URT 1998). According to the National Poverty Eradication Strategy (NPES), poverty is caused by lack of resources and capabilities to acquire basic human needs as seen in many, but often mutually reinforcing parameters which include malnutrition; ignorance; prevalence of diseases; squalid surroundings; high infant; child and maternal mortality; low life expectancy; low per capita income; poor quality housing; inadequate clothing; low technological utilization; environmental degradation; unemployment; rural-urban migration; and poor communication (URT, 1998:1). Moyo (2013) noted that poverty among women denied them to access productive resources which are critical to other life opportunities.

A study by NSGRP (2005:4) found that the prevalence of income poverty was still high in Tanzania. According to the Household Budget Survey of 2000/01 the proportion of the population below the national food poverty line was 18.7 percent and below the national basic needs poverty line was 35.7 percent. Mulder *et al* (2009) explain that in general, the rural economy tends to be unfavourable to women, who head 46% of rural households. Moreover, 27 per cent are living below the poverty level, compared to nine per cent of male-headed rural families. Further, the findings indicated that poverty manifested in major two areas for women, limited education and the burden of caring for their families in all services. Limited education of rural women leads to their lack of government jobs. These results confirm the findings by URT (1998:2) that one of the signs of poverty in Tanzania was the low level of literacy and numeracy which then was estimated to be 68% down from 90% achieved in the 1980s. The findings also concur with the study by Ndenje-Sichalwe (2004) that some of business women in Tanzania did not understand English language which is the most used in books and newspapers. Siyao (2010) in a study about agricultural information need and information seeking behaviour of small-scale sugarcane growers in gender perspectives in Tanzania found that females were underprivileged attendees of farming association meetings by fear of or inability to ask questions to others. Mfaume and Leonard (2004) noted that majority of women entered SMEs because they do not have adequate education background and therefore cannot find other paid job. URT (1998:4)

observed that high incidence of unemployment among women was among key distinguishing features of poverty.

NSGRP (2005:9) noted that there are few economic opportunities in rural areas, reflected rather as underemployment than unemployment in Tanzania. Such unemployment stands at 2.3 million (1.3 million women and 1.0 million men) equivalent to 12.9 percent of the labor force. Employment to-population ratio (the proportion of the target population that is employed) is 76 percent nationally. Furthermore, the ratio is lower in urban areas (58 percent) than in rural areas (81 percent). Fischler (2006:3) decried unemployment of women in rural areas. The findings quoted women involved in SMEs as expressing concern that they bore the burden of caring for their families in all services such as paying school fees, buying food, clothing, medicines, etc. Policy on Women in Development in Tanzania (1992) noted that women in Tanzania especially those living in rural areas had multiple roles and heavy workload. Consequently, they did not have adequate time for resting or for self-advancement and recreation. URT (1998:6) found that poor division of labour between men and women at the family level especially in rural areas was another cause of poverty. Women shouldered most of the work, a situation which led to low income hence perpetuating poverty. Moreover, in most work places many women are employed in low paid position.

The UN (2005:8) found that women who are seasonally employed by the fruit export industry in Chile increased their visibility in terms of their contribution to the household income and benefit from independent access to income. However, the potential for a more enduring change in terms of the division of labor in the household is circumscribed by the fact that women are only seasonally employed and revert to their traditional roles as wives and mothers in the off season. In addition the study found that even when they are earning wages, women retained the primary responsibility for domestic work. Maziku, Majenga, and Mashenene (2014) in discussing the effects of socio-cultural factors on the performance of women Small and Medium Enterprises in Tanzania recommended that “education should be provided to both women and men to enable them contribute nation development.

6.2.7.1 Poultry and Kiosk Business

It was also important to understand why majority of rural women in Chamwino and Manyoni districts engaged in poultry and kiosk businesses. The findings showed that, these businesses were easier to establish and manage for women. Women seemed to have the trust of shop owners from whom they could borrow foodstuffs (rice, cooking oil, wheat flour, maize flour etc.) cook and sell and repay back the shop owner. Similarly, for the women involved in poultry business, they earned the trust of the shop owners who could take chicken on credit and repay the debt after selling eggs from chicken or the chicken itself and repay back the money to the owner. The rural women also chose these businesses because they could effectively combine them with their family responsibilities. For example, they could work from home while taking care of their families at the same time.

Besides, a capital constraint facing rural women was a major reason why they opted for kiosk and poultry businesses. Smallbone, Baldock and North (2003:828) asserted that any business requires access to resources such as finance, management skills, labor, premises, information, and competencies. In Zimbabwe, Manyani (2014) in a study revealed that the financing options available to Bindura SMEs were impracticable to support the capital required for their operation because of stringent requirements and lack of collateral security. Similarly, Katega and Lifuliro (2014) in his study conducted in Dodoma Tanzania found that factors affecting the performance of non-farm activities included inadequate capital, lack of business education, poor business premises, inefficient transport to and from markets, women household gender roles, inadequate labor and illness incidences. The Small and Medium Enterprise Development Policy observes that generally, SMEs are confronted with unique problems including heavy costs of compliance resulting from their size, insufficient working premises and limited access to finance (URT, 2002).

ILO (2003) revealed that women entrepreneurs in Tanzania faced a number of constraints in starting their businesses. In the current study, more than a third of the respondents cited difficulties associated with access to markets due to competition and limited local demand for their products or services. At the same time about 11 per cent cited lack of capital or finance as a constraint. Tanzania Chamber of Commerce Industry and Agriculture (TCCIA) (2007) noted that

demand for finance is unlimited and lack of it is a major obstacle. Olomi (2006:2) added that, the main issues affecting market access include a public procurement system which make it very difficult for SMEs to access it; product standards which are out of reach of most micro and small enterprises, and limited access to finance. Bouri *et al* (2011:9) noted that financial constraints were higher in developing countries in general, and consequently SMEs were particularly constrained by gaps in the financial system such as high administrative costs, high collateral requirements and lack of experience within financial intermediaries. Olomi (2006:15) found that access to finance remained a serious problem for women in rural areas. This is exacerbated by long distances to financial institutions, delivery models which are unsuitable to rural sparsely populated and seasonal income earners and small loans sizes.

6.3 Information Needs of Rural Women Involved in SMEs

Understanding information needs of rural women involved in SMEs was considered important in this study as this would inform interventions for information provision and relevant policies needed for the development of small businesses. Nicholas and Herman (2009) and Dorner, Gorman and Calvert (2015) pointed out that the success of individual in meeting their primary need is dependent on them meeting their information need. In the current study it was challenging to isolate clearly the information needs of rural women entrepreneurs, as they perform several activities simultaneously and consequently their information needs change with time. Krikelas's 1983 model of information seeking asserts that understanding nature of need is very essential in providing information to the user.

All respondents (poultry and kiosk) said they needed information on family care issues such as getting food, shelter, and clothing, school fees for their children, treatment and domestic hygiene. Only three (16%) of the women groups stated that, they needed information on how to get water. These findings concur with those by Bakar (2011) that rural women in Malaysia highly needed information on child education, religion and food as well information on health services. Likewise, Mooko (2005) from the context of Botswana found that information needed by women who lived in rural areas depended on the family situation. The most situations that led rural women to seek for information were home-based care and health service for their family members.

Blessing (2007) in a related study found that information about children and family relationship was needed by 78.5% of respondents, as well as information on health 65%, housekeeping and house holding maintenance 43.5%. The related studies seem to suggest that women irrespective of where they live (country, urban or rural) they all need information about family care. Besides the need for information on family care, rural women needed information to accomplish their daily activities. Women entrepreneurs (poultry and kiosk) in this current study needed information about chicken medicine, how to access low-interest loans and capital, market prices, training, as well as entrepreneurship. These results concur with literature reviewed in the current study (Odini, Otike and Kiplang'at, 2012; Mtega, 2012; Isowe, 2007; Ndenje-Sichalwe, 2004; Njoku, 2004) which found that the various information needs were influenced by the nature of business that women were engaged in. Kamuzora (n.d:3) asserts that women have a need for capital to start their businesses like other investors. Mutula and Brakel (2006) in a study of e-readiness of SMEs in the ICT sector in Botswana pointed out that, there was a great diversity of information demand by SMEs that included information for marketing, training opportunities, credit, supplier prices, enhancing business growth and start up small business. In another related study by Mutula and Brakel (2006) they found that a great diversity of information demands needed to be fulfilled by SMEs. The information was needed on enhancing business growth, starting up small businesses, licensing, tenders, taxation and tariffs; productivity, sales, marketing, distribution, export, training opportunities, credit, potential investment opportunities, market trends, new products, viable business projects, supplier prices, customers, consumer needs, and legislation and judicial decisions.

The information needs of entrepreneurs above are generally consistent with those reported by Okello-Obura (2007). Okello-Obura (2007) found that SMEs in Northern Uganda needed information on finance, capital, loans; business managerial skills, local markets, business competitors, security; appropriate technologies, business law and taxation, trade fair, tenders, and contracts; governments policies and regulations; international markets and foreign exchange as well.

6.3.1 Information Seeking

Information seeking is considered a sub-set of information behavior (Wilson, 1999). Johnson's (n.d) model describes information seeking as actions of searchers that involve channels and sources also imply processes, feeling, other behaviour and cognitive elements. Leckie *et al.*, (1996) model of information behaviour assumes that information-seeking is related to the performance of a particular role and it is associated tasks.

The findings in this study revealed that majority of rural women did not seek for information because they did not have enough time. The findings are not surprising since women in developing countries have challenges with regards to time management because of their multiple roles in society (Moyo, 2014). Similarly, IFC (2007) in discussing the voice of women entrepreneurs in Ghana found that 57 percent of the respondents thought it more challenging as a woman business owner to balance business and family commitments. Women entrepreneurs in Ghana explained that biggest challenges were balancing their home or work life and spending enough time with their family, especially when their children were much younger.

Apart from challenges of limited time, there are several factors that affect individual's information seeking behaviour. Study by Gureshi, Iqbal and Bashir Khan (2008) revealed that the leading factors that have significant effect on student's behaviour are educational and cultural background, surrounding environment and student participation. They asserted that if the surrounding environment is helpful and student participation is active, then it will create culture that enhances the students' information gathering system.

In addition to inadequate time to seek for information, the current study reveals that majority of the rural women entrepreneurs acquired information accidentally rather than by purposefully seeking it. This finding confirms Wilson 1981 model of information behaviour that information need is not a primary need but secondary need. Findings further revealed that some of rural women entrepreneurs sought information but failed to access it due to the various reasons such as limited education, lack of enough time, and unawareness of where to seek for information. Kiondo (1998) in her study revealed that the main obstacles to rural women's access to information included workload, customs and traditions, attitude of information provider, non-

availability of audio-visual and printed sources, low income and relatively low education level of rural women. Likewise, Ndenje-Sichalwe (2004) also found that time constraint hinders women entrepreneurs from accessing information.

Wilson 1981 model states that in the effort to discover information need the enquirer is likely to meet with difficulties of different kinds. Additionally Wilson 1996 model emphasizes that, “if information needs are to be satisfied, three relevant theoretical ideas must be present namely; stress/coping -which offer possibilities of explaining why some needs do not invoke information seeking behaviour; risk/reward - which may help to explain sources of information that may be used more than others by a particular person; and social learning - which embodies a concept of self-efficacy”.

Wilson 1996 further points out that information seeking barriers can be psychological (mind, emotional and mental), demographic (human population such as births, deaths, wealth, diseases, age, gender etc), roles related or interpersonal (the type of work one plays for example teacher, librarian, entrepreneur, peasant), relationship or communication (between people), environment (condition or area around the people) and source characteristics (electronic or print).

6.4. Channels of Communication

Communication channels are very important tool in facilitating the provision, access, exchange or sharing of information. In this regard the Wilson’s nested model states that information behaviour is a part of human communication behavior. This model therefore, has been used in the current study to enhance understanding of the relationship between information-seeking behaviour and channels of communication as well as information sources. Notwithstanding the fact that not all of the group members owned mobile phones, results showed that 10 (100%) group leaders interviewed, supported by 16 (89%) of women groups mentioned that mobile phone was the main channel of communication followed by group meetings and visitations. Findings further showed that the group leaders often communicated by writing a note as well.

Okello-Obura (2007) in a study of business information system design for Uganda’s economic development found that the means of access to business information used by respondents were

telephone, discussion with business colleagues or customer, listening to radio broadcastings, public notice board, e-mails, listening to and watching television broadcastings, communication at conferences, using internet, visiting library and information centres and reading information sources, as well as listening to politicians. Mutula and Brakel (2006) found that the means of disseminating information by SMEs were memos, staff meetings, workshops and personal visits. They also found that information dissemination was achieved through a combination of methods, such as: e-mail; memos; staff meetings; departmental heads; newsletters; annual reports; websites; intranets; workshops; trade catalogues; and personal visits. They pointed out that the reliance on various means of disseminating information was attributed to the fact that no single method was considered sufficient, perhaps due to the diversity of information needs.

6.4.1 Mobile Phones

Mobile is a word from Latin *mobilis*-“to move” “able to move freely or easily” (Sharon, (2007:4). Sharon defines mobile device, mobile wireless, or cellular phone as a portable, handheld communications device connected to a wireless network that allows users to make voice call, send text messages and run applications (Sharon, 2007:5). The findings showed that mobile phone was a major communication channels used by rural women entrepreneurs in Chamwino and Manyoni districts in both kiosk and poultry businesses.

The findings concur with those of Lwoga (2010) in her study which revealed that cell phone was becoming popular for farmers to communicate with tele centres operators in case of emergency or advice concerning farming activities. Another study on information behaviour of health-care of home based elderly people in Nakuru district in Kenya by Khayesi (2011) found that, cell phone, professional’s health care service, women groups, religious meetings, agricultural shows and Internet were used to receive information for geriatric care. Similarly, Lwoga, Stilwell, and Ngulube (2011) found that cell phone and radio were also used as communication channels by farmers in Tanzania. In relation to Johnson model (cited in Case, 2002) points out channels of communication are selected on the basis of their match with the seeker’s needs as well as expectation concerning satisfaction to be obtained. Mobile phones are helpful communication

tools for women entrepreneurs because they save travelling time and in addition do not need high level of skills to use.

6.4.2 Group Meetings Visitation and Note Writing

Meetings and visitation allow interaction between people working in a group. The study's findings showed that group meetings 15 (83%) and visitation were cited as important channels of communication for women entrepreneurs. The findings from interviews showed that few group leaders of the women group preferred to communicate by writing a note, or by sending a text message especially when there was no need for clarification. Ndenje-Sichalwe (2004) also agreed that the important means of transmitting information to women involved in SMEs were regular meetings, training and seminars/workshops. The study by Kiondo (1998) about access to gender and development information by rural women in Tanga region, Tanzania found that, "rural women perceived demonstration and group discussion to be the most effective channels of communications followed by face to face communication and tradition media (songs and dance)".

Krikelas's 1983 model of information seeking states that the act of disseminating messages may be achieved in various ways (written, verbal, and visual). Krikelas pointed out that individuals are usually senders and recipients of the information. Wilson 1981 model of information behaviour asserts that, in order to satisfy the need, a client makes demands on either formal or informal information sources through communication channels. Moreover, the information perceived as useful may also be passed to other people, by the person seeking the information.

6.5 Information Resources or Sources Used by SMEs

It was assumed that access to and use of information among women in SMEs depended on the availability of information resources. Wilson 1981 model of information behaviour posits that in order to satisfy the need, user makes demands on either formal or informal information sources. Similarly Krikelas's 1983 model of information seeking states that in order to meet information

need the seeker is assumed to choose information sources which according to Krikelas can be internal (oneself) or external (other people) (Case, 2002).

The findings of the current study showed that rural women involved in SMEs consulted informal than formal sources of information to satisfy their need. Similarly, Siyao (2010) found that both (formal and informal) sources were used by Small Scale Sugarcane Growers (SSSG) as a source of information. Likewise, Lwoga, Stilwell and Ngulube (2011) found that the major sources of information for farmers were neighbours, friends and family, followed by public extension services. Mutula and Brakel (2006) sources of information used by SMEs in Botswana among others were brochures, visits to relevant office and training seminars. Okello-Obura (2007) in the context of Uganda observed that small and medium enterprises in Northern Uganda preferred to use radio stations, newspapers, personal contacts such as entrepreneurs and friends, extension workers, printed sources like trade literature, journals, and reports, private sector consultancy, Uganda government departments, banks or other financial institutions, television stations, industrial or trade associations, internet sources as well as libraries, telecentres and resources centres as a sources of information.

A related study by Mutula and Brakel (2006) observed that SMEs in general obtained information from various sources, including: the internet; head offices; heads of department; brochures; other ICT companies; consultants; training seminars; trade catalogues; visits to relevant offices; international databases product maps; and the worldwide networks of business information. In the same vein Keh, Nguyen, and Ng (2007) studied the effects of entrepreneurial orientation and marketing information on the performance of SMEs and found that entrepreneurs used information from both personal and impersonal sources. Personal sources of information included family, friends and customers. Impersonal sources according to (Smeltzer, Fann, and Nikolaisen 1988) are those without direct human contact. In contrast Varis and Littunen (2010) examined the information sourcing practices of (SMEs) in Eastern Finland and found that entrepreneurs consulted freely external information sources such as exhibitions, fairs, internet, and media.

Formal and informal sources of information were also used by university students in various studies. For instance Manda (2008) in discussing gender analysis of sexual and reproductive health information access and use also revealed that, students in three Universities accessed a wide range of sources of sexual reproductive health information. But the actual use was concentrated and limited to only three major sources which were radio, television and friends. Reed and Tanner (2001:231) in explaining perspectives on information needs and library services for the fine arts faculty observed that the primary information sources for faculty were Texas Tech University (TTU) Libraries (89.6%), personal library (81.3%), colleagues (68.8%), Internet (64.6%), and bookstores (43.8%). Additionally, in academic purposes students were relying on textbook, periodical, the internet and colleagues, library books (Abdoulaye, 2002; Chisa, 2004; Muhambe, 2009).

6.5.1 Informal Sources of Information

Informal sources of information have for a long time provided reliable information for SMEs entrepreneurs. The findings showed that friends, neighbours and group leaders were the common informal sources mentioned in the current study used by all 162 (100%) women entrepreneurs. The importance of neighbours as sources of information need not be over emphasised as such people perhaps have known one another for a long time, they have probably schooled together and others are relatives. Although rural women preferred to use informal sources of information, the findings of this study showed that they also preferred formal sources of information to seek information. Among such sources were information centres, livestock officers, and Village Executive Officers (VEO).

Corno (2007) examined learning in health seeking behaviour in rural Tanzania and found that patients relied on informal health providers that included family homes, self-care or no care practitioners, and pharmacy rather than formal health providers such as hospitals, clinics, dispensaries, and health centers. Bakar (2011) also found that family, friends and magazines were the main source of information used by rural women in Malaysia. Bakar furthermore, found that information sources on home beautification were obtained from magazines, family members, friends, television and radio. Mawby, Foster, and Ellis (2015) investigated everyday

life information seeking behaviour in relation to the environment. The findings showed that respondents relied on a variety of informal sources of information such as household members, non-immediate family members, friends, colleagues, neighbours and a range of professionals. Thus, it seems Majority of users rely on informal than formal sources of information because it was easy to obtain such information. In addition, no skills were needed to use informal sources of information.

These findings confirm those by Siyao (2010) in his study about Tanzania agricultural information needs and information seeking behaviour of Small-Scale Sugarcane Growers (SSSG) in gender a perspectives. He found that Small-Scale Sugarcane Growers preferred to seek information by consulting other growers, listening to radio and attending farmer's association meetings. Further, Siyao revealed that, SSSG mostly relied on relatives, friends, neighbours, fellow farmers as well as agricultural inputs vendors as a source of information.

The results were also similar to those of Mtega (2012) who in a study revealed that there were several sources of information used by rural communities in Kilosa district, Tanzania that included among others radio that was used 97% of respondents. Reed and Tanner (2001:231) found that faculty in their respective departments almost exclusively used the departmental special libraries to satisfy their information needs. The usage per faculty was as follows: The Art faculty (35.4%), the Visual Resources Centre, and the Music faculty (33.3%). The faculty nearly always referred students to TTU Libraries as demonstrated by (83.3%) of respondents, their personal collection (35.4%), Music Listening Library (31.3%), bookstores (25.0%), and the Art Visual Resources Centre (20.8%). To a lesser extent, faculty sometimes referred students to their personal library (33.3%), Music Listening Library (47.9%), bookstores (50.0%), and Art Visual Resources Centre (16.7%).

6.5.2 Reasons of Limited Use of Formal Information Resources

The reason(s) given by the women entrepreneurs for not using formal information resources were varied but five stood out. The first reason was that most of the time information centres were closed. Secondly the lack of appropriate information materials (information about poultry

and kiosk) was a hindrance. Third there was lack of information providers. Fourth reason mentioned by the women was that most of rural women were often busy and did not have enough time to visit the information centres, while some of them did not know where to seek for information. The fifth reason why women did not make use of formal information resources was that information centres were located far from where people lived and this made travelling and using the centres difficult.

Aina (2002) observed that information users obtained information from variety of sources, although some of sources were costly and/or difficult to acquire and utilize. Siyao (2012) also found among agricultural extension officers that 54%, of them lacked access to library and information centres, about 50% did not have access to seminars, workshops and training programs, other 44% were hindered to access to formal agricultural information resources by other barriers

The rural women entrepreneurs in the current study often did not know where to seek for information. United Republic of Tanzania (URT) (1992) found that women in Tanzania especially those in the rural areas had multiple roles and heavy workload. Similarly Siyao (2012) isolated barriers for accessing formal sources of information to include unknown sources of information (39%), and lack of reading materials (37%). This was exacerbated by the fact that information centers were costly to maintain in terms of paying staff, and buying information materials. Dimitra (2003) also found that normally rural information centres were located in places that women were not comfortable going to. Gundu (2006) in the context of women in Zimbabwe found they had limited access to information sources due to their low level of literacy.

6.5.3 Information Resources on Financial and Legal Advice

It is believed that financial literacy can improve the performance of informal sector entrepreneurs and sustain business information and skills. Through financial literacy, the basic life skills such as numeracy and literacy, communication skills and information searching skills of informal sector entrepreneurs can be improved (Jiyane and Zawada, 2013). Access to finance is essential to create an economic environment that enables firms to grow and prosper. However,

SMEs more than larger firms are constrained by financial, legal and corruption related constraints (Beck, Demirguc-Kunt, and Maksimovic, 2005).

In the current study it was found that rural women entrepreneurs needed finance (capital) to establish and run business, as well as to understand their rights when conducting business. Leckie *et al.* (1996) general model of information-seeking of professionals assert that needs create an awareness of information sources and thus motivate individual to access and use them. Moreover, awareness of information sources and accessibility has a direct impact on information seeking. It was evident that the main financial source of information on finance was Rotating Savings and Credit Association (ROSCA) and Village Community Bank (VICOBA) followed by the financial institution such as Foundation for International Community Assistance (FINCA), Small Enterprises Agency (SEDA), and Promotion of Rural Initiative and Development Enterprises Limited (PRIDE). The findings are in line with those of Ndenje-Sichalwe (2004) who found that “PRIDE-Tanzania, and FINCA-Tanzania were the institutions that provided support to women in small-scale business to overcome problems related to low level of education, external constrains such as access to market information.

Access to finance remains one of the key obstacles of SMEs not only when starting the business project but also when operating it. In Ghana Chea (2008) investigated factors that influenced the survival of women owned small business start-ups in the city of Tema. The results revealed that, apart from the obstacles encountered by women included lack of access to finance. Another study in Kenya also found access to affordable credit to be problematic (Gichuki, Mulu-Mutuku, and Kinuthia, 2014).

The findings revealed that only a few women mentioned Community Development Offices CDOs, and Banks as sources of financial information. These results confirm those of Okurut; Olalekan and Mangadi (2011:83) which suggested that the limited experience of SMEs reduces their chances of acquiring credit from banks. Banks believe that SMEs do not have adequate capacity to keep proper financial statements. They also hardly make profits to service the loans they may be given. There is therefore a need for capacity building among SMEs in the areas of business management (including financial record keeping) to enable them become credit worthy

and borrows from the banks. The SMEs on their part feel banks need to improve their efficiency especially in the area of loan processing and in reducing the cost of borrowing (i.e. interest rates).

A study by Organization for Economic Co-operation Development (OECD) (2004:5) found that due to small size of SMEs they were particularly constrained by non-competitive real exchange rates, limited access to finance, cumbersome bureaucratic procedures in setting up, operating and growing a business, poor state of infrastructure and lack of effective institutional structures. The OECD found that removal of these constraints was a daunting task calling for holistic SME support, i.e. an enabling environment for SME development consisting of functioning macro, meso and micro level institutions. Kamuzora (n.d) examined the necessity of ICT for women's SMEs development in Bukoba rural and urban district, and found that source of capital for women involved in SMEs differed with some obtaining their capital from their husbands (15.5%), while others obtained capital from their own sources (52.9%), credits (25.9%), and other sources (5.7%). The results concur with the findings by Weda (2013) in his study about factors influencing empowerment of women in the management of group projects in Winami division in Kenya which showed that only 32.44 per cent of the women groups had access to credit or grants from the government and NGOs

With regard to access to legal information, results showed some women used ten-cell leader (the leadership system in Tanzania starts from ten-cell leader meaning that, at least in every ten households there is one democratically elected leader), local chairperson and village chairperson or ward chairperson. Majority of the women did not by and large seek information on legal advice. International Finance Co-operation (IFC) (2007) studied voice of women entrepreneurs in Ghana, the study found that almost a third of respondents stated having an average of three disputes each over the last two years. Of that number the largest majority 33 percent did nothing about the issue. The IFC (2007) further revealed that many of the women interviewed perceived the legal system to be complicated and slow and this affected contractual agreements. Gavvani, Qeisari, and Jafarabadi (2013) on their part found that women in Iran were passive information seekers. They further found that rural entrepreneurs tended to ignore police stations and courts as sources of legal information due to perceived corruptions and wastage of time associated with

these institutions. As a result women entrepreneurs accessed incorrect information resources or out rightly failed to seek information on legal advice.

6.6 Skills Women Have to Identify, Access and Use Information

It was assumed that effective access to information requires women to have searching skills to retrieve information from the diverse sources and resources. Information literacy skills are essential in identifying, accessing and using information in an environment of information explosion. The current study's findings showed that apart from reading and writing more than half, six (60%) group leaders and 145 (89.5%) of women did not have skills for accessing and using information. In a related study Mchombu (2000) found that most workers who were employed in small businesses usually did not have any skills. Bakar (2011) in discussing information seeking behaviour of rural women in Malaysia also revealed that lack of skills among rural women hampered their access to the Internet sources. Ndenje-Sichalwe (2004) also revealed that lack of skills one of the problems women in small-scale businesses in Tanzania are faced with. The findings are similar to those arrived at by Kiplang'at (1999) who found in the context of rural entrepreneurs in Kenya that skilled personnel was often lacking. Korobili, Malliari and Zapounidou (2011) emphasized the need for improving the level of information literacy skills especially for students but same can be argued for people involved in small scale entrepreneurship.

The findings of the current study showed that women entrepreneurs in both (poultry and kiosk) businesses did not use computers to identify and access information. Despite the importance of group leaders to act as a link between members of their groups and Village Executive officers (VEOs) and Community Development Officers (CDOs). The findings from the current study revealed that all group leaders did not have skills in identifying, and accessing information. This finding was not surprising as concurred with those of (Lwoga 2010) on bridging the agricultural knowledge and information divide which found that there was low use of internet for knowledge acquisition. In this regard Jacobs and Herselman (2006) argued that, those who are unable to access the internet are ever more disadvantaged in their access to business information. Weda (2013) points out that adult literacy should be encouraged to address the high rate of illiteracy of women.

Today information technology has developed rapidly and has had a huge impact on access to information and on information seeking behaviour (Siddiqui 2011). Therefore, women need to be empowered more on usage of Information Communication Technology (ICT) (Weda, 2013). Hisrich and Ozturk (1999) studied women entrepreneurship in a developing economy and observed that the problem of start up of new business in Turkey was a common concern for women. The finding in Turkey corroborated another study in Ghana by IFC (2007) on voice of women entrepreneurs which revealed that lack of technical skills and basic education was very problematic.

6.6.1 The use of Available Information

Information is deemed to be useless unless it is put to good use (Ottum and Moore, 1997; Wilton and Myers, 1986; Deshpandé and Zaltman, 1982). Menon and Varadarajan (1992) classify information utilization into action-oriented use, knowledge-enhancing use and affective use. According to them action-oriented use refers to information utilization that result in changes in the user's activities, practices or policies. Knowledge enhancing use changes the user's knowledge; and affective use helps change the user's psychological status, such as satisfaction or dissatisfaction, confidence or lack thereof, and trust or mistrust.

The way women use the information accessed from various sources was another variable of interest in this study. The findings showed that all 162 (100%) respondents used the available information to carry out various assignments as well as to solve their daily problems. For instance those who doing poultry business used the available information to cure their chickens while those in kiosk business used information to prepare and cook different types of food. They used also available information to exchange or share ideas. Usually they shared information when they visited each other or and when they met once a week in their groups. Respondents also shared information through conversations (mobile phones and face to face chatting) with friends. Mutula and Brakel (2006) found that SMEs shared information through e-mail applications, small databases, Microsoft applications, and product information for in-house use.

These findings concur with those of Lwoga, Stilwell and Ngulube (2011) who in their study on the use of agricultural information in the rural areas by women that they required client-based information services in order to meet the farming needs. The Wilson 1981 model of information seeking behaviour, states that the information perceived as useful may also be passed to other people by the person seeking the information. Moreover, part of information seeking behaviour may involve other people through exchange of information. Chiware (2008) asserts that, information is of strategic importance to businesses, as the success of any firm depends on its ability to acquire the right information at the right time and cost.

Williamson's 1998 model of information seeking and use, recognizes the role of the individual agency plays in shaping information behaviour. According to Williamson, information behaviour may be shaped by person's wider environment, that may comprise of intimate personal networks (family and friends); wider person network (Social clubs); mass media (television and radio) and formal institutions (libraries and government organizations), as well the extent to which the individual makes use of information sources (Ooi and Liew, 2009). In the same way Wilson 1981 is of the view that information use behaviour consists of the physical and mental acts involved in incorporating the information found into the person's existing knowledge base. This may involve, physical acts such as marking sections in a text to note their importance or significance, as well as mental acts that involve, for example, comparison of new information with existing knowledge (Wilson, 2000:50).

The study findings with regard to adequacy, currency and accuracy, revealed that information available to the women entrepreneurs was not enough, and it was often outdated and incorrect. The findings confirm the Wilson 1981 model which states that, the successful retrieval of information results in user satisfaction or un-satisfaction. It is important information is available to the women entrepreneurs in the right format and at the right time in order for the recipients to make informed decisions.

6.7 Challenges Faced by Rural Women in Seeking Information

Understanding challenges faced by rural women when seeking for information was investigated in order to find ways to reduce if not overcome such challenges. Some of the challenges have

already been discussed such as women being too busy to seek for information, not knowing where to seek and access various information and the fact that most of information centres were closed and (See 6.5.1).

The findings showed that 158 (97.5%) of women felt they were unable to buy airtime for their mobile phones to communicate. Network failure was mentioned by 58 (36%) of women as hampering use of mobile phones in seeking information. About 49 (30%) of women mentioned lack of electricity as a hindrance. These findings concur with those of (Mtega, 2012; Lwoga, Stilwell and Ngulube, 2010; Siyao 2010; Dorsch, 2000; Kiplang'at, 1999) identified similar challenges as hampering access to information by women in Kenya especially with regard to access, transfer and the use of agricultural information in the rural areas. He pointed out that the availability of reliable telecommunication system for access to the networks is still a problem in rural areas in Kenya where electricity cuts were common.

In the context of Tanzania Siyao (2010) noted that the limited availability of power for charging cell phones and the cost of dry batteries reduced access to some of the information sources. In a related study on factors influencing the survival of women-owned small business start-ups in Ghana by Chea (2008) they found several obstacles faced by women entrepreneurs that included tax system a hindrance because the rates were high, but also because the system was complex, changed frequently, corruption; changing legislations; lack of access to starting and working capital, high interest rates, and unaffordable collateral; administrative controls and lack of official financing. Similarly, Gatakaa (2012) found that accessing credit particularly for starting an enterprise is one of the major constraints affecting women entrepreneurs and hindering them in running the businesses effectively. Gatakaa further explains that these problems were exacerbated by illiteracy on how to access financial aid,

Callinan (2005) investigated information-seeking behaviour of undergraduate biological student at the Univeriry College Dulbin (UCD) and found that first year student's experienced challenges to accessing information for course-work, among them internal computer system problems within the university, notably due to the slowness in downloading information from the internet and from downloading the web-based lecture notes. Furthermore, Callinan asserted that,

majority of first year students expressed difficulty both with accessing electronic resources and finding the notes online, and lack of awareness of various electronic databases. At the same time, the greatest difficulty experienced by final year biochemistry students in UCD was primarily related to obtaining course textbooks from the long-term loan collection. It was also found barriers existed in using digital public libraries that included lack of computers, overloaded information organization, complicated interface design, and weak searching functionalities (Liu, Martin, Roehl, Yi and Ward, 2006).

6.7.1 Interventions to Address the Challenges Facing Women Entrepreneurs

Findings revealed majority of respondents needed to be empowered, by being provided with capital loans of low repayment interest as well as training. Ndenje-Sichalwe (2004) also recommended that the Government and NGOs must set aside funds to support women involved in SMEs to attend seminars and workshops so as to equip them with suitable knowledge and skills related to their businesses. Mwobobia (2012) with regard to women entrepreneurs in Kenya recommended that women needed to be recognized and supported financially, legally and equipped with relevant skills to manage their businesses.

Moreover, 32 (48%) of respondents from Manyoni district suggested that government should build information centres, while 51 (31%) in both districts suggested the need for government to provide information materials on SMEs written in Kiswahili language and provided in simple format. These findings confirm those by Isowe (2007) that challenges faced by Tanzania coffee farmers in Moshi region in accessing information included; too much information, high price, time, and language constraints.

About 32 (22%) of women entrepreneurs suggested that, government needed to build infrastructure such as roads to ease travel and reduce communication especially in rural areas. Similarly, Barkema and Drabescott (2000) cited in Smallbone (2014:7) explained that the remoteness of many rural places presented transportation challenges to small businesses because the sparse distribution of the population. Moreover, 21 (13%) of rural women expressed the need for government to supply electricity in rural areas to lower communication costs. Okello-

Obura (2007) recommended that subsidised use of telephone by the Government of Uganda would help improve livelihood in rural areas. Mutula and Brakel (2006:410) in discussing e-readiness SMEs in the ICT sector in Botswana recommended interventions to address issues relating to, a lack of access to relevant information, a lack of awareness of the potential of ICTs, poor telecommunications infrastructure, the lack of an enabling policy and legislative framework, lack of government support, the absence of an e-commerce infrastructure, lack of access to credit, and shortage of critical ICT skills. Another six (6%) of women entrepreneurs in Chamwino district suggested that the village office should be open all the time, as well as village meetings should be held frequently at least once in every three months to provide information to women about what was happening generally and in the business environment. It was also proposed by 10 (10.5%) of women doing kiosk business that the district officials should assist rural women entrepreneurs to secure tenders for cooking during government events.

6.8 Summary

This Chapter discussed and interpreted the findings that were presented in chapter five. Interpretation of the findings was predicated on the research questions, related themes from literature review and key variables from models of information behaviour. In interpreting the research findings, an attempt was made to situate them in extant empirical and theoretical literature and to show how the current study's findings support or differ from previous studies. Findings of the current study showed that the age of rural women in SMEs ranged from 18 to 65, years. Between 78 (52.5%) rural women involved in poultry business were under the age of 31 to 45. Amongst 74 (66%) of rural women conducting kiosk business, were between the ages of 31 to 45 years. Therefore, the common age of rural women involved in poultry and kiosk business in this study was 31 to 45 years.

The findings of the study further revealed that historically most of women in the rural village did not get a chance to pursue further education. Education level of majority of rural women varied from those who had never attended school to those who had college level of education. Therefore, results showed more than three quarters 128 (79%) of women had basic education (standard one to seven). On the issue of marital status, the findings showed that more than half 98 (60.4%) of women entrepreneurs in both kiosk and poultry businesses were single.

Regarding business experience the study's results indicated that, only three (2%) of the respondents had high business experience of 15 to 21 years, while overwhelming majority 148 (91%) of entrepreneurs had low business experience of one to seven years. Findings further showed that all seven visited women business groups in Manyoni district were registered, while in Chamwino district among eleven visited groups, eight were registered. Moreover among the 18 visited groups in both districts (Chamwino and Manyoni) eight (44.4%) of groups had 10 members each. With regard to reasons that motivated women to conduct SMEs, findings showed that the need to overcome poverty was the major motivation. As to why majority of rural women in Chamwino and Manyoni districts engaged in poultry and kiosk businesses. The findings of the study showed that, these businesses were easier to establish because they needed limited capital and no special business skills were needed.

It was evident from the findings that all respondents in poultry and kiosk businesses needed information on family care issues such as getting food, shelter, and clothing, school fees for their children, treatment and domestic hygiene. Only 16% of the women groups needed information on how to get water. Furthermore, the findings showed that apart from information for taking care of families, rural women needed information to accomplish their daily activities. Women entrepreneurs (poultry and kiosk) needed information about chicken medicine, how to access low-interest loans and capital, market information, training, and information on entrepreneurship.

The study revealed that majority of rural women did not seek for information because they did not have enough time. Additionally, the findings showed that that majority of rural entrepreneurs acquired incidental information rather than purposefully seeking it. However, results showed that all women 10 (100%) group leaders, supported by 16 (89%) of women groups believed that mobile phone was the main channel of communication, followed by group meetings and visitations and through group leaders writing a note to communicate. Although rural women involved in SMEs preferred informal sources of information they also consulted formal sources of information to satisfy their need.

As to why respondents had limited use of information centres, five reasons were given. The first reason was that most of the time information centres were closed. Secondly there was lack of

appropriate information materials (information about poultry and kiosk). Third there was paucity of information providers. Fourth, most of rural women were often busy and did not have time to visit the information centres, while some of them did not know where to seek for information. Finally, information centres were located far from where people lived making it difficult to seek information from such centres.

With regard to sources of finance, the findings revealed that the rural women sought funding information from ROSCA, VICOBA, FINCA, SEDA, and PRIDE. Furthermore, findings indicated very few women used CDOs, and Banks as sources of financial information. Concerning information resources on legal advice, results showed very few women use ten-cell leader, local chairpersons and chairpersons of wards. However, majority of the women hardly sought information on legal advice.

The findings showed that apart from reading and writing more than half, six (60%) group leaders and 16 (89.5%) groups of women did not have other skills for accessing and using information. Furthermore, the findings showed that 158 (97.5%) of women mentioned inability to buy airtime for their mobile phones to communicate and seek information. Moreover, network failure was indicated by 58 (36%) of women as one of the causes of not using mobile phones in seeking information. About 49 (30%) of women said the lack of electricity was a challenge for them to seek information.

The findings also revealed that majority of respondents needed to be empowered, in terms of being provided capital, loans of low repayment interest and training. About 32 (48%) of respondents from Manyoni district suggested that government should build more information centres. Moreover, 51 (31%) of women in both districts suggested the government should provide information materials on SMEs written in Kiswahili language and in simple format. About 32 (22%) of women entrepreneurs suggested that, government should build infrastructure such as roads. In addition, 21 (13%) rural women entrepreneurs asked government to supply electricity in rural areas. It was also proposed by 10 (10.5%) of women doing kiosk business that the district officials should assist women secure tenders for cooking during government events.

CHAPTER SEVEN

SUMMARY OF FINDINGS, CONCLUSION AND RECOMMENDATIONS

7.1 Introduction

The final chapter of a PhD thesis is usually concerned with integrating, or tying together the various issues covered in the thesis and to make comments on the whole research project (Assan, 2014). This study set to investigate information behaviour of rural women involved in small and medium enterprise in Chamwino and Manyoni districts of central Tanzania. Understanding information behaviour of rural women involved in SMEs was the vital in the endeavor in meeting their information needs. The value of information as a strategic resource in businesses has been extensively covered in literature, as the success of any firm depends on its ability to obtain the right information at the right time (Chiwere, 2008).

The following research questions were addressed:

- 1) What is the information behaviour of rural women involved in SMEs?
- 2) What channels of communication are used to seek and satisfy women information needs?
- 3) What information resources are used to seek and satisfy their information needs?
- 4) What skills do women have to effectively identify and access information?
- 5) How is the information sought by women involved in SMEs used?
- 6) What challenges are faced by women in seeking and using information?

The study was underpinned by interpretive paradigm and Wilson 1981 model of Information behaviour. Qualitative approach was used to provide a deeper understanding of emerging patterns of information behaviour of rural women involved in SMEs. The study was based on a case study research design and the target population was 481 women involved in SMEs in Chamwino and Manyoni districts in central Tanzania. The sampling frame for the target population was 142. Empirical data were collected through interviews and focus group

discussion. In addition, secondary data were collected from books, journals, theses, conference proceedings, databases and districts social economic profiles. The qualitative data collected were coded and analyzed into thematic categories using Nvivo version 7 to generate descriptive statements and relevant themes.

This chapter provides summary of findings, conclusions and recommendations of the study. The chapter is divided into four sections. The first section provides an introduction of the chapter. This is followed by second section that describes the purpose and research questions of the study. The third section revisits and provides a summary of the main findings and conclusions. The last section of this chapter describes contribution of this study to the domain of knowledge, recommendations for action and suggests further areas of study.

7.2 Summary of the Study Findings

The summary of findings presented here are based on the key research questions that were addressed by the study

7.2.1 Demographic Profile Respondents

Age of rural women involved in SMEs in Chamwino and Manyoni districts

The study found that the age of rural women engaged in SMEs in both districts ranged from 18 to 65 years. But the common age of rural women involved in poultry and kiosk business in this study were 31 to 45 years. Based on the research findings it would seem majority of women entrepreneurs involved in SME businesses were of middle age who actively sought, accessed and shared information with other entrepreneurs within and outside the group. Likewise, these women had the ability to learn various techniques and mechanisms to search, access and use information.

Education level of rural women involved in SMEs in Chamwino and Manyoni districts

The findings revealed that education level of majority of rural women in this study varied from those who had never attended school to those who had college level of education. Results further revealed that more than three quarters (79%) of users had basic education (standard one to seven). This result suggest that most women in the rural villages that were investigated did not get a chance to pursue further education (secondary, college or university education) but stayed at home doing either domestic chores such as cooking for their families and looking after their children or worked in the farms. For those who had attained primary level education, majority of them were distracted from continuing with their secondary education due to pregnancy or early marriage. In addition parents invested less in girl's education than they did for boys.

Marital status of rural women involved in SMEs in Chamwino and Manyoni districts

The findings of the current study revealed that only 50 (30.8%) of the 162 women were married. More than half 98 (60.4%) of the women involved in both business (kiosk and poultry) were single, 10 (6%) were widowed and four (4.2%) were divorced. This result suggests that majority of rural women involved in SMEs are responsible for providing large part of their income to support themselves and their families. The many responsibilities of rural women entrepreneurs often hinder their access to information and opportunities to enhance their livelihood.

Business experience of rural women involved in SMEs in Chamwino and Manyoni districts

The study found that, only three (2%) respondents had vast business experience of between 15 to 21 years, while over three quarters 148 (91%) of entrepreneurs had modest or low business experience that was one to seven years. Furthermore, the results further revealed that only relatively few women pursued their businesses in SMEs for a long time. Regardless of the experience all women needed information to help support their families as well as their business growth. The major reasons that hindered women who were involved in food vending to pursue the business for a long time was for example the use of poor and outdated facilities and materials such as firewood to execute their business. The use of firewood had negative health, effect among women who used it for a long time. The negative health effect included among others respiratory and eye diseases. The use of sand and the ashes to wash their utensils also had negative impact to their hands resulting in fungal infection and scratch marks on their palms.

Groups Registration Status

Regarding the status of group registration, the findings of the study revealed that all seven visited women business groups in Manyoni district were registered, while in Chamwino district among eleven visited groups eight of them were registered. One of the main advantages of registering a group is recognition and access to various opportunities from different stakeholders. For instance, it was stated by the women themselves that, some groups were able to access tenders for various events such as public meetings and burial ceremonies. However, the study found that overwhelming majority of groups needed various kinds of support to ensure that members undertake their Income Generation Activities (IGAs) effectively and efficiently. In addition it was revealed that some business activities that were undertaken by women individually would have provided more benefit through joint effort due economies of scale. This hindered effective and efficiency performance of their groups. For example, if one of the women had an emergency to attend to such as sickness or attending funerals she would normally close the business as opposed to when they worked together in group.

Similarly, it was noted that when a group received a grant or loan which was small it became difficult to share reasonable amount among all individuals. However, if the same amount of money was utilised collectively this would have reasonable impact on the business than having it shared among many individuals. For example, one women group received a total of Tshs. 500,000/- {301\$} grant and distributed it to all 12 members. Each member received a total of 41,666/- {25\$}. The women expressed the view that had the amount been spent collectively in a group, it would have benefited the members more than what each individual member benefited with US\$25.

Number of members constituting the groups

The findings of the study showed that among eighteen (18) visited groups in both districts (Chamwino and Manyoni) eight (44.4%) of groups had 10 members in each group. This was followed by three (17%) of groups which had 12 women in each group, and another three (17%) had 15 members in each group. The findings further revealed that the other remaining four groups had 18, 20, 25, and 30 members respectively in each group. It was assumed that group model was the best in the reduction of poverty among women in rural areas. The results therefore

seemed to suggest low propensity of rural women involved in SMEs towards working in groups and majority seemed to work alone.

The study by Mutula and Brakel (2006) found that SMEs employed between 100-200 workers, and had turnover of 5 Million South African Rands per year. URT (2002) classifies business firms (including SMEs) as follows: Micro enterprises, 1-4 employees and annual turnover of 5 Million Tanzanian shillings (Tshs), Small enterprises, 5-49 employees and annual turnover of Tshs 5 Million. Medium enterprises, 50-99 employees and annual turnover of Tshs 200 Million and Large scale enterprises, over 100 employees and annual turnover of Tshs 800 Million. Consequently the businesses in which rural women were involved in Chamwino and Manyoni were largely small enterprises.

Reasons for the Establishment of Women Entrepreneurship Groups

The findings of the study showed that alleviating poverty was a major motivation for establishing SMEs groups by rural women. The poverty facing rural women was attributed to lack of or; low levels of education. Low level of education among women hindered their chances to access employment opportunities in both government and non-government institutions.

The Main Reasons that Facilitated Creation of Poultry Keeping and Food Vending

The findings revealed that rural women in both districts preferred to conduct poultry and kiosk businesses, because it was easier to establish and manage. Women seemed to have the trust of shop owners from whom they could borrow foodstuffs like rice, cooking oil, wheat flour, maize flour etc. Once they, cooked and sold the food they repaid back the shop owner. Moreover, kiosk and poultry businesses were traditionally undertaken by women who gained experience from their earlier childhood stage through apprenticeship. In addition these businesses require low startup capital. It was found out that women could undertake these businesses at their homes without having to hire a premise from which to operate the business. It is also possible while working at home to do other domestic chores.

7.2.2 Information Needs of Rural Women involved in SMEs

Information Needs of Women Involved in SMEs in Chamwino and Manyoni Districts

The findings found that all respondents needed information about family care (food, shelter, and clothing, school fees for their children, treatment and domestic hygiene). The need for information by rural women was motivated by family and domestic responsibilities, whereby each woman wanted to see her family meets basic requirements. Furthermore, majority of respondents needed information on how to get market for their products, empowerment (loan, capital, training and or seminar) and where to get water.

The major challenge that faced women in rural areas to undertake their Income Generation activities (IGAs) was lack of reliable market to sell their products and services. It was revealed that the lack of reliable market forced some women to sell their products at relatively low prices. Lack of appropriate training targeting women in rural areas of Chamwino and Manyoni was another major factor that hindered effective performance of their groups. Consequently most of women started their business ventures without appropriate knowledge and business skills. The women pointed out that they needed information on where to get market, or training to enable them maintain profit and loss accounts of their businesses. They also pointed out that they needed training on monitoring and evaluation.

Specifically for women engaged in poultry business, they felt a strong need for information on chicken medicine, and modern chick keeping. Women who engaged themselves in poultry keeping were particularly concerned about where they can get help to grow their businesses. They pointed out that they lacked important chicken medicine to keep diseases away from their chickens. They also did not even have income to buy available medicine even when such medicine was available.

Furthermore, women in kiosk business needed information on where they could sell their food at reasonable prices and how they can be capacitated in entrepreneurship. Most of the women entrepreneurs sold their products at high prices because of the high cost of transportation and poor infrastructure thus increasing the cost of their businesses.

7.2.3 Channels of Communication

The findings revealed that mobile phone was the main channel of communication for the women involved in SMEs in rural areas. The reliance of mobile phone for communication was attributed to availability of cheaper mobile phones costing below Tsh. 35,000/- {21\$}. Using the mobile phones enabled them save time on travelling to seek information about various aspects of their businesses such as markets for selling and obtaining their products.

Furthermore, the findings further revealed that face to face interactions and visiting a friend or neighbour was also enabled the women communicate with one another. These methods were used to ensure accuracy and timeliness of the information. Many of the women groups met once a week where they exchanged information about their businesses. Most of the groups met usually Tuesdays, Wednesdays or Thursdays and reserve other days for prayer and other activities. Findings from interview showed that a few group leaders used written notes as channel of communication to overcome the barriers associated with network downtime and also reach those who did not own mobile phones. The written notes would communicate information about meetings announcements or pass information about an impending or outbreak of an epidemic. Besides using written notes, the youths were often used to pass messages between the women. The use of word of mouth to communicate was also cited as being utilized by the women to communicate.

7.2.4 Information Resources Used by SMEs

The results showed that rural women involved in SMEs consulted informal than formal sources of information to satisfy their need. This was attributed to the fact that it was easy to access and use the informal sources of information as they also did not have adequate skills and or knowledge of accessing and using formal sources of information.

The women found it easy to access information from friends, neighbours, and fellow group members regarding for example how to cure their chicken rather than using information centres, journals or reading various books or special available sources that would require high literacy level.

The women also preferred learning from each other for example how to cook a certain kind of food than searching the same information from information centres. They also pointed out that learning specialized skill from formal training providers would be difficult for them to understand because of their limited formal education. The motivation to seek information from each other by the women was also motivated by the fact that that livestock officer had specific timetables to provide support and the various groups of people. The findings further revealed that rural women in SMEs failed to use services from information centres due to lack of adequate human resources to provide such services. It was found that most of the service providers in the information centres were volunteers and as a result the centres remained on the large part closed.

The non-use of the information centres by the women was also attributed to their busy schedules and they also lacked knowledge about the existence of such information centres or what they could offer. Regarding sources of financial information, the findings revealed that the main financial source of information used by rural women entrepreneurs were Rotating Savings and Credit Association (ROSCA) and Village Community Bank (VICOBA). These two were the main and easy sources for rural women entrepreneurs to access financial capital through relatively low interest rates compared to other financial institutions. In the VICOBA a form of cooperative savings individual members bought shares and also interest rate to for the loan taken was collectively agreed upon. The VICOBA helped the women obtain money to pay for school fees for their children and care for their family in general.

In addition financial institutions such as Foundation for International Community Assistance (FINCA), Small Enterprises Agency (SEDA), and Promotion of Rural Initiative and Development Enterprises Limited (PRIDE) were also mentioned as a source of financial sources of information. The study revealed that relatively a few rural women entrepreneurs accessed information from these financial institutions. Most of these financial institutions and others were found largely in urban areas or sub-urban centres and as a result most women entrepreneurs in rural areas did not know the existence of some of the available financial institutions. Only a few women were aware of Community Development Offices CDOs, and Banks as sources of financial information. The findings further indicated that, relatively a few women groups managed to access limited credit, which was inadequate to meet their business needs because of

high interest rate of about ten percent (10%) and the requirement for them to deposit collateral such as non-movable assets including houses, farms and plots. This made most of women fail to apply for the loans to avoid their properties being taken away.

With regard to accessing sources of information on legal advice, the findings revealed that rural women used ten-cell (the lowest administrative unit in Tanzania, constituting of at least in every ten households) leader, local chairperson and village chairperson or ward chairperson to find them this information. Most women did not bother to look for legal information they needed from the police or courts of law because they felt this would require them to pay a bribe and also the slow and bureaucracy that will be involved in acquiring such information dissuaded them from seeking information from these sources. The low level of education among the rural women and lack of awareness about their right of access to information were other factors that hampered their access to information they needed to grow their business.

7.2.5 Skills Women Have to Identify, Access and Use Information

The findings showed that apart from reading and writing, more than half six (60%) group leaders and 89.5% of women did not have skills for accessing and using information. From these responses it would seem rural women in SMEs normally failed to access information not only because information systems were not in place or were not reliable, but also due to lack of skills. However, it was noted that within the two districts most of the rural women who were involved in the SMEs relied much on other information sources such as friends, neighbors, and relatives. Though Chamwino district had information centres considerable numbers of women were not aware of their presence and the role they could play in providing them with requisite information to make informed decisions. In one of the villages the women stated that they did not find the need to visit the information centres and also felt the information centres were for big businesses or individuals involved in international businesses.

Furthermore, the findings indicated that, group leaders did not get help from government on how to identify and access information. It was found that just like their members, group leaders had only attained primary education, which was not adequate to enable them provide leadership for

group activities. The group leaders did not also receive training related to their activities and job roles. Out of all eighteen visited groups only one leader reported to have received relevant training to enable her manage the women groups.

7.2.6 The Use of Available Information

The findings revealed that all groups utilized and shared the available information on various issues concerning home based care and their business to facilitate their Income Generation Activities (IGAs). Regarding poultry business, women used information from their friends and relatives in their respective groups or villages to cure their chickens when they got infected. On the other hand rural women involved in kiosk business used the available information from different sources (friends, relatives, and neighbour) to learn to cook variety of foodstuffs. However, very few rural women rarely learned from television program how to cook certain food, though in other situations not all information from television was relevant in their given local context. For instance, some TV programs in various channels presented programmes on how to cook international food which often did not have local market. In addition, rural women also had difficulties accessing and using information that would enable them cook different types of food.

7.2.6.1 Information Satisfaction

On the whole the findings revealed that the information available to the women entrepreneurs was inadequate for them to make informed decisions about their businesses and often was outdated and incorrect. These findings concur with the Wilson 1981 model which states that, the successful retrieval of information results in user satisfaction or dissatisfaction. Therefore, inadequate or incorrect information that was available to the women did not satisfy their needs thus compelling them to seek information from other information sources or information systems. In addition, the women expressed concern that the information they accessed was at times not relevant to suit their requirement. For example, the use of traditional ways to treat chicken diseases in most cases did not produce the desired results.

The use of the information by women was made difficult when it was inaccurate. For example, women occasionally would be told that loans were available from financial institutions for them to promote their businesses but when they visited the relevant financial institutions they would be given different information with conditions that they would also not afford or the amount of money fell below their expectations. For example, one group was promised four hundred thousand shillings (Tshs. 400,000/-) per member upon payment of forty thousand shillings (Tshs.40, 000/-). However, it turned out after settling the forty thousand Tanzanian shillings that they were only given Tshs. 200,000/- thus totally undermining their plans.

7.2.7 Challenges Faced by Rural Women in Seeking Information

Findings of the study revealed that rural women faced a lot challenges when they sought information. Among the challenges was lack of money to put airtime in their mobile phones exacerbated by the high cost of buying airtime. They felt mobile phones communication cost had added to the high cost of living. They stated that the Tsh. 1,000/- needed buy voucher was sufficient vegetable for a family meal.

The women also expressed concern about having insufficient time to go searching search information to make informed decisions about their businesses. The felt that, their tight schedule coupled with IGAs roles as well as supporting their families did not leave them with adequate time to look for relevant information. This situation was not peculiar to women in Tanzania because in most families in Africa, women are responsible largely for domestic activities such as cooking, cleaning home, preparing children to go to school, cultivating the farms, etc.

Another challenge that was expressed related to poor communication as a result of availability or poor telecommunication infrastructure. It was stated that is some areas women had to move to specific locations to get access to network. Such places would include top of the trees or hills, which was difficulty for women to do so. Some women groups reported that they often missed opportunities for tenders to supply food due to poor communication. The women also complained about inadequate and timely information on tenders that would enable them to prepare themselves adequately to supply foodstuffs cost-effectively.

The other challenge expressed by women was lack of electricity in most parts of the villages which made it difficult to get correct and timely information. Because the women relied on mobile phone communication the poor electricity supply meant that they could not recharge their mobile handsets. Though in some villages people used solar power energy to charge their mobile telephones the overwhelming majority of rural women could not afford to buy the solar panels. As a result those who could afford to buy solar panels charged high prices for charging services that ranged from Tshs. 300 to 500 per phone. In some other places the women were forced to walk about seven (7) kilometres to fourteen (14) to seek charging services. As a result of these difficulties, most women were not accessible on phone and this affected the efficient operations of their businesses. The women also expressed concern information centres not opening regularly. This was attributing the fact that the centres depended on volunteers who rarely turned up for work because they had their own important responsibilities to attend to.

The other concern expressed by women was the irrelevant information materials that were available within the centres. Journals and some documents in these centres focused on health, gender, politics and laws. Though these documents were essential they did not add value to the promotion of their business especially poultry and kiosk activities. These challenges that women in rural areas in rural Tanzania in searching for information to promote their business need policy, and practical interventions by different stakeholders such as government, financial institutions, non-government organizations and professional bodies to assist them grow their businesses.

7.2.8 Interventions to Address the Challenges Facing Women Entrepreneurs

The findings revealed that rural women in SMEs need to be empowered, by being provided them with start-up capital and low interest loans. They also needed training to enable them manage their businesses efficiently. The women also believed that their group leaders needed to ensure that money meant for loans to facilitate their access to credit reached them rather than being held up at the district level.

The respondents felt that government must regulate food prices to enable them make profits out of their businesses. They believed government needed to provide a training plan for them to get appropriate training. Moreover, they believed the village office needed to be open all the time, and village meetings held frequently at least once after every three months so that they can frequently engage with livestock officers. The women expressed the need for a bookshop in the village which would sell publications concerning poultry keeping and kiosk business.

The women expressed the need for protection of their businesses from outside competition so that their business can thrive. This could be achieved by ensuring people from outside the district are not given tenders to supply foodstuff at the expense of the residents. The need for enhancing rural infrastructure such as roads, electricity, mobile networks, water supply, and business places was expressed. The infrastructure would ensure travel and communication is enhanced for their businesses to thrive.

7.3 Overall Conclusion

The aim of the study was to investigate information behaviour of rural women involved in Small and Medium Enterprises (SMEs) in Chamwino and Manyoni District of Central Tanzania. The study established that although respondents' pattern of information behavior was passive, the most commonly needed information was about family care and information regarding their businesses (kiosk and poultry). Further, mobile phones were the most used channel of communication, followed by face to face, meetings and visitations to friends and neighbours to seek information. On top of that respondents were more likely to consult informal than formal sources of information to satisfy their information needs. Additionally, respondents did not have skills in reading, writing, identifying, and accessing information. The findings of the study indicated a number of challenges which rural women faced when seeking for information. Among the challenges were, lack of enough time, lack of knowledge about where to seek information and the fact that information centers opened rarely, inadequate and irrelevant information materials with in the centres to meet their information needs; limited airtime to communicate through their mobile phones, mobile phone network failure; and lack of electricity for charging their mobile phone handsets.

In view of this, the study made specific recommendations as presented below on how to enable rural women engaging in SMEs to access relevant information so as to alleviate poverty and facilitate their contribution to development.

7.4 Recommendations

Based on the main research findings, literature reviewed and model of information behaviour the researcher makes recommendations on the following aspects: Information needs, and information seeking behaviour of rural women involved in SMEs; channels of communication; information resources; skills for identifying and access information.

7.4.1 Information Needs of Rural Women involved in SMEs

In relation to information needs of rural women involved in small and medium enterprises. The study established that although rural women had several information needs they did not effectively seek for information due to various reasons. Among them includes workloads, time constraints, and low level of literacy. The study therefore recommends that the Government through different education stakeholders should continue to educate people especial men about giving support to their spouses on issues concerning family care. In this regard the Policy on Women in Development in Tanzania emphasize the need for men to participate in work presently considered to be women's domain (URT, 1992) to freewomen so that they can to partake in development. Further, the researcher highly recommends that parents should invest a lot in girl's education than they did for boys. This would enable girls to compete with boys to the job and or employment opportunities. Additionally, the study recommends that it is important to conduct regular survey of user needs assessment using participatory approach so as to understand the nature of the information needs of rural women in Tanzania. The participatory approach would assist rural women to participate in the assessment so as to make information services provided to them responsive to their needs. On top of that information made available to rural communities should be linked to both their practical and strategic needs in their personal

and community lives.

7.4.2 Channels of Communication

In relation to the question on what channels of communication rural women in SMEs used to seek and share information, the findings revealed that although mobile phone was a major channel of communication there were several challenges in using them. Among the challenges were lack of money to buy airtime, network failure, and lack of electricity. Despite the adoption of cellphone by rural women in Tanzania, infrastructure challenges were hampering use of such phones. Kiondo (1998) in her study about access to gender and development information by rural women in the Tanga region in Tanzania recommended the need for government to team up with private sector players in telecommunication industry such as Vodacom, Tigo and airtel to improve communications among rural dwellers.

This study therefore recommends that women to be economically empowered by being provided with loans with a relatively lower rates of interests to get capital to initiate and sustain their business activities. Access to the capital will facilitate easy business activities and hence increase their chances to reduce if not to address life hardship challenges. In turn when rural women entrepreneurs are economically stable they will be able to access timely information through various means. For instance economic stability will enable women in rural areas to buy mobile phone vouchers buy radio, and TV sets that facilitate easy and timely access of information not only within their respective villages but across the globe. Further economic stability facilitates access to various and alternative sources of energy such as electricity through solar power. It is a clear fact that electricity is very important in the current globalised world to facilitate various development initiatives.

7.4.3 Information Resources

In relation to information resources used to satisfy their information needs. The study established that majority of rural women entrepreneurs used informal sources of information more to access information needs due to limited literacy skills, lack of accessible formal information systems, irrelevant information resources to the needs of women and more.

In this regard, the study recommends that first, the rural women be provided with relevant training to enable them also make use of the formal information resources. Indeed all sources of information (formal and informal) are crucial to make any society being informed with important information. Most of women in rural areas have mobile phones which can act as important instruments to access information. Hence having access to mobile phones is very significant to support rural women to get appropriate information to support their business undertakings. This includes but not limited to how business can be done. Mobile phones can also be significant information channel with government officers like CDO. In this regard Matsveru (2013) in a study of the use of information sources pointed out the need to make available both informal and the formal sources of information to complement each other.

Second, government officials should ensure that the existing information centres are opened and manned by fulltime staff rather than by unpaid volunteers who do not show a lot of commitment to this work. Further, there is need for survey of user needs of rural women be undertaken so that relevant information resources can be made available in the information centres. Moreover, the information resources provided should be in commonly understandable languages such as Kiswahili and also in appropriate formats. If all important documents are written in Kiswahili language and attractive style it will be easy for rural women to get correct and relevant information. This would help literate women to read and help others who are not able to read and write. Such sharing of information will facilitate economic activities of all rural women in various fronts.

Third, given the importance of ICT in facilitating access to information, women groups should be capacitated through digital literacy to enable them have access to timely information beyond their localities through the internet. AlMughairi (2006) pointed out that computer and other formats of electronic services can no longer be considered as luxuries but necessary tools to deliver services at acceptable standards. Chaura (2014) in the study of information behaviour of fourth year students of Mzuzu University in Malawi recommended the need for computers connected to the internet to enable students to access online resources.

7.4.4 Skills for Identifying and Accessing Information

The study sought to investigate whether respondents had skills for identifying and accessing information. Findings revealed that rural women entrepreneurs had not been trained on how to identify and access information. It is therefore recommended that government through CDO, WEO and VEO should plan, design and implement the special programs for rural women entrepreneurs particularly in information literacy and business training. This recommendation corroborates that of Ramasoli (2009) that users of information systems must receive appropriate training enable them in searching for information. Similarly, Stranger-Johannessen (2009) in a study of learners using a rural community library in Uganda recommended the need for the information centres to provide and make available audio-visual materials (such as tapes, posters) to meet their information needs. In a related study to this current research, Ndenje-Sichalwe (2004) recommended the need for Government and Non-Government Organizations (NGOs) to set aside funds to help women in small-scale businesses to attend seminars or workshops in order to equip them with appropriate knowledge related to their businesses.

The government could also assist to link rural women entrepreneurs to such agencies as ILO, UNIDO and national as well as international trade fairs that can assist in providing training in SMEs. Moreover, Districts official such as CDOs and VEOs should pay regular visits to the women groups to clarify their role and responsibilities in relation to information provision so that follow ups to the groups concerning what information is needed, how to seek and access information and what challenges they face can be understood. This will help women groups to grow their businesses and become profitable so as to alleviate poverty. Kiondo (1998) recommended that planning and implementation of information services that are guided by government policy directives, mechanisms for implementation and adequate financial and human skilled resources were needed.

7.5 Originality and Contributions of the Study

The study findings have provided a new contribution of the knowledge in the field of information behaviour and SMEs. Specifically with regard to how information provision can facilitate the economic development to rural women entrepreneurs.

7.5.1 Implication of the Study for Theory

Theoretically the study has helped to provide an understanding of the significance of Wilson (1981) model of information behaviour with regard to information needs and information seeking behaviour of rural women involved in SMEs in Tanzania. The Wilson (1981) model provides three views of information seeking namely: context of the user or seeker, the system engaged (either manual or machine), and information sources. This model posits that information seeking behaviour occurs as a result of a need perceived by information user. The findings of the current study corroborate Wilson model that information seeking behaviour can happen in two different perspectives namely active or passive, depending on the user context such as the one obtaining with rural women in Tanzania.

7.5.2 Implication of the Study for Policy

The study contributes to the policy in various ways, through providing data to policy makers to improve techniques to increase the ability of rural women entrepreneurs to seek access and use information in support of their SMEs. The small and medium enterprise policy of Tanzania fails to adequately provide ways to improve the effective access and use of information by rural women entrepreneurs.

Chapter five section B pages 64, 65, 66, and 67 respectively of the policy on women in development in Tanzania makes provision for national plans to help women's promote their work in business through making available information, providing training in production and facilitating access to credit to alleviate women's poverty. However, the policy falls short of providing implementation strategies for these provisions. This study provides base for revision of the policy to address these shortcomings.

7.5.3 Implication of the Study for Practice

Practically the study has contributed to the understanding of the information behaviour of rural women entrepreneurs in central Tanzania with regard to identifying, seeking and using information to promote their businesses. The recommendations proffered in this study provide a framework for policy review especially with regard to creating awareness about the information needs of women involved in SMEs, capacity building, information infrastructure development and business networking to position women strategically to play a meaningful role in the rural economy in Tanzania.

7.6 Suggestion for Future Research

In Tanzania rural districts and villages are broader and varied in nature; therefore further research in information behaviour should extend to cover other vulnerable groups besides women such as the youth, people living with disability especially in rural areas that have long suffered economic marginalization at the hands of successive governments since independence in 1961.

Though this study used Wilson and other related models of information behaviour to investigate the information behaviour of women involved in SMEs in central Tanzania, the issues uncovered in this study would lend themselves to further investigation using interdisciplinary models in business and entrepreneurship as well as gender studies. This would provide a holistic understanding of the perspectives underlying women participation in development.

7.7 Summary

This chapter provided a summary, conclusions and recommendations on the information behaviour of rural women involved in small and medium enterprises in Chamwino and Manyoni districts of central Tanzania.

The purpose of the study was achieved by answering various questions; what is the information behaviour of rural women involved in SMEs?; What channels of communication are used to seek and satisfy women information needs?; What information resources are used to seek and satisfy

their information needs?; What skills do women have to effectively identify and access information?; How is the information sought by women involved in SMEs used?; and what challenges are faced by women in seeking and using information?.

The study was underpinned by Wilson 1981 model of information behaviour. The study reviewed literature from various sources such as books, journals, chapters in books and conference proceedings. The study employed qualitative approach and data were collected through interviews and focus group discussions and analyzed using Nvivo version 7 and presented using narrations and tables. The chapter discussed the contribution of the study to the domain of knowledge from the perspectives of theory, policy and practice. Furthermore, areas for future research were outlined.

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APPENDICES

Appendix 1: Interview Guide for Group Leaders of Women involved in SMEs

The purpose of this study is to investigate information behaviour of rural women involved in SMEs in Chamwino and Manyoni Districts in Central Tanzania.

The interview data collected would help to understand the information needs and seeking behaviour of rural women involved in SMEs. The findings of this study will help to improve SMEs of rural women so as to reduce poverty, and also create awareness of policy makers and information providers on the importance of rural women in economic development.

- Name of the District.....
- Name of Ward.....
- Name of Village.....
- Name of group.....
- Date of interview.....
- Education background of group leader

Section 1: Demographics information about the SMEs Group

- 1.1 What is the age range of members in your SMEs group?
- 1.2 What is the marital status of members in your SMEs group?
- 1.3 What is the education qualification possessed by your group members? (Primary, secondary, other, please specify)

Section 2: Information Behaviour

- 2.1 What types of information does your group members need to do their business?
- 2.2 How does your group members go about seeking information?

2.3 Are your group members aware of where to find information they need for their business?

.....

What kinds of information resources is preferred by your group members and why?

What skills do your group members have or not have to seek and use information?

Do you play any role in creating awareness or seeking information for your group members?

2.3 How is the information perceived useful communicated to your group members?

.....

2.4 What methods are used to share the information in the group?

.....

Section 3: Channel of communication and Information resources

3.1 What channels of communication are used by group members to satisfy their information needs?

S/No	Channels	Please tick
1	TV	
2	Radio	
3	Village meeting	
4	Group discussion	
5	Notice board	
6	Mobile phones	
7	Films	
8	Posters	
9	Brochures	
10	Leaflets	
11	Magazines/Newsletters	
12	Newspapers	
13	Others, please specify	

3.2 Do you think channels of communication mentioned above are adequate in satisfying your group information needs? Yes/No

If the answer is yes, to what extent? Please tick

	Channels	Very adequate	Adequate	Not adequate
1	TV			
2	Radio			
3	Village meeting			
4	Group discussion			
5	Notice board			
6	Mobile phones			
7	Films			
8	Posters			
9	Brochures			
10	Leaflets			
11	Magazines/Newsletters			
12	Newspapers			
13	Others, please specify			

3.3 What information resources are used by group members to satisfy their information needs? (Library/ information resources centers, District community Development Office (DCDO), others, please specify)

.....

3.4 Do you think information resources mentioned above are adequate in satisfying your group information needs? Yes/ No.

If the answer is yes, to what extent?

	Resources	Very adequate	Adequate	Not adequate
1	Library			
2	Information Resource centers			
3	DCDO			
4	Others, please specify			

3.5 What do you think need to be done to improve channels of communication and information resources of your group members?

.....

3.6 Comment on the best channels of communication and information resources you mostly think can satisfy your group information needs.

.....

Section 4: Skills to Identify, Access, and Use Information

5.1 What skills do women have in your group to effectively identify, access and use information?

.....

.....

Section 5: Challenges Faced in Seeking Information

4.1 What challenges do women in your group face when seeking and using information?

.....

4.2 How do women use available information?

.....

4.2 What do you think are possible solutions for the challenges facing the women involved in SMEs?

.....

Any other comments you wish to make?

.....

Thank you.

Appendix 2: Interview Guide (Swahili Translation)

Kiambatisho namba 1: mwongozo wa maswali ya mahojiano kwa viongozi wa vikundi vya biashara ndogondogo

Lengo la utafiti huu ni kuchunguza mwenendo wa wanawake wa vijijini wanaojihusisha na biashara ndogondogo kwenye mahitaji, utafutaji na utumiaji wa taarifa katika wilaya za Chamwino na Manyoni zilizopo katikati mwa Tanzania.

Takwimu zitatakazokusanywa kutokana na mahojiano haya zitasaidia katika kuelewa mwenendo wa taarifa za wanawake wanaojihusisha na biashara ndogondogo. Pia, majibu ya utafiti huu yatasaidia kutoa taarifa ya jinsi ya kupunguza umaskini miongoni mwa wanawake, Vilevile, utafiti huu utaongeza maarifa kwa watengeneza sera na watoa taarifa juu ya umuhimu wa wanawake wa vijijini katika kuchangia maendeleo ya kiuchumi vijijini.

Jina la Wilaya.....

Jina la Kata.....

Jina la Kijiji.....

Jina la Kikundi.....

Tarehe ya Mahojiano.....

Sehemu ya Kwanza: Taarifa za Kikundi

1.4 Je, wanakikundi wako wana umri kati ya miaka mingapi hadi mingapi? (Mf. 20-25; 26-30; 31-35; 36-40 n.k).....

1.1

.....
.....

1.2 Je, ni wanakikundi wangapi wameolewa na wangapi hawajaolewa?

.....
.....

1.3 Je, wanakikundi wana kiwango gani cha elimu?(Elimu ya msingi, sekondari, nyinginezo, tafadhali taja).....

.....

Sehemu ya Pili: Mwenendo wa Taarifa

2.1 Je, ni aina gani ya taarifa ambazo wanakikundi chako wanazozihitaji katika kufanya biashara? (Mf. Taarifa za masoko, taarifa za upatikanaji wa madawa, taarifa za mitaji n.k)

.....

.....

2.2 Je, wanakikundi chako wanatafutaje taarifa? (Mf. Kusoma magazeti, kuangalia vipindi kwenye televisheni, kusikiliza redio n.k)

.....

.....

2.3 Je, wanakikundi wanafahamu wapi wanaweza kupata taarifa wanazozihitaji kwa ajili ya biashara zao? (Hapana/ndiyo).....

Kama ni ndiyo, taja.....

.....

2.4 Je, wanakikundi wanapenda kutumia vyanzo gani vya taarifa? Na kwasababu gani?

.....

.....

2.5. Je, wanakikundi wana ujuzi gani wa kutafuta na kutumia taarifa? Au hawana?

.....

.....

2.6. Je, ni nini jukumu/ mchango wako katika kuwawezesha wanakikundi wako kupata taarifa za kibiashara?

.....

.....

2.7. Je, wanakikundi wanawasilianaje pindi wanapopata taarifa muhimu za kibiashara?

.....

.....

2.8 Je, wanakikundi wanatumia njia/mbinu gani kupeana taarifa za kibiashara ndani ya kikundi?

.....

.....

.....

Sehemu ya Tatu: Njia za Mawasiliano na Vyanzo vya Taarifa

3.1 Je, ni njia/mbinu gani za mawasiliano wanazotumia wanakikundi kukidhi mahitaji ya taarifa?

	Njia za mawasiliano	Tafadhali weka alama ya vema(√)
1	Televisheni	
2	Redio	
3	Mkutano wa kijiji	
4	Mazungumzo ya wanakikundi	
5	Ubao wa Matangazo	
6	Simu za kiganjani	
7	Filamu	
8	Mabango	
9	Vipeperushi	
10	Magazeti	
11	Nyinginezo, taja tafadhali	

3.2 Je, unafikiri njia/mbinu za mawasiliano zilizotajwa hapo juu zinasosha kukidhi upatikanaji wa taarifa zinazotakiwa na wakikundi? (Ndiyo/Hapana)

Kama jibu ni ndiyo ni kwa kiasi gani? Weka alama ya vema (√) kwenye jibu sahihi

	Njia za mawasiliano	Inatosha sana	Inatosha	Haitoshi
1	Televisheni			
2	Redio			
3	Mkutano wa kijiji			
4	Mazungumzo ya wanakikundi			
5	Ubao wa Matangazo			
6	Simu za kiganjani			

7	Filamu			
8	Mabango			
9	Vipeperushi			
10	Magazeti			
11	Nyinginezo,taja tafadhali			

3.3 Je, ni vyanzo gani vya taarifa ambavyo wanakikundi wanavitumia ili kupata taarifa za kibiashara? (Maktaba, Afisa Maendeleo ya Jamii, vinginevyo tafadhali taja)

.....

.....

3.4 Je, unafikiri vyanzo vya taarifa vilivyotajwa hapo juu vinatosheleza upatikanaji wa taarifa kwenye kikundi chenu? Ndiyo/Hapana

Kama jibu ni ndiyo, ni kwa kiasi gani? Weka alama ya vema (√) kwenye jibu sahihi

	Vyanzo	Vinatosha sana	Vinatosha	Havitoshi
1	Maktaba			
2	Vituo vya Taarifa			
3	Afisa Maendeleo ya Jamii			
4	Nyinginezo, elezea tafadhali			

3.5 Je, unafikiri nini kifanyike kuongeza ubora wa njia za mawasiliano na vyanzo vya taarifa kati ya kikundi chenu na vikundi vingine?

.....

.....

3.6 Shauri njia bora za mawasiliano na vyanzo vya taarifa unavyofikiri vinafaa zaidi kukidhi mahitaji ya upatikanaji wa taarifa katika kikundi chenu?

.....

.....

Sehemu ya Nne: Uwezo wa Kutambua, Kupata na Kutumia Taarifa

4.1 Je, wanawake wa kikundi wana ujuzi gani wa kuainisha/kutambua, kupata na kutumia taarifa?.....

.....

4.2 Je, Wanawake wanazitumiaje taarifa zilizopo/ walizonazo kufanya biashara zao ziendelee?

.....

.....

Sehemu ya Tano: Changamoto Katika Utafutaji wa Taarifa

5.1 Je, ni changamoto gani wanazozipata wanawake wakati wa kutafuta taarifa?

.....

.....

5.2 Je, unafikiri nini kifanyike kutatua changamoto wanazozipata wanawake wanaojihusisha na biashara ndogondogo katika utafutaji wa taarifa?.....

.....

.....

5.4. Je, una ushauri wowote kuhusu mwenenendo wa mahitaji, utafutaji na utumiaji wa taarifa za biashara miongoni mwa wanawake wa vijijini?

.....

.....

Asante sana.

Appendix 3: FGD for Women involved in SMEs - Themes

Let us start by introducing ourselves, giving our full names, education background, the business we are involved in, the length (in weeks, months, years) you have been in business, your village where you live.

1. Information needs of rural women involved in SMEs

- Think about your daily or weekly routine and give examples of information needed
- What types of information do you need to do your business?

2. Channels of communication used to satisfy information needs

- Think about recent time and give examples of channels of communication used to satisfy your information needs

3. Information resources used to satisfy information needs

- Where do you go when you need information?
- What information resources do you use to satisfy your information needs?

4. Challenges women face in seeking and using information needed for their business

- what challenges do you face in seeking information to satisfy your information needs?
- What do you think is a biggest challenge you face in seeking and using information?
- How do you address the challenges you face when seeking and using information?

5. Skills women need to effectively identify access and use information

- What skills do you have to identify, access and use information?
- What kinds of training do you need to improve your business?

6. The use of available information

- How do you use the available information you seek to promote your business?
- how current, relevant accurate and adequate is the information you seek and access?
- How often do you need the information for your business?

7. Technologies such as computers, cell phones, to seek information

- Do you use of any technologies above to seek information?
- If yes, how does this help your business?

Appendix 4: Themes-Guide (Swahili Translation)

Kiambatisho cha 4: Majadiliano Katika Makundi yawanawake Wajasiliamali Wadogo na Wakati

Tuanze kwa kujitambulisha majina, kiwango cha elimu na biashara tunazofanya, tumefanya biashara kwa muda gani (wiki, miezi, miaka) na unaishi katika kijiji gani.

1. Uhitaji wa taarifa za wanawake wanao jishughulisha na biashara ndogondogo

Fikiria shughuli zako za kilasiku au za wiki nautoe mfano wa taarifa ulizo ziitaji

Je, ni taarifa gani unazozitaji kufanya biashara yako?

Wapi, na vipi unapopata taarifa unazozitaji kusaidia biashara yako?

2. Njia za mawasiliano unazotumia kutosheleza mahitaji yako ya taarifa

Toa mfano wa njia za mawasiliano hulizotumia kutosheleza maitaji yako ya taarifa

3. Vyanzo vya taarifa unavyotumia kutosheleza mahitaji yako ya taarifa

Je, unakwenda wapi unapoitaji taarifa?

Je, ni vyanzo gani vya taarifa unavyotumia kutosheleza mahitaji yako ya taarifa?

Je, muundo gani wa vyanzo vya taarifa unavyofikiri vinakuasaidia kwenye/kwa kazi yako?

4. Changamoto wanazokutana nazo wanawake kwenye kutafuta na kutumia taarifa wanazo wanazozihitaji kwenye biashara zao

Fikiria wakati ulipokuwa unatafuta taarifa na ikawa vigumu kuzipata ulifanyaje?

Je, ni changamoto zipi unakutanazo wakati wa kutafuta taarifa za kutosheleza maitaji yako?

Je, unatatua vipi changamoto unazokutanazo wakati wakutafuta na kutumia taarifa?

5. Ujuzi wanaohitaji wanawake ili kuainisha, kupata na kutumia taarifa ipasavyo

Je, unaujuzi gani wa kuainisha, kupata na kutumia taarifa

Eleza ni kwa kiwago gani ni muhimu kuwa na ujuzi wa kutafuta na kutumia taarifa

Je, ni aina gani ya mafunzo unayohitaji kuboresha biashara yako?

Je, ni wapi unapata taarifa za kukusaidia kifedha, au ushauri wa kisheria

6. Matumizi ya taarifa zilizopo

Je, unatumia taarifa zilizopo kuendeleza biashara yako?

Je, ni mara ngapi unahitaji taarifa kwa ajili ya biashara yako?

7. Teknolojia kama komputa, simu za kiganjani kutafuta taarifa

Je, unatumia teknolojia tajwa kutafuta taarifa?

Kama ndiyo ni kwa kiasi gani zimekusaidia kwenye biashara yako?

Kama hapana, kwa nini?

8. Je, ni aina gani ya vyanzo vya taarifa ungependa viwepo kutosheleza mahitaji yako ya taarifa?

Asante sana.

Appendix 5: Introduction Letter - Manyoni

District Executive Director,
Manyoni District Council,
P.O. Box 60,
Manyoni/Singida.
Tanzania.



12 April 2013

RE: Introducing Ms. Juliana J. Manyerere-PhD Student at University of KwaZulu Natal

This letter serves to introduce and confirm that Ms. Juliana J. Manyerere is a duly registered PhD (Information Studies) candidate at the University of KwaZulu Natal. The title of her PhD research is Information Behaviour of rural women involved in Small and Medium Scale Enterprises (SMEs) in Chamwino and Manyoni Districts of Central Tanzania. The outcome from the study is expected to improve practice, inform policy and extent theory in this field of study. As part of the requirements for the award of a PhD degree (Information Studies) she is expected to undertake original research in an environment and place of his choice. The UKZN ethical compliance regulations require her to provide proof that the relevant authority where the research is to be undertaken has given approval.

We appreciate your support and understanding to grant Ms. Juliana Manyerere permission to carry out research in your organization (s). Should you need any further clarification, do not hesitate to contact me.

Thank you in advance for your understanding

A handwritten signature in black ink, appearing to be 'Stephen Mutula', written over a horizontal line.

Prof Stephen Mutula (Information Studies Programme)

Supervisor and Academic Leader, Development Cluster
University of KwaZulu Natal
Private Bag X01 Scottsville 3209
Pietermaritzburg
Email: mutulas@ukzn.ac.za
Tel: +27 33 260 5571; +27 712 750 109

Appendix 6: Introduction Letter - Chamwino

District Executive Director,
Chamwino District Council,
P.O. Box 223,
Chamwino,
Dodoma.
Tanzania.



RE: Introducing Ms. Juliana J. Manyerere-PhD Student at University of KwaZulu Natal

This letter serves to introduce and confirm that Ms. Juliana J. Manyerere is a duly registered PhD (Information Studies) candidate at the University of KwaZulu Natal. The title of her PhD research is Information Behaviour of rural women involved in Small and Medium Scale Enterprises (SMEs) in Chamwino and Manyoni Districts of Central Tanzania. The outcome from the study is expected to improve practice, inform policy and extent theory in this field of study. As part of the requirements for the award of a PhD degree (Information Studies) she is expected to undertake original research in an environment and place of his choice. The UKZN ethical compliance regulations require her to provide proof that the relevant authority where the research is to be undertaken has given approval.

We appreciate your support and understanding to grant Ms. Juliana Manyerere permission to carry out research in your organisation(s). Should you need any further clarification, do not hesitate to contact me.

Thank you in advance for your understanding

A handwritten signature in black ink, appearing to read "Stephen Mutula", followed by a horizontal line.

Prof Stephen Mutula (Information Studies Programme)

Supervisor and Academic Leader, Development Cluster
University of KwaZulu Natal
Private Bag X01 Scottsville 3209
Pietermaritzburg
Email: mutulas@ukzn.ac.za
Tel: +27 33 260 5571; +27 712 750 109

Appendix 7: Informed Consent Letter



School of Social Sciences
Private Bag X01
Scottsville 3209
South Africa
Tel: 0604808616
Email: juliana.manyerere@gmail.com

10 April 2013

Dear Respondent

Informed Consent Letter

Researcher: Juliana James Manyerere
Institution; University of KwaZulu-Natal
Telephone number: 031 260 4373
Email address: Juliana.manyerere@gmail.com

Supervisor: Prof. Stephen M. Mutula
Institution: University of KwaZulu-Natal
Telephone number: 033-260 5571
Email address: mutulas@ukzn.ac.za

I, Juliana J. Manyerere, of the Institute of Rural Development Planning (IRDP) - Dodoma, kindly invite you to participate in the research project entitled Information Behaviour of rural women involved in Small and Medium Enterprises (SMEs) in Chamwino and Manyoni Districts of Central Tanzania.

This research project is undertaken as part of the requirements for the award of the PhD degree (Information Studies), at the University of KwaZulu-Natal.

Participation in this research project is voluntary. You may refuse to participate or withdraw from the research project at any stage and for any reason without any form of disadvantage.

There will be no monetary gain from participating in this research project. Confidentiality and anonymity of records identifying you as a participant will be maintained by the Department of Information Studies, at the University of KwaZulu-Natal.

If you have any questions or concerns about participating in this study, please feel free to contact myself or my supervisor at the numbers indicated above.

It should take you about 15 minutes to complete the questionnaire.

Thank you for participating in this research project.

A handwritten signature in blue ink, appearing to read 'Mamy.', is written over a horizontal dotted line.

10 April 2013

Signature

Date

I hereby consent to participate in the above study.

Name: Date: Signature:

Appendix 8: Informed Consent Letter



October 29, 2013

Informed Consent Letter

Researcher: Juliana James Manyerere
Institution: University of KwaZulu-Natal
Telephone number: +27 60 480 8616/+255 759 344 122
Email address: 213541733@stu.ukzn.ac.za

Supervisor: Prof. Stephen M. Mutula
Institution: University of KwaZulu-Natal
Telephone number: +27 (0) 33 260 5571
Email address: mutulas@ukzn.ac.za

Dear Respondent,

I, Juliana James Manyerere, of Institute of Rural Development Planning (IRDP)-Dodoma, who is currently a PhD candidate at the school of social science of the University of KwaZulu-Natal, kindly invite you to participate in the research project entitled: Information behavior of rural women involved in Small and Medium Enterprises (SMEs) in Chamwino and Manyoni districts of Central Tanzania.

This research project is undertaken as part of the requirements of the PhD, which is undertaken through the University of KwaZulu-Natal, Information Studies Department.

The aim of this study is to investigate information behavior of women involved in SMEs in central Tanzania with a view to contributing to policy and practical solutions in small scale entrepreneurship in rural areas.

Participation in this research project is voluntary. You may refuse to participate or withdraw from the research project at any stage and for any reason without any form of disadvantage. There will be no monetary gain from participating in this research project. The information you provide will be used for academic purposes only and not otherwise. Confidentiality and anonymity of records identifying you as a participant will be maintained by the Department of Information Studies, at the University of KwaZulu-Natal.

If you have any questions or concerns about participating in this study, please feel free to contact myself or my supervisor at the numbers indicated above.

It will take us about 30 to 40 minutes to complete the interview and focus group discussion.

Thank you for participating in this research project.

Signature

Date

DECLARATION OF CONSENT

I,..... (Full names of participant) hereby confirm that I understand the contents of this document and the nature of the research project, and I consent to participating in the above mentioned research project.

I understand that I am at liberty to withdraw from the project at any time, should I so desire.

Name: Date: Signature:

Appendix 9: Informed Consent Letter (Translation)



Barua ya hiari ya mshiriki

October 29, 2013

Jina la Mtafiti: Juliana James Manyerere
Taasisi: Chuo Kikuu cha KwaZulu-Natal
Nambari ya simu: +27 60 480 8616/+255 759 344 122
Barua pepe: 213541733@stu.ukzn.ac.za

Msimamizi wa utafiti: Prof. Stephen M. Mutula
Taasisi: Chuo Kikuu cha KwaZulu-Natal
Nambari ya simu: +27 (0) 33 260 5571
Barua pepe: mutulas@ukzn.ac.za

Ndugu mshiriki,

Mimi, Juliana James Manyerere, wa Chuo Cha Mipango ya Maendeleo Vijijini -Dodoma, ambaye sasa ni mwanafunzi wa shahada ya uzamivu katika shule ya sayansi jamii ya Chuo Kikuu cha KwaZulu-Natali, ninakuomba ushiriki katika utafiti huu wenye kichwa cha somo: Mwenendo wa wanawake wa vijijini wanaojihusisha na biashara ndogondogo kwenye mahitaji, utafutaji na utumia wa taarifa kwenye wilaya za Chamwino na Manyoni katikati mwa Tanzania.

Utafiti huu unafanyika ili kukidhi mahitaji ya shahada ya uzamivu (PhD), ya Chuo kikuu cha KwaZulu-Natal, Idara ya mambo ya taarifa.

Madhumuni ya utafiti huu ni kuchunguza mwenendo wa wanawake wa vijijini wanaojuhusisha na biashara ndogondogo kwenye mahitaji, utafutaji na utumiaji wa taarifa kwa mtazamo wa kuchangia kwenye sera na kwa watoa taarifa juu ya umuhimu wa wanawake wa vijijini katika kuchangia maendeleo ya kiuchumi vijijini.

Ushiriki katika utafiti huu ni wa hiari yako. Unaweza kukataa kushiriki au kujiondoa kwenye utafiti huu katika hatua yoyote na kwa sababu yoyote bila kupata madhara yoyote. Hata hivyo ijulikane kuwa hakutakuwa na malipo yoyote kwa kushiriki kwako katika utafiti huu. Taarifa zote utakazotoa zitatumika kwa madhumuni ya kitaaluma tu na si vinginevyo. Na kwamba taarifa zozote kukuhusu wewe kama mshiriki zitahifadhiwa na Idara ya mambo ya taarifa ya Chuo Kikuu cha KwaZulu-Natal.

Kama una maswali au hoja kuhusu kushiriki katika utafiti huu, jisikie huru kuwasiliana nami au msimamizi wangu kwa kutumia namba hizo hapo juu.

Tutatumia dakika 30 hadi 40 kukamilisha mahojiano na majadiliana haya.

Nashukrani kwa ushiriki wako katika utafiti huu.

Saini

Tarehe

TAMKO LA KUKUBALI KWA HIARI

Mimi,..... (jina kamili la mshiriki) nathibitisha kwamba nimeelewa maudhui ya andiko hili na kiini cha utafiti huu, na kwa hiari yangu nakubali kushiriki kwenye utafiti huu kama ulivyotajwa hapo juu.

Naelewa kwamba niko huru kujiondoa kwenye utafiti huu wakati wowote, kama nitapenda kufanya hivyo.

Jina la mshiriki: Tarehe: Saini:

.....

Appendix 10: Ethical Clearance



19 March 2014

Ms Aikana J Manyerere (213541733)
School of Social Sciences
Pietermaritzburg Campus

Protocol reference number: HSS/IK/27/0140
Project title: Information behaviour of rural women involved in Small and Medium Enterprises (SMEs) in Chamwino and Manyoni Districts of Central Tanzania

Dear Ms Manyerere,

In response to your application dated 20 November 2013, the Humanities & Social Sciences Research Ethics Committee has considered the abovesubmitted application and the protocol have been granted **FULL APPROVAL**.

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

Please note: Research data should be securely stored in the discipline/department for a period of 5 years.

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

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

Yours faithfully



Dr. Shemuka Singh (Chair)

cc: Supervisor: Professor Stephen Mutuku
cc: Academic Leader Research: Professor Sabine Marshall
cc: School Administrator: Ms Nancy Muzau

Humanities & Social Sciences Research Ethics Committee

Dr. Shemuka Singh (Chair)

Wahlville Campus, Govan Mbeki Building

Postal Address: Pietermaritzburg, 6001, Durban 4000

Telephone: +27 (0) 31 260 350/353/400/ Fax: +27 (0) 31 260 4805 Email: ethics@ukzn.ac.za / ethics@ukzn.ac.za / ethics@ukzn.ac.za

Website: www.ukzn.ac.za

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Appendix 11: Research Permit - Manyoni

JAMHURI YA KURUGANO WA TANZANIA
OFISI YA WAZIRI MKUU
TAWALA ZA MIKOA NA SERIKALI ZA METAA
HALMASHAURI YA WILAYA YA MANYONI
(Barua zote zitumwe kwa Mkurugenzi Mtendaji Wilaya)

STIMI NA.2540210/2540136
FAX NA.2540210/2540209

Unapojiba tafadhali tuja:

Kumb.Na.HW/S.1/33 VOL.II/112

Ofisi ya Mkurugenzi Mtendaji Wilaya,
S.L.P. 60,
MANYONI.

17 Oktoba, 2013

Maafisa Wakendaji wa Kata za Manyoni, Mlawese,
Idigi Majengo, Chikola, Makanda, Mitundu, Makuru,
Saranda, Majiri na Muhalala,
Halmashauri ya Wilaya,
MANYONI.

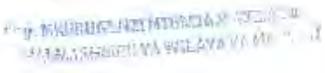
**YAH: UTAMBULISHO WA BI. JULIANA J. MANYERERE MWANAFUNZI WA
SHAHADA YA UZAMIVU. CHUO KIKUU CHA
KWAZULU - NATAL**

Rejea mada tajwa hapo juu.

Kwa barua hii naomba utambue mtajwa hapo juu ambao atafanya utafiti katika
vikundi vya Akinamama vinavyojihusisha na biashara ndogo ndogo na za kati (SMEs).

Naomba apewe ushirikiano tafadhali.


P. O. Naveeta
Kny: MKURUGENZI MTENDAJI WILAYA
MANYONI



Nakala;

Bi. Juliana J. Manyerere

Appendix 12: Research Permit –Chamwino

CHAMWINO DISTRICT COUNCIL

(All letters should be addressed to the district Executive Director)

Personal Telephone No.
District Executive Director 026-2321449
fax No. 026- 2323299



S.L.P. 1126,
Chamwino,
Dodoma.
TANZANIA

Ref. Na HW/U.30/14/vol-II/72

25th /October/2013

University of KwaZulu-Natal,
Private Bag X0i Scottsville 3209
Pietermaritzburg,
South Africa

REF. RESEARCH PERMIT

The reference is made to your letter dated 27th September 2013. This is to inform you that the Chamwino District Council has accepted Ms. Juliana J. Manyerere – PhD Student at University of KwaZulu-Natal to conduct her Research in our council. In that case, she is allowed to visit Small-Scale and Medium Scale Enterprises' (SMEs)

The research permit is granted from October 2013

Yours,


Jaina S. Msangi

DISTRICT EXECUTIVE DIRECTOR
CHAMWINO DISTRICT COUNCIL
P. O. Box 1126
DODOMA

For; DISTRICT EXECUTIVE DIRECTOR

CHAMWINO

Cc: Ms Juliana J. Manyerere

Appendix 13: List of SMEs at Chamwino District

Small and Medium Enterprises owned by women groups at Chamwino District

S/N	Name of the SMEs	Activity	Group members
1	Amani	Poultry	05
2	Wanawake na maendeleo	Poultry, swine keeping	25
3	Ilumbo	Poultry	11
4	Ushirika mseto	Poultry, catering, decoration	40
5	Misani	Poultry, horticulture	35
6	Ushirika Nkwenda	Kiosk	25
7	Darubini	Kiosk	14
8	Mshikamano	Kiosk	10
9	Ushirika	Kiosk	14
10	Ukombozi	Kiosk	15
11	Umoja	Kiosk	10
12	Tupendane	Kiosk	26
13	Mshikamao	Kiosk	15
14	Hekima	Kiosk	30
15	Misani	Kiosk	35
16	Wendo	Buy and sell agriculture product	05
17	Jiendeleze	Buy and sell agriculture product	05
18	Mihanga	Buy and sell agriculture product	05
19	Umonga	Buy and sell agriculture product, bee-keeping	05
20	Msamaria	Buy and sell agriculture product, Horticulture	05
21	Mshikamano	Swine keeping	10
22	Kilimo kwanza	Horticulture	05
23	Dira yetu	Horticulture	26
24	Misani	Horticulture	35
25	Amani Lusinde B	Horticulture, catering	40
26	Jitegemee	Horticulture	18
27	Chiwindo farmers association	Horticulture	10
28	Wastara	Café	05
29	Kiwama	Café, bakery	10
30	Ushindi	Café	14
32	Wanawake wafuganyuki	Bee-keeping	05
33	Wanawake wakulima	Bee-keeping	05
34	Ung'alale	Bee-keeping	06

Appendix 14: List of SMEs at Manyoni

Small and Medium Enterprises owned by women groups at Manyoni District

S/N	Name of the SMEs	Activity	Group members
1	Matunda	Poultry	17
2	Upendo	Poultry	10
3	Tumaini	Poultry	07
4	Nguvu yetu	Poultry	07
5	Amani	Poultry	20
6	Azimio	Poultry	20
7	Mapinduzi	Poultry	20
8	Mshikamano	Poultry	20
9	Ushindi	Poultry	07
10	Amani	Poultry	08
11	Chihuliko	Tie and dye	05
12	Agape	Tie and dye	05
13	Jiungeni	Weaving, wine processing	07
14	Songambebe	Tailoring	15
15	Tumaini	Tailoring	07
16	Wajane Manyoni	Oil extraction	15
17	Manyoni women	Oil extraction	05
18	Wajane	Oil extraction	10
19	Jitume	Kiosk	10
20	Amkeni	Kiosk	10
21	Mheme maendeleo	Kiosk	10
22	Wapika chumvi	Salt manufacturing	05