

**INFLUENCE OF EMPOWERMENT PROGRAMME ON SEXUAL
BEHAVIOUR CHANGE AMONG FEMALE SEX WORKERS,
A CASE OF FAMILY AIDS CLINIC IN NAKURU, KENYA**

BY

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DECLARATION

This research project is my original work and has not been presented for the award of any degree in any other University.

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This research project has been submitted for examination with my approval as the University supervisor.

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DEDICATION

This research is dedicated to my late mum Hannah Wambua and my dad Cosmas Wambua who showed me the importance of education.

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ABSTRACT

This research sought to examine how a specific empowerment program influenced sexual behavior change among female sex workers enrolled at the Family AIDS Initiative Response Clinic that is based in Nakuru County in Kenya. The objectives of this study were drawn from approaches that the empowerment program used to help the enrolled sex workers. These objectives include; capacity building, support through small and medium enterprises, outreach and agricultural-based support activities. Despite rapid growth in empowerment programs in Kenya as well as the ballooning number of agencies dealing with empowerment and rural development, the impact of such programs and projects on sexual behavior change especially on female sex workers has not been given sufficient attention in most empirical literature studied. This study was therefore guided by four objectives derived from strategies employed by the program under study. Empirical literature of the works of widely published scholars was reviewed. The study was hinged on two models namely; social cognitive behavior theory and the theory of change. The nexus between study variables was demonstrated by a conceptual framework that exemplifies interrelationships between variables. The study adopted a descriptive survey design with a target population of 150 respondents. Using the Krejcie and Morgan table for determining sample size, 108 respondents were sampled for this study. To achieve a desired representation, simple random sampling was used in selecting respondents. A questionnaire with a 5-point Likert scale was constructed and used to collect the required data. Data obtained was analyzed using SPSS Version 21.0. Quantitative data was analyzed by making inferences from the expressions and opinions of the respondents around the variables and presented descriptively to make inferences. Instrument's validity was determined by using construct's validity while reliability was determined by using the Cronbach-Alpha Coefficient. Pilot testing of the questionnaire was done 2 weeks prior to the main study. It is hoped this study would generate vital information and add to the pool of knowledge to the ever-expanding discipline of program evaluation. From the multiple regression findings, a unit change in capacity building led to 1.000 unit increase in sexual behavior change. A 1.000 unit increase in support by SMEs also led to 1.076 increases in sexual behaviour change. The findings also indicated that there was a highly significant relationship (with t statistic p value $<0.023 < 0.05$) between capacity building and sexual behaviour change among female sex workers. Again, the same findings also indicated that there existed a highly significant relationship (with t statistic p value $<0.0015 < 0.05$) between support through SME's and sexual behavior change among female sex workers. However there seemed to exist no significant relationship between outreach activities and sexual behavior change at ($p = 0.220 > 0.05$) and between agricultural activities and sexual behavior change with ($p = 1.000 > 0.05$). In conclusion therefore, the researcher observed that there existed highly significant relationships between capacity building and support through SME's against sexual behaviour change in female sex workers, while there existed no relationships between outreach and agricultural activities against sexual behaviour change amongst female sex workers enrolled at family AIDS initiative clinic. On this basis, the researcher recommends that a comprehensive study be undertaken to find out the joint influence of capacity building and micro and medium enterprises on sexual behavior change among female sex workers elsewhere in Kenya.

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ABBREVIATIONS AND ACRONYMS

| | |
|------------------|---|
| AIDS: | Acquired Immune Deficiency Virus |
| ANOVA: | Analysis of Variance |
| BC: | Behavior Change |
| DFID: | Department for International development |
| FSW: | Female Sex Workers |
| HIV: | Human Immunodeficiency virus |
| IDA: | International Development Association |
| IFAD: | International Fund for Agricultural Development |
| KCPE: | Kenya Certificate of Primary Education |
| KCSE: | Kenya Certificate of Secondary Education |
| KDHS: | Kenya Demographic Health survey |
| KNBS: | Kenya National Bureau of Statistics |
| NACOSTI: | National Council for Science, Technology and Innovation |
| NGO: | Non-governmental Organization |
| PM&E: | Participatory Monitoring and Evaluation |
| SME: | Small and Micro Enterprises |
| STI: | Sexually Transmitted Infections |
| SPSS: | Statistical Package for Social Scientists |
| UNDP: | United Nations Development Program |
| UK: | United Kingdom |
| WHO: | World Health Organization |

CHAPTER ONE

INTRODUCTION

1.1 Background to the Study

Health behavior change is the motivational, volitional, and actionable processes of abandoning such health-compromising behaviors in favor of adopting and maintaining health-enhancing behaviors (Reid, 2004). Behavior change has become a central objective of public health interventions. With an increased focus on prevention in health services at many levels, behavior change is seen as particularly important in low and middle income countries, where the efficiency of health spending and the costs and benefits of health interventions has been under increased scrutiny in recent decades (WHO,2002).

In order to develop relevant strategies that respond to sexual behavior change among female sex workers, it is important to engage these populations with empowerment programs that help curb societal attitudes that face them thereby placing them at a greater risk of infection and by extension the larger society as a whole. Empowerment impacts the lives of sex workers on a global, local, household and individual level. Sex workers' marginality as migrants, single mothers, and sexually and gender-diverse people influences their choice of work over formal unskilled occupations. But the main issue is the money. For many, sex work earns more money in less time than other available occupations. Sex workers need to work together for economic and social justice. By forming organizations, sex workers can help one another to earn and keep more money.

Collaboration, training and skills building among female sex workers is a key strategy. As well as general capacity building provides training and support on specific topics such as legal analysis, use of information technologies, governance, financial administration and other areas of organizational development. While advocating for sex workers to participate in crucial meetings that determine legal and policy approaches to HIV and sex work in order to ensure that the capacity of sex workers is also built for proper and meaningful engagement. Outreach is a reciprocal learning by which programme managers and staff learn about the community and the community learns through the programme. A team of female sex workers who are peer educators and community workers'' reach out'' to people who are in need. The

outreach teams disseminate information, distribute condoms, demonstrate correct condom use, refer community members of HIV and STI testing, clinical services and social support, help people living with HIV adhere to their anti-retro treatment regimen and support the community members to address violence, stigma and discrimination that they encounter. Outreach increases awareness and change behaviors where proper design and strategies are adopted.

Micro-finance is the provision of financial services such as credit, insurance, savings and in some cases, other non-financial services such as business skills training. Micro finance is widely used to empower economically deprived groups (Mk Nelly and Dunford 1998; Chowdhurg and Bhuiya 2001; Schuler and Hashemi 1994). The impact of micro finance services is thought to occur at four levels: Individual, household, enterprise and community (Sebstad and Barnes 2000) four pathways of individual-level effects of micro finance services on women's lives, including their risks to HIV have been considered in most empirical studies.

Studies in different contexts have reported positive effects of micro finance services on women's empowerment. Schuler and Hashemi (1994) using a carefully controlled study and employing contextually defined measures of employment found that women involved in micro credit programs in Bangladesh exhibited greater economic security, ability to make own purchases and freedom from family dominations violence than those in the control. SMEs are also said to be responsible for driving innovation and competition in many economic sectors. Petrakis and Kostis (2012) explore the role of interpersonal trust and knowledge in the number of small and medium enterprises. They conclude that knowledge positively affects the number of SMEs, which in turn, positively affects interpersonal trust. Note that the empirical results indicate that interpersonal trust does not affect the number of SMEs.

Agriculture is one of the oldest occupations of in the world. Kenya is predominantly an agricultural country with 82% of the households still in the rural sector. High risk groups constitute 50.7% of the population and is considered to be a valuable resource potential needed to be meaningfully organized and recognized in the field of entrepreneurship, especially in the rural agricultural sector (KDHS, 2008). The employment structure in this Survey showed that around a third of the employed

worked in the Agriculture sector, with a quarter in Industry and balance two fifths in the Services sector. Around 70% of the employed remained working in the informal sector where majority of them are not meaningfully engaged. Underemployment continues to be a serious problem in the country remaining at 22% of the labor force. Relatively more females are underemployed than males (Statistical Abstract, 2013)

1.2 Statement of the Problem

Empowerment programs have been known to influence personal behavior and improve on their livelihood. Despite rapid growth in empowerment programs as well as the ballooning number of agencies dealing with empowerment and personal emancipation, their impact on is not clearly shown. Again prevalent knowledge gaps exist in the literature on the influence of community empowerment programs on sexual behavior change. Several empirical studies have not explored relationships these two phenomena.

Kariuki, (2006) explored the interface between community empowerment and economic emancipation and found a strong positive relationship. Simotwo, (2012) studied the influence of development outcomes and reported that performance was resource-led and heavily relied on the politics and constraints in the international development system. He however did not explore the extent of this interplay. Klein (2007) ascribed the prevailing contention to program orthodoxy, complexity, history, political positioning and ideological legitimacy of program performance but did not show how this impacted empowerment. Bagire, (2012) looked at the influence of empowerment programs on behavior change but did not observe these changes in any high risk groups. Many authors limited their studies to empowerment by NGO's and did not explore any of these programs on high risk groups like female sex workers.

This study therefore sought to determine how various strands of empowerment contributed to sexual behaviour change among a highly risk group of female sex workers operating in Nakuru town. Strategies including capacity building; support through formation of small and medium enterprises; outreach and agricultural-based initiatives were considered in the context of how they impacted sexual behaviour change among female sex workers.

1.3 Purpose of the Study

The purpose of this study was to examine the influence of empowerment programs on sexual behavior change among female sex workers enrolled at the Family Aids Initiative Response clinic in Nakuru, Kenya.

1.4 Research Objectives

The study was guided by the following objectives:-

- i. To assess the extent to which capacity building influence sexual behavior change of female sex workers supported by Family Aids Initiative Response clinic.
- ii. To determine the extent to which small and micro enterprises influence sexual behavior change of female sex workers supported by Family Aids Initiative Response clinic.
- iii. To assess the extent to which outreach activities influence sexual behavior change of female sex workers supported by Family Aids Initiative Response clinic.
- iv. To establish the extent to which agricultural activities influence sexual behavior change of female sex workers supported by Family Aids Initiative Response clinic.

1.5 Research Questions

The study sought to answer the following research questions:-

- i. How does capacity building influence sexual behavior change of female sex workers supported by Family Aids Initiative Response clinic?
- ii. To what extent do small and micro enterprises influence sexual behavior change of female sex workers supported by Family Aids Initiative Response clinic?
- iii. At what level do outreach activities influence sexual behavior change of female sex workers supported by Family Aids Initiative Response clinic?
- iv. How do agricultural activities influence sexual behavior change of female sex workers supported by Family Aids Initiative Response clinic?

1.6 Significance of the Study

It is hoped that this study shall be a critical contribution to the practice, research and theory of community development and to the body of knowledge of professional rural development programming. The study will also provide development practitioners, consultants, evaluation experts and the academia with facts and data generated with lead to scholarly publications and useful reference materials. Scholars and researchers will therefore find information and data from this study as a basis for further research.

This study shall also contribute immensely to the theory and body of knowledge of project planning and management discipline. The theory of change and social behavioral change theories upon which this study is grounded, will be examined in the light of previous theories. Interrelationships between these theories and their contribution to the doctrine of program management will make a reasonable contribution to the pool of knowledge. It is also expected that this study will make insightful contribution to university teaching in the field of project planning. In addition, new knowledge generated through this study will benefit funding agencies, program evaluators and program implementation agencies in the development arena.

1.7 Limitations of the Study

Since the targeted responds for this research were female sex work, the practicability of interviewing all respondents was remote. This was due to time and cost constraints. To overcome this, the researcher undertook sampling from the target population and ensured the sample size used was large enough so as to be representative of the entire population. In addition, the sampling procedure used was scientific to the extent that the statistical principle of randomization was not compromised in the sampling frame.

Secondly, getting female sex workers-who practice an illegal trade to participate in an academic process by filling a relatively technical questionnaire, was not only a difficult endeavor but also next to impossible. To circumvent this, the researcher tactically befriended leading sex workers from their group and planned her meetings well in advance and made prior arrangements with concerned sex workers before meeting them at secluded places. This ensured that targeted respondents were assured of their privacy.

1.8 Delimitations of the Study

This study was delimited to female sex workers that were enrolled at the Family Aids Initiative Response clinic in Nakuru County only. Female sex workers not enrolled at the clinic did not form part of the target group.

Secondly, this study was delimited to research objectives that were thought to be influential on empowerment of individual female sex workers. Such factors as conceptualized by the program included capacity building, support through small, micro and medium enterprises, sensitization activities and investment in agricultural activities. The scope of this study was informed by the fact that the Kenyan Ministry of Health and funding agencies could be interested in the findings from this research.

1.9 Assumptions of the Study

During this research, it was assumed that targeted respondents would be available and responsive and that they would appreciate the significance of this research and fully support the research process. Since the targeted respondents were people doing an illegal trade, it was assumed they would come out and openly discuss their plight.

Secondly, it was also assumed that female sex workers targeted would be accessed easily since majority of them live in slums and shanty establishments that are not accessible. It was again assumed that targeted sex workers would understand and appreciate items within the research instrument and accordingly help in providing crucial information.

1.10 Definition of Significant Terms

Agricultural Programs: These are programs targeting to enhance some farming and livestock activities among the female sex workers on a small scale to help them become food secure.

Capacity Building: These are training related or empowerment-based activities that are geared towards enhancing the inert abilities of individual female sex workers become more equipped with requisite life skills.

Empowerment Programs: These are programs designed to enhance or improve the capacity of individual female sex workers become more prepared to handle challenges in life. Empowerment programs are geared towards making better life to this high risk groups.

High Risk Groups: These are groups that could easily be affected or influenced by specific vices in any community. Such groups are normally considered deviants or outcasts. Female sex workers are considered a high risk group

Outreaches: This is a non-associative learning process in which repeated administrations of a stimulus results in the progressive amplification of a response. It is often characterized by an enhancement of response to a whole class of stimuli in addition to the one that is repeated. Outreaches in most cases take the form of outdoor training activities.

Sexual Behavior Change: This is a positive behavior change from both irresponsible heterosexual and homosexual behavior to a controlled sexual life

Small and Medium Enterprises: These are medium-sized income generating enterprises designed for rehabilitated female sex workers so as to focus on production. Such enterprises are considered suitable for empowering high risk groups.

Female Sex Workers: These are groups or individual women who practice sex as a means of income generation. Such groups receive money or goods and services in exchange of sexual services

1.11 Organization of the Study

This study is organized in five chapters. Chapter one discusses the background of the study where the highlights on conceptual analysis were done. The chapter gives direction for the study which covers the statement of the problem, objectives of the study, hypotheses related to the study topic, research questions, limitations, delimitations and definitions of significant terms.

Chapter two covers empirical and theoretical literature upon which the study is hinged. The review gives a further elaboration on the context of the study where an increasing bundle of literature is shown. The chapter also gives theoretical framework upon which the study is anchored. Pertinent gaps in empirical studies were identified that informed the conceptual framework where interrelationships between study variables were depicted on a model.

Chapter three covers research methodology as applied in the study, the research design, target population, sampling procedure, description of research instruments, pilot testing, validity and reliability of research instruments, methods of data collection, procedures for data analysis, operational definition of variables and ethical considerations.

Chapter Four shall entail data analysis, presentation, interpretation and discussion of study findings while chapter five shall cover summary of research findings, conclusions, recommendations and suggestions for further research.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This chapter contains an empirical review of pertinent literature on empowerment programs and sexual behavior change amongst female sex workers. This review anchored the study on the theoretical framework and identified gaps in empirical studies from which the conceptual framework was formulated.

2.2 The Concept of Sexual Behavior Change amongst Female Sex Workers

In developing countries, sexual behaviour change has been the agitation for many organizations particularly the civil society organizations (Dwight, 2007). Health behavior change is the motivational processes of abandoning health-compromising behaviors in favor of adopting and maintaining health-enhancing behaviors (Reid, 2004). Behavior change has become a central objective of public health interventions. With an increased focus on prevention in health services at many levels, behavior change is seen as particularly important in low and middle income countries, where the efficiency of health spending and the costs and benefits of health interventions has been under increased scrutiny in recent decades (WHO,2002).

To respond to sexual behavior change among female sex workers, it is important to engage these populations with empowerment programs that help curb societal attitudes that face them thereby placing them at a greater risk of infection and by extension the larger society as a whole. Empowerment impacts the lives of sex workers on a global, local, household and individual level. But the main issue is the money. For many, sex work earns more money in less time than other available occupations. Sex workers need to work together for economic and social justice. By forming organizations, sex workers can help one another to earn.

Collaboration, training and skills building among female sex workers is a key strategy. As well as general capacity building provides training and support on specific topics such as legal analysis, use of information technologies, governance, financial administration and other areas of organizational development. Advocating for sex workers to participate in crucial meetings that determine legal and policy approaches to HIV and sex work is therefore crucial for them to live meaningfully.

2.3 Capacity Building and Sexual Behavior Change among Female Sex Workers

Training and capacity building has been cited to be influential to behavior change (Emerald, 2007). The Instructional System Development (ISD) methodologies, which emerged in the USA in the 1950s and 1960s and are represented in the works of (Gagne and Biggs, 2004) and (Goldstein, 2003) have taken root in the development of behavioral change approaches in the world. Research and technology development in the fields of behavioral change have gained momentum. This endeavor was rooted in the scientific research paradigm which sought to apply quantitative methodologies in the identification, prediction and control of the variables that are to be the critical cognitive affective determinants of responsible environmental behavior (Alliger, 2009).

It would seem that two decades after positivism and the quantitative tradition steered the definition and development of a research in empowerment education (Morris 2010). Training and various capacity building approaches and their characteristics continue to be dominant in the research and literature on environmental conservation today. However, capacity building field is dynamic and increasingly influential on modern development thinking (Selma 2009). Many more environmental educationists are developing a research perspective in their work, and more researchers are working full-time in the field of environmental conservation than ever before (Morris 2010).

Along with this trend is an ever- widening range of themes pursued by researchers with increasing emphasis being placed on the links between empirical research and the behavior change approaches. The range of methodologies and approaches to research is slowly but surely broadening to take account of the all-important social context of behavior change (Selma 2009). The increasing qualitative and interpretative research studies in the field of empowerment continue to be based on methodologies that are either lacking in rigor or too poorly articulated (Sachez, 2008). A great deal needs to be done in qualitative research and training so as to systematically broaden the implementation capacities of numerous actors in the field of behavior change and related approaches (Russel, 2012). Effective implementation and management of behavior change and capacity building programs depends on education, awareness raising, training in the relevant areas and evaluation (Awsathi and Sebastian, 1996).

Without an understanding of how to build synergies around capacity enhancement might reduce impacts in the field of empowerment (Maxwell, 2013) the need to improve capacity in training and curriculum development in the field capacity development cannot therefore be over emphasized (Morell,1998). Awareness and Training' is an important scheme for enhancing the understanding of people at all levels about the relationship between human beings and the environment in which they live in and to develop capabilities and competences to improve and protect their lives and wellbeing (Maxwell, 2013).

A committee comprising representatives from management institutions, industry and resource-based organizations is already looking into various aspects like course content and syllabi of the existing courses so that gaps could be identified and suggestion could be given for enhancing/introducing the behavioral content where necessary. Training and capacity building therefore plays a significant role in encouraging and enhancing people's participation in activities aimed at making themselves better (Bakshi and Naveh 2000).

The National behavior change awareness Campaign was launched in mid 1986 with the objective of creating awareness at the national level. It is a multi-media campaign which utilizes conventional and non-conventional methods of communication for disseminating behavior change messages to a wide range of target groups (Detjen, 2005). Under this campaign, nominal financial assistance is provided to registered NGOs, schools, colleges, universities, research institutions, women and youth organizations, army units, state departments among others for organizing/ conducting awareness raising activities.

These activities which include seminars, workshops, training camps, rallies, public meetings, exhibitions, essay/debate/painting/poster competitions, folk dances and songs, street theatre, puppet shows, preparation and distribution of behavior change resources benefit the female sex workers through hands-on participatory approach that unites teachers and scientists all over the world, is aimed at changing their perceptions about their sexuality and behavior associated with it (Johansen, 2013). Capacity enhancement has therefore been cited as being critical in building capacities for better performances

2.4 Micro Enterprises and Sexual Behavior Change among Female Sex Workers

Small and medium enterprises have grown tremendously in the last decade (Ismail, 2014). These organizations are carried out with minimum investment (Jakes, 2013) and comprise businesses that are run with the plan to produce more income with the least amount of money invested (Carol, 2014). While most people run their small and medium enterprises from their neighborhood localities, many such businesses are now also being run from homes or communal based establishments (Jakes, 2013).

Small and medium enterprises are also for those people who are unemployed, or who want to spend quality time with their family in meaningful economic activities (Russel, 2013). Since small and medium enterprises are trade mechanisms which are run on a low budget, they are extremely advantageous for people who want to earn a decent earning by operating an inexpensive business which they can afford. These initiatives have largely been promoted as a remedy for less privileged and disadvantaged groups (Amanda, 2012). With the emergence of several micro finance institutions in the recent years, Kenya has seen tremendous growth and establishment of small and medium enterprises (Kadenge, 2012). This growth has led to the creation of employment opportunities to many unemployed people countrywide (Karau, 2013).

The concept of small and medium enterprises has become deep rooted in the society to the extent that this sector has attracted both the International and National attention. At the International level, there is great effort and emphasis from both the United Nations Poverty Eradication Programs and International Community Aid agencies through micro finance programs and poverty eradication initiatives (World Bank, 2008). This has led to the creation of curriculum and blueprints with partnerships being formed to coordinate activities of small and medium enterprises. A number of other business ventures have been established to provide both intermediary services and act as technical oversight bodies specializing in business proposals, financing, and consultancies (Dahl, 2008).

In Kenya, the government through its affiliate agencies with donors and Non-Governmental Organizations has put in place several initiatives to partner with small and medium enterprises to steer the economy to prosperity (KDHS, 2008). This has seen changes in legislation, licensing, policy formulations and adoption of best

practices from other regions as impetus to provide incentives to citizens to create employment in the country and reduce over dependence (Statistical Abstract, 2010). Key among these have been the creation of Youth Enterprise Development Fund which deals with the larger youth population in the country, and Women Development Fund which has continued to be administered through women affiliated forums and activities such as Kenya Women Trust Fund among others (GOK, 2014).

In contemporary business world, a small and medium enterprise can be defined as a firm that is independently owned and operated and is not dominant in its operations (Johansen, 2010). The structure can be sole proprietor, partnership, family or even as limited company especially where capital required is relatively very insignificant in size (Abel, 2008). For decades, small and medium enterprises have competed against some world's largest organizations as well as multitudes of other small and medium companies. This has enabled such small and medium enterprise to try and keep ahead of the trends and find their own niche in the market (Lodassa, 2006).

Looking at the impact of small and medium enterprises in the Kenyan economy, we can remarkably foresee the successes this sector is likely to have on the economy (Economic outlook 2008). Key among the contributions is the case of employment creation to the youth and at large the majority of the unemployed population, reduction of rural urban migration, creation of goods substitutes among others and reduction in risky behavior (Jonde, 2008). Youth unemployment has been cited as a key contributor to growth of deviant behaviour including commercial sex. Expanded access to employment opportunities would therefore accordingly curtail sex work.

The small and medium enterprises sector shall therefore be crucial to empowerment programs particularly to the service sector and provision of opportunities and income to high risk segments of the society (Marrel, 2007). This sector shall also play a critical role in contributing significantly to poverty reduction (Johansen, 2009), positive behavioral change (Riise, 2009) and provide the much needed services to the larger corporate community and help to systematically improve on the livelihood. SME's have been critical in delivering masses from poverty hence helping communities and individuals find alternative sources of livelihood. Small enterprises have therefore demonstrated significant impacts on reducing deviant behaviour.

2.5 Outreach and Sexual Behavior Change among Female Sex Workers

Influence of outreach programs on behavior change approaches have substantially increased in the last decade (Larky, 2009). There is a growing awareness phase by government and other organizations where the need to incorporate behavioral change topics in to their educational system (Russel, 2010). Different organizations have included sensitization and outreach program in their wider program implementation agendas. However, they have been forced to work in an uncoordinated manner because of lack of support and organization (Russel, 2010)

Different groups often have distinct views and positions regarding behavior change approaches. Many external and internal factors shape the work done by diverse organizations and institutions. International organizations don't always recognize that different cultural solutions may be applicable for the same problem in other ways (Cathey, 2011). Local leaders on the other hand are not always concerned with change issues, even if they are "environmentally aware". Their political agendas are saturated with political problems like employment, national security, economic development, poverty and development (Loic, 2013) Government and non-government institutions have different perspectives on empowerment.

Efficiency in communication dissemination and outreach mechanisms needs to be delivered properly to the public mainly because it helps implant behavior change. Ecological knowledge without proper communication approaches is next to meaningless when sustainable solutions need to include public involvement (Sobel, 2005). The establishment of crossing points between science, management and communications is a must since the goals of sustainability should benefit all stakeholders, and most importantly the public.

The goal is to ease the access, distribution and application of knowledge at all social levels therefore does not need to be over emphasized (Russel 2008). In developing countries organizations and institutions should include means that facilitate the practical use of knowledge and information. This only works by applying a systems (or cross-cutting) perspective that encourages collaborative perspectives among all the different stakeholders, including the use of well-designed awareness campaigns (Lalle, 2007).

There is need to invest awareness creation of the immediate need to find solutions to various aspects of the sexuality crisis (Lande 2008). It has also been recognized that behavioral problems require the integration of ecological science knowledge with social issues. Local traditional knowledge is very useful when it comes to applying sustainable management strategies at a community level (Sobel, 2005). In a study to examine the influence of communication on behavior change, it was pointed out that knowledge of students whose teachers took part in the educational programs improved considerably. Student's performance was greatly enhanced by adequate preparation and reinforcement of behavior change information as well as by active participation (Charles, 2008).

Results obtained from other numerous studies have shown significant contributions in alleviating deviant behaviour among many groups and were being used to develop new educational campaigns for many high risk groups in many empowerment related programs (Sobel, 2005). In an attempt to promote empowerment and facilitate awareness in Swaziland, Nkosi (2002) carried out a community oriented education program on biological diversity and sustainability. This study emphasized the need for a public educational program to address marginalization and lack of involvement in community development initiatives. The results for this study were encouraging particularly to the involvement of high risk groups in general community emancipation and poverty reduction (Nkosi, 2002)

Other studies on community empowerment have significantly been influential to behavior change patterns (Remy, 2005). From Canada there is evidence to support the notion that behavior change activity is thriving within elementary schools; in Spain the prospects are good for collective effort and achievements'; in Australia the prospects remain bright and teachers find a way of engaging in behavior change even in circumstances where this is against all odds (Palmer,2008).

In this regard therefore empowerment programs have been cited to be related to behaviour change only if effective communication and dissemination mechanisms have been put in place (Remy, 2005). The extent of this relationship therefore needs to be examined in great detail with a particular focus on empowerment programs.

2.6 Agricultural Projects and Sexual Behavior Change among Female Sex Workers

Agricultural productivity has declined by 50% due to soil erosion and desertification. Yield reduction in Africa due to past soil erosion may range from 2–40%, with a mean loss of 8.2% for the continent. Africa is perhaps the continent most severely impacted by land degradation (Baanante, 2006), with the global average being lower, possibly in the range of 1–8%. The effects of soil erosion go beyond the loss of fertile land. It has led to increased pollution and sedimentation in streams and rivers, clogging waterways and causing declines in fish and other species. And degraded lands are also often less able to hold onto water, which can worsen flooding. With increasing pressures of climate change, water scarcity, population growth and increasing livestock densities, these ranges will be probably conservative by 2050.

According to study findings “Economic Analysis of Natural Resources in Rwanda” (2006) due to environmental degradation, poverty had increased, livelihood opportunities had declined, provincial health budgets were escalating, and soil loss of 15 million tons per year was costing the country 2% of its GDP annually. This was equivalent to a reduction in the country capacity to feed 40,000 people a year. In Malawi soil erosion alone reduces agricultural productivity by at least 6% and if this yield was recovered, an additional 1.88 million people would be lifted out of poverty between 2005 and 2015 (Westman *et al* 2014).

The impacts of land degradation and the depletion of soil resources have profound economic implications, environmental damage results in loss of current income and increased risk, and particularly affect the poor (Emerald, 2005) degradation of land resources reduces the prospects of economic growth and threatens future human welfare furthermore, the long term impact of soil erosion on livelihoods of farmers is the area of land that is rendered unproductive (Cohen, Brown, & Shepherd 2005). It is hence essential to understand not only the relationship between economic development and the environment but also for individual sectors to understand how unsustainable use of the environment can have a negative influence on their own sectors targets. Investment in sustainable agricultural activities on a short term basis could impact productivity and encourage female sex workers to consider agricultural activities as safer and viable sources of income.

While agricultural productivity has gradually reduced over the years, mainly due to soil depletion, on a global scale, the annual loss of 75 billion tonnes of soil costs the world about US\$400 billion/year (at US\$3/tonnes of soil for nutrients and US\$2/tonnes of soil for water), or approximately US\$70/person/year (Lal, 1998). It is estimated that the total annual cost of erosion from agriculture in the US is about US\$44 billion/year or about US\$247/ha of cropland and pasture (Westman *et al* 2014).

In Sub-Saharan Africa, productivity in agriculture has declined in over 40% of the cropland area in two decades while population has doubled. Titilola (2008) report that the predominant cause of land degradation and soil erosion stem from excessive human pressure or poor management of the land specifically over grazing, over cultivation of crop land and deforestation. Additionally, Setegn (2009) notes that poor land use practices, improper management systems, and lack of appropriate soil conservation measures have played a major role in land degradation in Ethiopia.

In most of such establishments where agriculture is a main source of livelihoods and a significant contributor to the economy, agricultural complexities are a common threat to rural livelihood and significantly limit change processes (Emerald, 2005). While the entire population depends on agricultural and livestock productivity, strategies to prevent soil depletion and boost agricultural practices are critical to ensure sustainable development (Cohen, Brown, & Shepherd 2005). Agriculture is one of the oldest occupations of in the world and has contributed significantly to the growth of all other sectors.

Kenya is predominantly an agricultural country with 82% of the households still in the rural sector. 50.7% of the population and is considered to be a valuable resource potential needed to be meaningfully organized and recognized in the field of entrepreneurship, especially in the rural agricultural sector (KDHS, 2008). Around 70% of the employed remained working in the informal sector where majority of them are not meaningfully engaged. Underemployment continues to be a serious problem in the country remaining at 22% of the labor force. Relatively more females are underemployed than males (Statistical Abstract, 2013)

2.7 Theoretical Framework

This study is grounded on two interrelated theories namely: Social cognitive behavior theory and the theory of change

2.7.1 Social Cognitive Behavior Theory

The conceptual roots for social cognitive theory which is also called Bandura's social Cognitive theory come from Edwin B. Holt and Harold Chapman Brown's 1931 book theorizing that all animal action is based on fulfilling the psychological needs of "feeling, emotion, and desire". The most notable component of this theory is that it predicted a person cannot learn to imitate until they are imitated. A behavior will be imitated depending on whether the model receives a positive or negative response (York, 200). This response will determine the adoption of that behavior (Lolle, 2000).

This theory proposes that people are driven not by inner forces, but by external factors (Dwight, 2007). The social cognitive theory also explains that several constructs underlie the process of human learning and behavior change (Bellet, 2007). These variables may also intervene in the process of behavior change for self-efficacy (Locke, 2009). Outcome expectations in social behavior change are crucial to managing ones perspectives and expressions (Rina, 2008). A judgment of the likely consequences of a behavior will be influenced by ones perceptions (Locke, 2009). The importance of these expectations may also drive behavior. Reinforcements of such behavior are something that increases or decreases the likelihood of such an occurrence (Bellet, 2007).

2.7.2 Theory of Change

Theory of Change emerged in the 1990's at the Aspen institute roundtable on community change as a means to evaluate comprehensive community initiatives. Notable methodologists, Huey Chen, Peter Rossi, Michael Quinn Patton, Heléne Clark, and Carol Weiss are associated with this model (Colby, 2013). Theory of Change is a specific type of methodology for planning, participation and evaluation that is used in the philanthropy and government sectors to promote change and redefine long-term goals of any project or program. It maps backward to identify necessary preconditions (Brest 2010) and explains the process of change by outlining causal linkages in an initiative (Clark 2012) between project outputs and outcomes.

The innovation of theory of change lies in making the distinction between desired and actual outcomes, and in requiring stakeholders to model their desired outcomes before they decide on forms of intervention to achieve those outcomes (Funnel 2011). This theory can be developed retrospectively by reading program documents, talking to stakeholders and using monitoring and evaluation data (Colby, 2013).

The theory of change focuses not just on generating knowledge about what needs to be changed but also on whether a program is effective on explaining what methods it uses to be effective (Funnel 2011). Stakeholders of complex community initiatives typically are unclear about how the change process will unfold and therefore place little attention on the early and mid-term changes needed to reach a longer term goal (Valters 2012). Such changes would in essence be critical in measuring behaviour change in high risk group's particularly female sex workers.

The theory of change is the main theory underpinning this study and defines all building blocks required to bring about a given long-term goal (Austin, 2011). This set of connected building blocks interchangeably referred to as outcomes, results, accomplishments, or preconditions is depicted on a map known as a pathway of change which is a graphic representation of the change process (Funnel, 2011). The theory of change describes the types of interventions that bring about outcomes depicted in this pathway. Each outcome is tied to an intervention, revealing often complex web of activity that is required to bring about real change (Colby, 2013).

2.8 Conceptual Framework

Interrelationships between study variables are conceptualized as shown in Figure 1

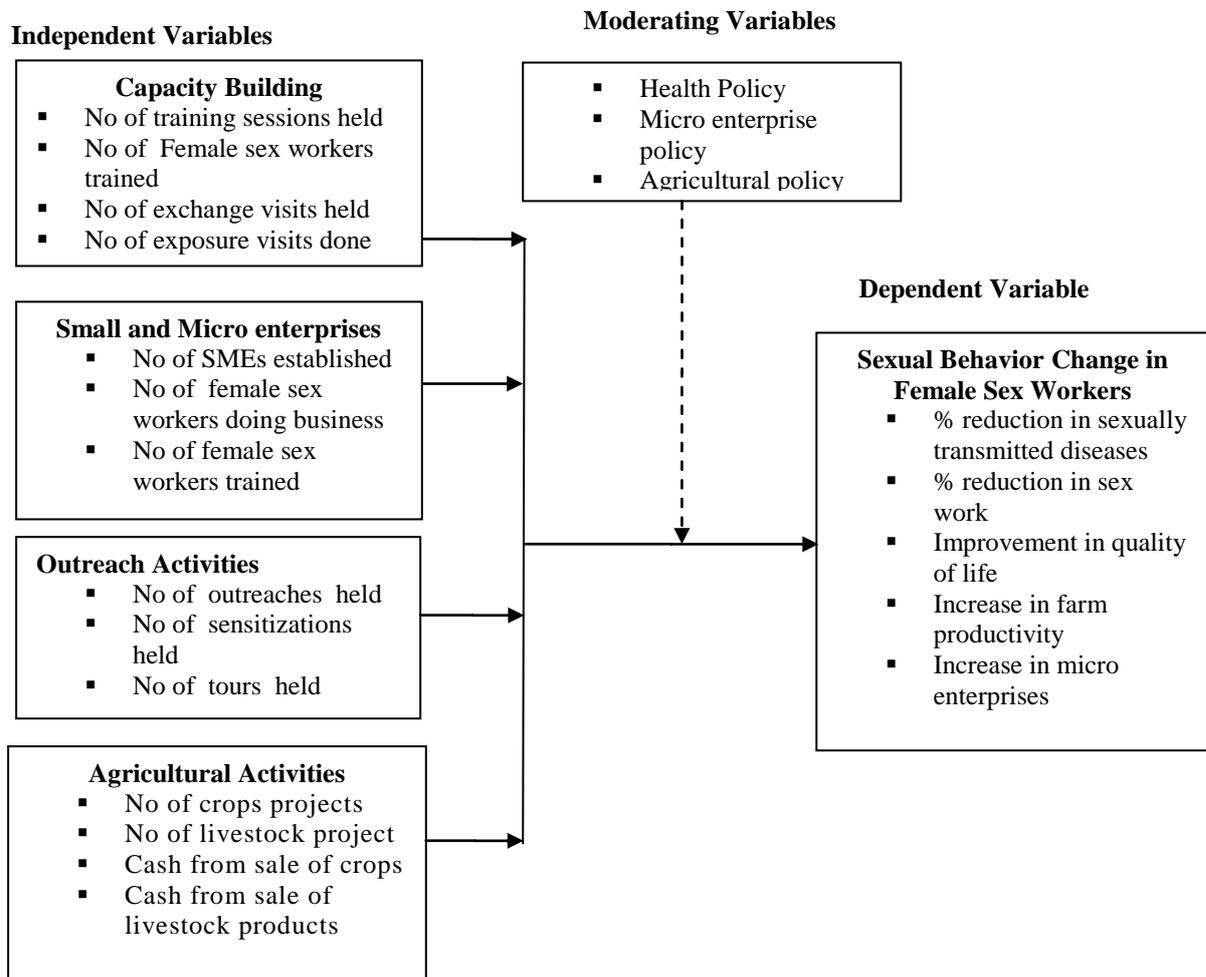


Figure 2.1: Conceptual Framework

As indicated in the conceptual model, there seems to exist extant relationships between variables under review against sexual behaviour change amongst female sex workers. From the conceptual model, agricultural development projects that were measured by number of crops projects implemented, number of livestock projects implemented, amount of money realized from sale of crops and amount of money got from sale of livestock products among others were perceived to be influential to sexual behavior change in female sex workers. However, the extent of this relationship had not been clearly determined. This relationship was tested in this study.

A review of empirical literature on sexual behavior change in female sex workers and other high risk groups also clearly illustrates a significant relationship between capacity building initiatives and empowerment programs. Capacity building enhances capacities of individuals and community to build sufficient energy to face constraints. However, the extent of this influence and their subsequent interplay has not been critically examined in any literature and therefore necessitated the need to examine this relationship within this study.

This conceptual model also indicates a possible relationship between investments in small and medium enterprises and sexual behavior change in female sex workers. Literature on the exact extent of this relationship was scanty and the exact interplay of this relationship was unclear and had not been accorded sufficient attention in most of empirical literature examined. It was therefore imperative to examine this interplay within this study.

Finally, a review of empirical literature on behaviour change of female sex workers and other high risk groups clearly illustrates that sensitization and outreach programs was significantly influential on this perceived relationship. Again, the exact influence of this relationship had not been well captured or given sufficient attention in most of the literature reviewed.

2.9 Knowledge Gap

The knowledge gap identified after reviewing relevant literature is shown table 2.1

Table 2.1 Summary of Knowledge Gap

| Variable | Author and Year | Findings | Gap in Knowledge |
|---|--|---|--|
| Capacity building and Behavior Change of Female sex workers | Emerald, 2007 Morris, 2010 Russel,2012 | Found significant relationships between capacity building and training versus empowerment. The study however did not examine it in the context of behavior change | There is need to undertake a detailed examination to elaborate these findings in the context of sexual behavior change |
| Small & micro enterprises and Behavior Change of Female sex workers | Jakes, 2013 Amanda, 2012 Dahl, 2008 | Focused on the impacts of small and micro enterprise on general wellbeing | The study shall seek to come up with the exact influence of SME on behavior change particularly to high risk and vulnerable groups |
| Outreach and Behavior Change of Female sex workers | Cathey, 2011 Sobel, 2005 Remy, 2005 | Found significant relationships between outreach versus empowerment. The study however did not examine it in the context of behavior change | There was need to undertake a detailed examination to elaborate these findings in the context of sexual behavior change especially among female sex workers |
| Agricultural Programs and Behavior Change of Female sex workers | Shepherd, 2005 Wright, 2014 Baanante, 2006 | Found positive relationships between investments in agricultural programs and empowerment but did not examine it in the context of behavior change | There was need to elaborate these findings in the context of sexual behavior change of female sex workers in Kenya. The need to domesticate these findings needed not to be overemphasized |

2.10 Summary of the Reviewed Literature

Literature review comprised the theoretical framework, empirical review and conceptual framework. This was critical since this study is grounded on program performance and evaluation theories. The theories upon which the study was grounded included the theory of change and socio-cognitive theories which linked interrelationships amongst study variables.

In this study, the researcher examined the literary works and empirical literature of four prominent scholars on each variable. The scholars studied were the ones who have extensively published on each of the study parameters. A review of empirical literature sexual behaviour change on high risk groups' especially female sex workers had not been clearly demonstrated. A critical examination of literature on empowerment vis-à-vis the orientation of high risk groups' particularly female sex workers had initially not been accorded significant attention in the empirical literature examined.

The theory of change was the main theory underpinning this study and defines all building blocks required to bring about a given long-term goal (Austin, 2011). This set of connected building blocks interchangeably referred to as outcomes, accomplishments, or preconditions is depicted on a map known as a pathway of change which is a graphic representation of the change process (Funnel, 2011). The theory of change describes the types of interventions that bring about outcomes depicted in this pathway. Each outcome is tied to an intervention, revealing often complex web of activity that is required to bring about real change (Colby, 2013). Social cognitive behavioral theory anchored the element of behavioral change in this study.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

This chapter describes the methods to be used to provide answers to the research questions. It focuses research design, sampling procedure, data collection methods, validity, reliability, data analysis, operational definition of variables and ethical issues.

3.2 Research Design

This study employed a descriptive survey design. This particular design was ideal since the research entailed collecting and comparing data from the phenomena at the same time of study. Mugenda and Mugenda (2003) argued that descriptive survey design is appropriate where the overall objective was to establish whether significant associations among variables existed at some point in time.

An aspect of triangulation was incorporated in this research. This was useful not only as a means to seek corroboration but also help expand the understanding of phenomena. This accordingly reduced weaknesses occasioned by over-reliance on one type of data set. The combination of qualitative and quantitative data as espoused in this study was an adequate explanation of the variables without resorting into enquiries of temporal effects (Dess et al. 1993).

Descriptive survey design was thought to be ideal since it sought to describe the characteristics of certain groups, estimate the proportion with certain characteristics and make predictions. This specific design was chosen because of its ability to ensure minimization of bias and maximization of the reliability of evidence so collected. This design was also ideal since the empirical inquiry in this research involved that in which the researcher did not have direct control over the independent variables because their manifestation already occurred or, they were inherently not manipulatable. The approach of this study involved collection of quantitative data for objective hypothesis testing and modeling while qualitative data was useful to explaining themes of behaviour change discerned among female sex workers.

3.3 Target Population

The target population for this study was 150 respondents. Sample size determination for programs to be studied followed procedure determined by Krejcie and Morgan (1970). As indicated from this table, a population of 150 respondents corresponded to a sample size of 108. Therefore 108 respondents were sampled for this study. Determination of sample size was important since it was useful to bringing out credible representation of the entire population.

3.4. Sample Size and Sampling Procedure

Sample size determination of female sex workers studied followed procedure determined by Krejcie and Morgan (1970). The sample indicates the total number of respondents selected from the target population. Sampling was done since it is not plausible to obtain information from the whole universe to accurately accomplish study objectives.

3.4.1 Sampling Procedure

Stratified sampling was used for this study. Members within the empowerment program will be picked randomly. These sampling methodologies are deemed appropriate to represent the target population and to provide the same results at the lowest possible cost and time. As noted by Sekaran (1992) and Kothari (2004), time and cost implications should be given invariable consideration when deciding the sample size.

Table 3:1 Sampling Frame

| Locations | Target Population | Sample Size |
|------------------|--------------------------|--------------------|
| Kaptembwo | 94 | 68 |
| London | 24 | 17 |
| Shaabab | 20 | 14 |
| Rhoda | 12 | 9 |
| Total | 150 | 108 |

3.5 Research Instruments

This study utilized a questionnaire as a primary tool for data collection. The questionnaire contained both structured and unstructured questions with 5 sections. The questions were systematic and pre-determined and were presented with exactly the same wording and in the same order to all respondents. Section A of the questionnaire captured questions on demographic characteristics of respondents; Section B had questions on agricultural programs. Section C of the questionnaire captured questions on capacity building, while section D contained questions on small and medium enterprise activities. Lastly section E entailed questions on sexual behavior change of female sex workers.

A Likert scale with the following connotations was used: (1) Strongly Disagree (SD), (2) Disagree (DA), (3) Uncertain (U) (4) Agree (A) and (5) Strongly Agree (SA). The strongly agreed responses were scored at 5 for direct positive responses while those of strongly disagreed responses were scored at 1. Statements in the questionnaire were both affirmative and neutral so as to keep respondents alert while answering them. Each of the sections of the Likert type scale had eleven statements. This is done to increase the response rate.

3.5.1 Pilot-Testing of the Research Instrument

A pilot study on the questionnaire was carried out two weeks prior to the main study. Allan and Emma (2011) pointed out that research outcome quality was determined by instruments quality. Pilot testing entailed picking 10 respondents and administering the questionnaire to them, this process helped to determine the questionnaire mechanics.

Pilot testing again pointed out any problems with test instructions, instances where items were not clear and helped to remove any noted typographical errors and inconsistencies (Mugenda 2003). Once all issues with the test items were addressed, the questionnaire was ready for large-scale field testing. The primary purpose of pilot-testing of the research instrument was to construct an initial picture of test validity and reliability, help elicit appropriate responses and determine if questions were relevant and appropriate. Pilot testing was also crucial in determining clarity and suitability of the wording.

3.5.2 Validity of the Research Instrument

Validity helps the researcher to be sure that questionnaire items measure the desired constructs. Donald and Delno (2006) define instrument's validity as the appropriateness, meaningfulness and usefulness of inferences a researcher makes based on data collected. Mugenda (2003) agrees with this assertion that validity has to do with how accurately the data obtained in the study represents the variables.

There are three types of validity that are of interest to researchers: content related, criterion related and construct validity (Donald and Delno, 2006). This study employed content and construct validity. Content related method was ideal for this study since it was consistent with the objectives of this study. Construct validity was appropriate to the research paradigm since it sought to unearth the finer details in program performance through construction of new knowledge paradigms. This assertion is in consonance with Kothari (2002) who argued that constructs are abstractions that are deliberately created by researchers in order to conceptualize the latent variable, which is the cause of scores on a given measure.

3.5.3 Reliability of the Research Instrument

Reliability is said to be achieved if an instrument gives consistent results with repeated measurements of the same object. This entailed administering the same questionnaire to the same group after a certain interval had elapsed since the previous test (Coopers and Schindler, 2003). To measure the reliability coefficient of the research instrument, Cronbach's Alpha reliability coefficient was obtained for all the variables in the study. Cronbach's alpha coefficient is like probability and therefore ranges between 0 and 1.

A coefficient of zero implied that the instrument had no internal consistency while that of one implied a complete internal consistence. Donald and Delno (2006), Creswell (1994) indicates that a reliable research instrument should have a composite Cronbach. After pilot testing the questionnaire, the average reliability of the questionnaire was obtained. The average Cronbach alpha coefficient was 0.822 as shown in table 3.2

Table 3.2: Cronbach Alpha Reliability Coefficient

| Questionnaire Section | Cronbach Alpha Coefficient |
|---|-----------------------------------|
| Section A | 0.75 |
| Section B | 0.82 |
| Section C | 0.88 |
| Section D | 0.74 |
| Section E | 0.92 |
| Average Cronbach Alpha Coefficient | 0.822 |

3.6 Data Collection Procedures

The study used primary data. Primary data refers to that which will originally be collected for the first time for the purposes of this study. The use of primary data is supported by (Saunders et al, 2007). The type of data collected was informed by the objectives of the study as supported by Teddlie (2010). After successfully defending the proposal, the researcher sought to obtain a research permit from NACOSTI, the researcher used two approaches to collect data. First, the researcher physically visited the project sites and hand-delivered questionnaires. This approach accorded the researcher an opportunity to meet the respondents. The second approach entailed research assistants interviewing respondents and writing down what was said by respondents.

3.7 Data Analysis Techniques

Data analysis was done following the four phases normally used in research, these included: data clean up, reduction, differentiation and explanation. Data clean up involved editing, coding and tabulation in order to detect anomalies. Data was then keyed using (SPSS) version 20.0 with appropriate codes and variable specifications and counter-checked for possible erroneous entries. To determine the level of significance of an independent variable against the dependent variable was tested through multiple analysis regression and correlation. The significance level was set at probability $p < 0.05$.

3.8 Operational Definition of Variables.

The operational definition of variables is as shown on table 3.3:

Table 3.3 Operationalization of Variables

| Variable | Indicators | Measurement Scale | Analysis Tool |
|--|--|--------------------------|---------------------------------------|
| Capacity building and sexual behavior change of female sex workers | <ul style="list-style-type: none"> ▪ No of training sessions held ▪ No of female sex workers trained ▪ No of exchange visits held ▪ No of exposure visits done | Ordinal | Correlation Multiple Regression |
| Small and medium enterprises and sexual behavior change of female sex workers | <ul style="list-style-type: none"> ▪ No of SMEs established ▪ No of SMEs funded ▪ Amount of money generated ▪ Amount of produce sold | Ordinal | Correlation Multiple Regression |
| Outreach and sensitization programs and sexual behavior change of female sex workers | <ul style="list-style-type: none"> ▪ No of outreaches held ▪ No of public forums held ▪ No of sensitizations done ▪ No of tours done | Ordinal | Correlation Multiple Regression |
| Agricultural Programs and sexual behavior change of female sex workers | <ul style="list-style-type: none"> ▪ No of crops projects implemented ▪ No of livestock projects implemented ▪ Amount of money realized from sale of crops <p>Amount of money got from sale of livestock products</p> | Ordinal | Correlation Multiple Regression |
| Dependent Variable | <ul style="list-style-type: none"> ▪ No of reduction of sexually transmitted diseases ▪ Improvement in quality of life ▪ Increase in farm productivity ▪ Increase in micro enterprises ▪ No of training forums held | Ordinal | Correlation Multiple Regression |
| Sexual behavior change of female sex workers | | | |

3.9 Ethical Considerations

In this study, ethical considerations were made on the basis of the basic concepts and aspects identified as important components of social considerations in social science research (Oliver, 2008)

First and foremost, the researcher obtained a research permit from the National Commission of Science, Technology and Innovation at the Ministry of Education. Secondly, the researcher wrote a letter of transmittal of data collection instruments to inform respondents in the research process that the research they were to undertake was purely for academic purposes only. The respondents were further assured that information gathered through this research was going to be treated with utmost confidentiality.

Respondents were further requested not to indicate their names anywhere on the questionnaire and were also be implored to provide the requested information truthfully and honestly. Finally, the respondents were assured that findings from this study would be communicated to concerned parties including interested stakeholders upon request.

CHAPTER FOUR

DATA ANALYSIS, PRESENTATION, DISCUSSION AND INTERPRETATION

4.1 Introduction

This chapter presents analysis of data and presents data in tables and cross tabulations, undertakes data presentation and interpretation and discusses study findings according to study themes. The chapter provides the major findings and results of the study as obtained from the questionnaire.

4.2 Questionnaire Response Rate

Questionnaire response rate indicates the rate in percentages at which the questionnaires given to respondents were filled and returned. The returned questionnaires were the ones analysed. Table 4.1 below shows the response rate from the sample size.

Table 4.1: Questionnaire Response Rate

| Location | Sample Size | Return Rate |
|-----------------|--------------------|--------------------|
| Kaptembwo | 68 | 65 |
| London | 17 | 15 |
| Shaabab | 14 | 12 |
| Rhoda | 9 | 8 |
| Total | 108 | 100 |

This study targeted a sample size of 108 respondents out of which 100 respondents filled and returned the questionnaires, making a total response rate of 92.59% as shown on table 4.1. The response rate was excellent and conforms to Mugenda and Mugenda (2003) stipulation, that a response rate of 50% is adequate for analysis and reporting; a rate of 60% is good while a response rate above 70% is excellent. In conclusion, the response rate obtained from this study can be classified as excellent and was sufficiently representative of the target population. This response rate was highly capable of producing useful results and make meaningful inferences.

4.3 Demographic Characteristics of the Respondents

As part of their demographic information, the study sought to establish the background information of respondents. This included level of formal education and their respective age brackets.

4.3.1 Distribution of Respondents by Level of Education

The study sought to find out the level of education of the respondents. The level of education was important since it would help the researcher understand if her targeted respondents had the capacity to understand items being researched (GoK policy, 2013)

Table 4.2: Distribution of Respondents by Levels of Education

| Educational Level | Frequency | Percentage |
|--------------------------|------------------|-------------------|
| Primary School Dropout | 30 | 30 |
| KCPE Qualification | 22 | 22 |
| KCSE Qualification | 24 | 24 |
| Certificate Holders | 15 | 15 |
| Diploma Holders | 9 | 9 |
| Total | 100 | 100 |

As shown in table 4.2 above, majority of the respondents, (30%) were primary school dropouts, those with KCPE qualification were 22%, and those with KCSE qualification were 24% while those with post-secondary school qualification represented a paltry 15% and 9% respectively. This means that most female sex workers were not well educated. This conforms to Ngugi, (2002) who asserted that poor education is the single-most leading contributor to deviant behaviour in Kenya.

Investment in education of young people particularly women would categorically reduce the presence of female sex workers on Kenyan streets. Education therefore empowers masses including female sex workers to seek other alternative and meaningful sources of income both for themselves and their families (Karanja, 2002) and severely reduces highly risky behavior's including commercial sex.

4.3.2 Distribution of Respondents by Age

The study also sought to establish the distribution of respondents by age so as to determine the age of women prone to illicit sexual. The results obtained were as shown in table 4.3 below.

Table 4.3: Distribution of Respondents by Age

| Age Cluster | Frequency | Percentage |
|--------------------|------------------|-------------------|
| Less than 15 years | 5 | 5 |
| 15-19 | 15 | 15 |
| 20-24 | 30 | 30 |
| 25-29 | 25 | 25 |
| 30-35 | 12 | 12 |
| 36-39 | 9 | 9 |
| 39 and Above | 4 | 4 |
| Total | 70 | 100 |

As shown in table 4.3 above, 5% of the respondents were less than 15 years, 15% were in the age bracket of 15-19 years, while the majority 30% of the respondents were in the age bracket 20-24 years. 25% of respondents were in the age bracket of 25-29 while 12% were in the age bracket 30-35. 9% of respondents were in the age bracket of 36-39 years while a paltry 4% were above 39years.

This therefore means the concentration of most female sex workers were in very productive ages who would accordingly direct their energies in productive work if alternative productivity options were available.

4.4 Factors influencing Sexual Behaviour Change in Female Sex Workers

In an effort to determine the factors that influence sexual Behaviour change among female sex workers in Kenya, respondents in this study were asked to indicate their level of agreement with specific statements in the questionnaire that related to this phenomenon. Respondents gave varied responses of whose findings are as shown in table 4.5:

Table 4.4 Factors Influencing Sexual Behaviour Change in Female Sex Workers

| Variable | Mean | Std. Deviation |
|---|-------------|-----------------------|
| Influence of Capacity Building | 4.560 | 0.615 |
| Influence of SME's and Microenterprises | 4.413 | 0.982 |
| Influence of Outreach Activities | 2.413 | 0.736 |
| Influence of Agricultural Activities | 1.560 | 0.739 |

On a scale of 1-5, with 1 representing low influence and 5 representing strong influence. The respondents indicated that capacity building including training and exposure visits had the highest influence on sexual behaviour change with a mean of 4.560 and standard deviation of 0.615. Capacity building is the most common purpose and use of change in sexual behavior among female sex workers.

SME's and expanded investment in microenterprises with a mean of 4.413 and standard deviation of 0.982 had a significant influence on sexual behaviour change among female sex workers.

Outreach activities with a mean of 2.413 and standard deviation of 0.736 did not influence sexual behavior change among female sex workers while agricultural activities with a mean of 1.560 and standard deviation of 0.739 did not seem to also have influence sexual behaviour change among female sex workers.

The average difference from the lowest influence to the strongest influence is (4.560-1.560)3 depicting a significant margin between the two factors on influence to sexual behaviour change.

4.5 Inferential Statistical Analysis

Inferential statistical data analysis entailed multiple regression analysis so as to test relationship among the study variables. SPSS version 21 was used for this analysis. The level of significance of the independent variable against the dependent variable was tested through multiple regression and correlation. The significance level for every analysis will be set at probability $p < 0.05$ for every statistical test.

Table 4.5 Model summary

| Model Summary | | | | |
|----------------------|--------------------|-----------------|--------------------------|-----------------------------------|
| Model | R | R Square | Adjusted R Square | Std. Error of the estimate |
| 1 | 1.000 ^a | 0.9000 | 1.000 | .00000 |

Predictors: Capacity building, small and micro enterprises outreach activities and agricultural activities

Dependent Variable: Sexual Behaviour change among female sex workers

This model summary depicts that the regression value was 1.000 while the r square value was found to be 0.9000; meaning 90% of data utilized in this study was valid. This indicates that the interpretation of findings from this data through inferential statistics is highly significant.

4.6 Multiple Regression Model

Multiple regression analysis was conducted as to determine the relationship between Capacity building, small and micro enterprises, outreach activities and agricultural activities against the dependent variable which is sexual behaviour change among female sex workers. After running the selected data through SPSS, a statistical model was generated. The model generated is what is popularly called a multiple regression model.

$$\text{This was } Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \epsilon$$

Y= is the dependent variable (Sexual behaviour change among female sex workers)

X₁= is an explanatory factor (independent variable), Capacity Building

X₂=is an explanatory factor (independent variable), SME Activities

X₃= is an explanatory factor (independent variable), Outreach Activities

X₄= is an explanatory factor (independent variable), Agricultural Activities

β₀=Constant (Y intercept), β=Coefficient and ε=Error term

Table 4.6 Coefficients of Regression Equation

| Model | | Unstandardized Coefficients | | Standardized Coefficients | | |
|------------------------------|----------------|-----------------------------|------------|---------------------------|----------|-------|
| | | B | Std. Error | Beta | t | Sig. |
| Constant | | 4.000 | .000 | | 4.922E7 | .000 |
| Capacity Building | X ₁ | 1.000 | .000 | .866 | 1.035E8 | .023 |
| Outreach Activities | X ₂ | 1.000 | .000 | -.866 | -7.101E7 | .0220 |
| Agricultural Activities | X ₃ | 1.724 | .000 | .000 | .000 | 1.000 |
| Small and medium enterprises | X ₄ | 1.076 | .000 | .000 | .000 | .0015 |

From the above table, the established multiple linear regression model for this study therefore becomes $Y = 4.00 + 1.00X_1 + 1.00X_2 + 1.724X_3 + 1.076X_4$.

The table indicates that there was a highly significant relationship (with t statistic p value $< 0.023 < 0.05$) between capacity building activities and sexual behaviour change among the female sex workers. Again, from the same table, there exists a highly significant relationship (with t statistic p value $< 0.0015 < 0.05$) between investment in small and medium enterprise activities and sexual behaviour change amongst female sex workers.

However there exists no significant relationship between outreach activities and sexual behaviour change among female sex workers in Kenya with ($p = 0.220 > 0.05$), as again there is no significant relationship between agricultural activities and sexual behaviour change among female sex workers with ($p = 1.000 > 0.05$). In conclusion therefore, there seems to exist a highly significant relationship between capacity building and investments in SMES against sexual behaviour change in female sex workers while there seems to exist no relationship between outreach and agricultural activities against sexual behaviour change of female sex workers.

The findings therefore indicates that more emphasis should be placed on capacity building that includes training and funding small and microenterprises if sexual behaviour change of female sex will have to be realized. Less effort should therefore be

invested in agricultural-based and outreach focused programs targeted at enhancing sexual behaviour change among female sex workers.

4.7 Correlation Analysis

Spearman correlation analysis was conducted at 95% confidence interval and 5% confidence level and was designed as a 2-tailed test. The table below indicates the correlation matrix between the independent variables (Capacity building, small and micro enterprises outreach activities and agricultural activities) against the dependent variable that was sexual behaviour change among female sex workers.

Table 4.7: Correlation

| Variables | | Capacity Building | Outreach activities | Agricultural activities | Small and micro enterprises | Sexual Behavior Change |
|------------------------------------|---------------------|--------------------------|----------------------------|--------------------------------|------------------------------------|-------------------------------|
| Capacity Building | Pearson Correlation | 1 | | | | |
| | Sig. (2-tailed) | | | | | |
| | N | 100 | | | | |
| Outreach activities | Pearson Correlation | .469 | 1 | | | |
| | Sig. (2-tailed) | .149 | | | | |
| | N | 100 | 100 | | | |
| Agricultural activities | Pearson Correlation | .422** | .333 | 1 | | |
| | Sig. (2-tailed) | .134 | .420 | | | |
| | N | 100 | 100 | 100 | | |
| Small and micro enterprises | Pearson Correlation | .697** | .207** | .690** | 1 | |
| | Sig. (2-tailed) | .037 | .623 | .058 | | |
| | N | 100 | 100 | 100 | 100 | |
| Sexual Behavior Change | Pearson Correlation | .822* | .478 | .477 | .777* | 1 |
| | Sig. (2-tailed) | .000 | .134 | .134 | .023 | |
| | N | 100 | 100 | 100 | 100 | 100 |

** . Correlation is significant at the 0.05 level (2-tailed).

From the table above, the findings show there exist a positive highly significant relationship between capacity building and sexual behaviour change in female sex workers at 0.822. These results are in consonance with the findings from the multiple regression models. Again, from the same correlation table, the findings show there exists a positive highly significant relationship between small and micro enterprises and sexual behaviour change in female sex workers at 0.777.

These results are again in conformity with the findings from the multiple regression model depicted above. However, there seems to exist a weak relationship between outreach activities and sexual behaviour change in female sex workers at 0.478 and finally a fairly weak relationship between agricultural activities and sexual behaviour change at 0.477. Thus at 5% confidence level and at a p-value ($P < 0.05$), basing on the results from the correlation analysis, only capacity building and small and medium enterprises are influential on sexual behaviour change

4.8 Discussion of Findings

The discussion of findings from this study is presented as follows;

4.8.1 Influence of Capacity Building on Sexual Behaviour Change among Female Sex Workers

The study established that capacity building highly influenced sexual behaviour change among female sex workers enrolled at the AIDS response clinic in Nakuru. The study findings are in tandem with previous studies that established such a highly significant relationship between sexual behaviour change and capacity building among female sex workers. These findings are in consonance with Lawler, (2001) who asserted that sexual behaviour change among female sex workers depended on expanded capacities. The findings are also in conformity with the works of Trank et al, (2002) who made similar conclusions. Research confirms capacity building is probably the most common purpose and use of sexual and deviant behaviour change.

4.8.2 Influence of Outreach Activities on Sexual Behaviour Change among Female Sex Workers

Outreach activities do not seem to influence sexual behaviour change among female sex workers enrolled at the AIDS response clinic in Nakuru (Patton, 1997). The study findings are in tandem with previous studies that did not establish any significant relationships between outreach activities including sensitization with sexual behaviour change among deviant groups. These findings are in consonance with Layolla, (2001) who asserted that sexual behaviour change among female sex workers depended on expanded capacities but not publicity activities. The findings are also in conformity with the works of Sheba al, (2007) that made similar conclusions. This research therefore reconfirms findings of other authors.

These findings therefore reconfirms that more emphasis should be placed on capacity building that includes training and funding small and microenterprises at the expense of outreach activities if sexual behaviour change of female sex will have to be realized. Less effort should therefore be invested in agricultural-based and outreach focused programs targeted at enhancing sexual behaviour change among female sex workers.

4.8.3 Influence of Small and Medium Enterprises on Sexual Behaviour Change among Female Sex Workers

The study established that investment in small and medium enterprises highly influenced sexual behaviour change among female sex workers enrolled at the AIDS response clinic in Nakuru. The study findings are in tandem with previous studies that established such a highly significant relationship between SME investment and sexual behaviour change among female sex workers. These findings are in consonance with Karanja (2005) who asserted that sexual behaviour change among female sex workers depended on expanded investment in small medium and micro enterprises. The findings are also in conformity with the works of Ngugi, (2007) who made similar conclusions. Research confirms that investment in SMES is probably the most common purpose and use of sexual and deviant behaviour change

These findings therefore reconfirms that more emphasis should be placed on investing in small medium and micro enterprises so as to help empower female sex workers that includes training and funding small and microenterprises (Lolle, 2008). This is done at the expense of outreach activities if sexual behaviour change of female sex will have to be realized (Kasola, 2009). Less effort should therefore be invested in agricultural-based and outreach focused programs targeted at enhancing sexual behaviour change among female sex workers.

4.8.4 Influence of Agricultural Activities on Sexual Behaviour Change among Female Sex Workers

Outreach activities do not seem to influence sexual behaviour change among female sex workers enrolled at the AIDS response clinic in Nakuru (Elkins, 2006).The study findings are in tandem with previous studies that did not establish any significant relationships between agricultural activities including investment in livestock production with sexual behaviour change among deviant groups. These findings are in consonance with Savala, (2002) and Elkins, (2006) who made similar assertions that sexual behaviour change among female sex workers depended on expanded capacities but not production related adventures. The findings are also in conformity with the works of other authors including Ngugi, (2007) and Naomi, (2005).

CHAPTER FIVE
SUMMARY OF FINDINGS, CONCLUSIONS, RECOMMENDATIONS AND
SUGGESTIONS.

5.1 Summary of Findings

This chapter presents a summary of the study findings, conclusions and recommendations. The findings are summarized in line with the objectives of the study which include capacity building, small and micro enterprises, outreach activities and agricultural activities. These independent variables were studied against the dependent variable which is sexual behaviour change among female sex workers attached to AIDS response clinic in Nakuru town constituency of Nakuru County.

Table 5.1 Summary of Findings

| Objective | Data collection Instrument | Type of analysis | Main findings. |
|--|-----------------------------------|-------------------------------------|--|
| Influence of capacity building on sexual behaviour change among female sex workers | Questionnaire | Descriptive/ Inferential statistics | The study established that there exists a significant relationship between capacity building and sexual behaviour change among female sex workers with (t statistic p value $<0.023 < 0.05$) and correlation coefficient of 0.822 |
| Influence of Outreach activities on sexual behaviour change among female sex workers | Questionnaire | Descriptive/ Inferential Statistics | The study established that there was no any significant relationship between outreach and sexual behaviour change among female sex workers (with t statistic p value $<0.220 < 0.05$) and correlation coefficient of 0.478 |
| Influence of Agricultural activities on sexual behaviour change among female sex workers | Questionnaire | Descriptive/ Inferential statistics | The study established that there was no any significant relationship between agricultural activities and sexual behaviour change among female sex workers (with t statistic p value <1.000) |

| | | | |
|---|---------------|-------------------------------------|--|
| Influence of small and medium enterprises on sexual behaviour change among female sex workers | Questionnaire | Descriptive/ inferential statistics | < 0.05) and correlation coefficient of 0.477 The study established that there was a highly significant relationship between small and medium enterprises and sexual behaviour among female sex workers at (with t statistic p value <0.015< 0.05) and correlation coefficient of 0.777. |
|---|---------------|-------------------------------------|--|

5.2 Conclusions

5.2.1 Conclusion on Capacity Building and Sexual Behaviour Change among Female Sex Workers

The study established that capacity building highly influenced sexual behaviour change among female sex workers enrolled at the AIDS response clinic in Nakuru. The study findings are in tandem with previous studies that established such a highly significant relationship between sexual behaviour change and capacity building among female sex workers.

These findings are in consonance with Lawler, (2001) who asserted that sexual behaviour change among female sex workers depended on expanded capacities. The findings are also in conformity with the works of Trank et al, (2002) who made similar conclusions. Research confirms capacity building is probably the most common purpose and use of sexual and deviant behaviour change. The study therefore concludes that capacity building should be up scaled within the empowerment programs.

5.2.2 Conclusion on Outreach Activities and Sexual Behaviour Change among Female Sex Workers

Outreach activities do not seem to influence sexual behaviour change among female sex workers enrolled at the AIDS response clinic in Nakuru (Patton, 1997). The study findings are in tandem with previous studies that did not establish any significant relationships between outreach activities including sensitization with sexual behaviour change among

deviant groups. These findings are in consonance with Layolla, (2001) who asserted that sexual behaviour change among female sex workers depended on expanded capacities but not publicity activities. The findings are also in conformity with the works of Sheba al, (2007) that made similar conclusions. This research therefore reconfirms findings of other authors.

5.2.3 Conclusion on Small and Medium Enterprises and Sexual Behaviour Change among Female Sex Workers

The study established that investment in small and medium enterprises highly influenced sexual behaviour change among female sex workers enrolled at the AIDS response clinic in Nakuru. The study findings are in tandem with previous studies that established such a highly significant relationship between SME investment and sexual behaviour change among female sex workers. These findings are in consonance with Karanja (2005) who asserted that sexual behaviour change among female sex workers depended on expanded investment in small medium and micro enterprises. The findings are also in conformity with the works of Ngugi, (2007) who made similar conclusions. Research confirms that investment in SMES is probably the most common purpose and use of sexual and deviant behaviour change

5.2.4 Conclusion on Agricultural Activities and Sexual Behaviour Change among Female Sex Workers

Outreach activities do not seem to influence sexual behaviour change among female sex workers enrolled at the AIDS response clinic in Nakuru (Elkins, 2006). The study findings are in tandem with previous studies that did not establish any significant relationships between agricultural activities including investment in livestock production with sexual behaviour change among deviant groups. These findings are in consonance with Savala, (2002) and Elkins, (2006) who made similar assertions that sexual behaviour change among female sex workers depended on expanded capacities but not production related adventures. The findings are also in conformity with the works of other authors including Ngugi, (2007) and Naomi, (2005).

5.3 Recommendation

These findings therefore reconfirms that more emphasis should be placed on capacity building that includes training and funding small and microenterprises at the expense of outreach activities if sexual behaviour change of female sex will have to be realized. Less effort should therefore be invested in agricultural-based and outreach focused programs targeted at enhancing sexual behaviour change among female sex workers.

These findings therefore reconfirms that more emphasis should be placed on investing in small medium and micro enterprises so as to help empower female sex workers that includes training and funding small and microenterprises (Lolle, 2008). This is done at the expense of outreach activities if sexual behaviour change of female sex will have to be realized (Kasola, 2009). Less effort should therefore be invested in agricultural-based and outreach focused programs targeted at enhancing sexual behaviour change among female sex workers.

5.4 Suggestions for Further Research

On the basis of what has been found out from this study, the researcher makes the following suggestions for further research;

That a comprehensive study be undertaken to find out the joint influence of capacity building and micro and medium enterprises on sexual behaviour change among female sex workers elsewhere in Kenya. A detailed study seeking to establish joint influence between capacity building and SME's against sexual behaviour change of female sex workers could give a clearer relationship between these study variables.

The researcher also recommends that a detailed study be undertaken to establish the relationship between agricultural projects and sexual behaviour change among female sex workers in the rural or peri-urban areas. Since this study was done in an urban area, studying undertaking a similar study within the set-up of a rural area would perhaps give a comparison on these aspects and make these recommendations unequivocally clear.

REFERENCES

- Artto, K. A., & Dietrich, P. H. (2004). Strategic business management through multiple programs. In P. W. G.
- Bagire Vincent 2012: Strategic configuration and performance of large Non-Governmental organizations in Uganda
- Cleland, D. I. (1987). The strategic context of programs, *Program Management Journal*,
- Cleland, D. I. (1998). Strategic program management, In J. K. Pinto (Ed.), *The Program Management Institute program management handbook* (pp. 27–54). San Francisco, CA: Jossey-Bass.
- Cooper D.R & Schindler, P.S (2004). Business research methods. 8th edition. Tata McGraw, India
- Cooper, R. G., Edgett, S. J., & Kleinschmidt, E. J. (2001). *Portfolio management for new products*. New York, NY: Basic Books.
- Crossan, M. M., & Berdrow, I. (2003). Organizational learning and strategic renewal. *Strategic Management Journal*, 24(11), 1087–1105.
- Cresswell, J.W 2012. Educational research: Planning, conducting and evaluating quantitative and qualitative research. Upper saddle river, NJ: Prentice hall
- Eisenhardt, K. M. (1989). Building theories from case study research. *Academy of Management Review*, 14(4), 532–550.
- Friedman, A & Phillips M (2004). Balancing strategy and accountability. *Non profit management and leadership* 15 (2) 187-204
- Galan, I.J & Sanchez Bueno. M.S (2009). Continuing validity of strategy and accountability nexus. *Strategic Management Journal*. 30 1200- 1243
- Grant, R.M (2003). Strategic Planning in a turbulent environment. *Strategic Management Journal*. 24 (6) 490-520
- Gugerty, M.K (2010). The emergence of non-profit self-regulation in Africa 39 (6)
- Hardjono, T., & Klein, P. D. (2004). Introduction on the European Corporate Sustainability Framework (ECSF). *Journal of Business Ethics*, 55(2), 99–113.
- Kirk, J., & Miller, M. (1985). *Reliability and validity in qualitative research*. Thousand Oaks, CA: Sage.
- Lewin, K. (1958). *Group decision and social change*. New York, NY: Holt, Rinehart & Winston.

- Lewis, D. (2007). *The management of Non-Governmental Development organizations* 2nd Edition. Routledge, London
- Lindblom, C. E. (1959). The science of muddling through. *Public Administration Review*, 19(2), 79–88.
- Lindblom, C. E. (1979). Still muddling not yet through. *Public Administration Review*, 39(6), 517–526.
- Marsh and David (1999). *Results framework and performance monitoring*. Westpot, Washington DC
- Manikutty, S (2000). Family Business groups in India. A resource based view of Emerging trends. *Family business review*. 13 (4) 270-300
- Miller, R., & Lessard, D. R. (2000). *The strategic management of large engineering programs*. Cambridge, MA: MIT Press.
- Morris, P.W. G. (2009). Implementing strategy through program management: The importance of managing the program front-end. In T. M. Williams, K. Samset, K. J. Sunnevag (Eds.), Hampshire, England, UK:
- Morris & J. K. Pinto (Eds.), *The Wiley guide to managing programs* (pp.144–176). Hoboken, NJ: Wiley.
- Newbert, Scott, L (2007). Empirical research on the resource based view of the firm an Assessment and suggestions for future research. *Strategic management journal*
- Pennypacker, J. S., & Dye, L. D. (2002). Program portfolio management and managing multiple programs: Tw Poli, M. (2006).
- Program Management Institute (PMI).(2008). *A guide to the program management body of knowledge* (4th ed.) Newtown Square, PA: Author.
- Reason, P., & Bradbury, H. (2007). *Handbook of action research*. London, England, UK: Sage.
- Rumelt, R (2009) Setting strategy in the new era. *The Mckinsey Quartely*, June, 2009
- Shenhar, A. J. (2012). Strategic program management: The new framework. In peerasit D. & T. R. Anderson (Eds.), *Proceedings of Portland International Conference on Management*
- Shenhar, A. J., Dvir, D., Guth, W., Lechler, T., Milosevic, D., Patanakul, Stefanovic, J. (2005). Program strategy: The missing link. Presented at the Annual Meeting of the Academy of Management Conference: A New Vision of Management.

- Slevin, D. P., & Pinto, J. K. (1987). Balancing strategy and tactics in program implementation. *Sloan Management Review*, 29(1), 33–41.
- Starbuck, W. H. (1965). Organizational growth and development. In J. G. March (Ed.), *Handbook of organizations* (pp. 451–533). Chicago, IL: Rand McNally.
- Shepherd, W. (2007): Approaches to linking producers to markets: A review of experience to date. *Agricultural Management, Marketing and Financial Occasional paper 13*, FAO, United Nations, Rome
- Shields, Patricia and Rangarjan, N. 2013: *A Playbook for Research Methods: Integrating Conceptual Frameworks and Project Management*. Stillwater,: New Forums Press.
- Shiferaw, B.; Hellin, J. and Muricho, G. (2011): Improving market access and agricultural productivity growth in Africa: what role for producer organizations and collective action institutions? In: *Food Security* 3 (4): 475-489.
- Shiferaw, B.; Obare, G. & Muricho, G. (2008): Rural institutions and producer organizations in imperfect markets: Experiences from producer marketing groups in semi-arid eastern Kenya. In: *Natural Resources Forum* 32 (1): 25-38
- Solomon, P. & Young, R. (2007): *Performance Based-Earned Value*, John Wiley and Sons Ltd Publishing House, San Francisco
- Teddle, C. and Tashakkori, A. (2009): *Foundations of mixed methods research: Integrating quantitative and qualitative approaches in the social and behavioral sciences*. Thousand Oaks, CA: Sage.
- Tollens, E. (2006): Market information systems in sub-Saharan Africa challenges and opportunities. Poster paper prepared for presentation at the International Association of Agricultural Economists Conference., Austria
- Thompson and Garbacz (2007): Mobile, Fixed Line and internet service effects on global productive efficiency. *Information Economics and Policy*, Volume 19
- Turner, J. (1999). *The handbook of program-based management: Improving the process for achieving strategic objectives*. London, England, UK: McGraw-Hill.
- Tvedt, T (2006). The international aid system and NGO's: A new research agenda. *Journal of international development*. 18 677-690
- Williams, T. (2005). Assessing and moving on from the dominant program management discourse in the light of program overruns. *IEEE Transactions on Engineering Management*, 52(4), 497–508.

APPENDICES

APPENDIX I

LETTER OF TRANSMITTAL OF DATA COLLECTION INSTRUMENTS

Janet Mutanu,
P.O Box 30197-00100
Nairobi,
7th March, 2015

Dear Respondent,

RE: REQUEST TO PROVIDE RESEARCH INFORMATION

I am a Master of Arts in Project Planning and Management student at the University of Nairobi's Nakuru Extra-Mural center currently conducting a research study entitled "Influence of Empowerment Program on Sexual Behaviour Change among Female Sex Workers Enrolled at the Family AIDS Clinic in Nakuru, Kenya".

You have been selected as one of the respondents to assist in providing the requisite data and information for this research. I kindly request you to spare a few minutes and answer the attached questionnaire. The information you shall give will be used for academic purposes only, will be treated with utmost confidentiality and will not be shared with anyone whatsoever. Do not write your name anywhere on the questionnaire.

On this basis I request you to respond to all questions with utmost honesty.

Thanking you most sincerely.

Yours Sincerely,

Janet Mutanu

0723837101

APPENDIX II
QUESTIONNAIRE

This questionnaire is designed to gather research information regarding the influence of empowerment programs on sexual behavior change. The questionnaire has six sections. For each section, kindly respond to all items using a tick [] or filling in the blanks where appropriate.

Section A: Demographic Characteristics of Respondents

1. Respondent's Particulars

Name (Optional).....

What is your level of formal education?

| | | | | | |
|--------------------|----------------|---------------------|------------------------|------------|--------------------------------|
| Certificate | Diploma | First Degree | Master's Degree | PhD | Other- Specify |
|--------------------|----------------|---------------------|------------------------|------------|--------------------------------|

Specify your age bracket

| | | | | | |
|-----------------|--------------|--------------|--------------|--------------|---------------------|
| Below 20 | 20-25 | 26-30 | 31-35 | 36-40 | 40 and above |
|-----------------|--------------|--------------|--------------|--------------|---------------------|

Section B: Capacity Building

2.1 To what extent does your program conform to the following capacity Building features?

(5) Strongly agree (SA), (4) agree (A), (3) uncertain (2) Disagree (DA) and (1) Strongly Disagree (SD).

| | Factor | 1 | 2 | 3 | 4 | 5 |
|----|---|----------|----------|----------|----------|----------|
| 1 | I attend all empowerment based training | | | | | |
| 2 | All trainings have a component of risk reduction | | | | | |
| 3 | We attend field days | | | | | |
| 4 | Training has made my life better | | | | | |
| 5 | Workshops, seminars and tours are a common occurrence | | | | | |
| 6 | Training forums have kept me busy | | | | | |
| 7 | Most of my trainings were rural based | | | | | |
| 8 | Skills obtained during training have changed my life | | | | | |
| 9 | I am willing to undergo further training | | | | | |
| 10 | I can encourage my peers to undergo such training | | | | | |
| 11 | I can also train others on life skills | | | | | |

Section C: Small and Micro Enterprises

3. Specify to what extent the following SME dimensions are true

(5) Strongly agree (SA), (4) agree (A), (3) uncertain (2) disagree (DA) and (1) strongly Disagree

| | Factor | 1 | 2 | 3 | 4 | 5 |
|-----------|--|----------|----------|----------|----------|----------|
| 1 | I am an SME member | | | | | |
| 2 | I received business skills due to SMEs training | | | | | |
| 3 | I can handle a small business | | | | | |
| 4 | I have basic skills on running a successful business | | | | | |
| 5 | I want to grow my business | | | | | |
| 6 | I can employ a few people to my business | | | | | |
| 7 | I have enough networks to run a successful enterprise | | | | | |
| 8 | I own some local resources that can help set up a business | | | | | |
| 9 | I do business because I am unemployed | | | | | |
| 10 | I can develop a business plan | | | | | |
| 11 | I can develop a marketing strategy | | | | | |

Section D: Outreach Activities

4. Specify to what extent the following outreach parameters are true.

(5) Strongly agree (SA), (4) agree (A), (3) uncertain (2) disagree (DA) and (1) strongly Disagree

| | Factor | 1 | 2 | 3 | 4 | 5 |
|-----------|---|----------|----------|----------|----------|----------|
| 1 | Mobilization is through the media | | | | | |
| 2 | We design posters and fliers to communicate | | | | | |
| 3 | We use our mobile phones to mobilize our colleagues | | | | | |
| 4 | We regularly hold meetings | | | | | |
| 5 | We participate in local administration sessions | | | | | |
| 6 | We hold rallies and sensitization tours | | | | | |
| 7 | We hold both clinical and non clinical level outreaches | | | | | |
| 8 | We lobby for training through social functions | | | | | |
| 9 | We determine when and where to meet | | | | | |
| 10 | We visit our friends at their homes | | | | | |
| 11 | We hold targeted hotspots outreaches | | | | | |

Section E: Agricultural-Based Activities

5. To what extent are the following agricultural-based statements true?

(5) Strongly agree (SA), (4) agree (A), (3) uncertain (2) Disagree (DA) and (1) strongly Disagree

| | Factor | 1 | 2 | 3 | 4 | 5 |
|----|---|---|---|---|---|---|
| 1 | Involvement in agricultural activities has been beneficial | | | | | |
| 2 | The activities I undertake were as a result of unemployment | | | | | |
| 3 | Farming is my part time engagement | | | | | |
| 4 | I make all my income from farming activities | | | | | |
| 5 | I do farming as a business | | | | | |
| 6 | I do farming since we were supported as a group | | | | | |
| 7 | I am not involved in any other economic activity | | | | | |
| 8 | I have become a professional farmer | | | | | |
| 9 | I spent most of my time on farm | | | | | |
| 10 | Farming has helped me change my behavior | | | | | |
| 11 | Farming has helped me reduce my sex work activities | | | | | |

Section F: Sexual Behaviour Change Among Female Sex Workers

6. Specify to what extent the following behavior change approaches are true.

(5) Strongly agree (SA), (4) agree (A), (3) uncertain (2) disagree (DA) and (1) strongly Disagree

| | Factor | 1 | 2 | 3 | 4 | 5 |
|----|--|---|---|---|---|---|
| 1 | Training has led to change in sexual behavior | | | | | |
| 2 | Fear of diseases has led to change in sexual behavior | | | | | |
| 3 | Outreach forums have led to sexual behavior change | | | | | |
| 4 | Sensitization meetings have significantly impacted sexual traits | | | | | |
| 5 | Agricultural programs have impacted sexual on behavior | | | | | |
| 6 | SMEs have helped reduce irresponsible sexual behavior | | | | | |
| 7 | SMES have kept us busy hence changed our sexual behavior | | | | | |
| 8 | Consistent condom use has increased | | | | | |
| 9 | Negotiation on safer behavior has been enhanced | | | | | |
| 10 | A health seeking behavior(HTC, STI) has improved | | | | | |
| 11 | HIV/STI incidences have reduced | | | | | |

Thank you for your Participation

APPENDIX III

TABLE FOR DETERMINING SAMPLE SIZE FOR A GIVEN POPULATION

| Table for Determining Sample Size for a Given Population | | | | | | | | | |
|--|----|-----|-----|-----|-----|------|-----|--------|-----|
| N | S | N | S | N | S | N | S | N | S |
| 10 | 10 | 100 | 80 | 280 | 162 | 800 | 260 | 2800 | 338 |
| 15 | 14 | 110 | 86 | 290 | 165 | 850 | 265 | 3000 | 341 |
| 20 | 19 | 120 | 92 | 300 | 169 | 900 | 269 | 3500 | 246 |
| 25 | 24 | 130 | 97 | 320 | 175 | 950 | 274 | 4000 | 351 |
| 30 | 28 | 140 | 103 | 340 | 181 | 1000 | 278 | 4500 | 351 |
| 35 | 32 | 150 | 108 | 360 | 186 | 1100 | 285 | 5000 | 357 |
| 40 | 36 | 160 | 113 | 380 | 181 | 1200 | 291 | 6000 | 361 |
| 45 | 40 | 180 | 118 | 400 | 196 | 1300 | 297 | 7000 | 364 |
| 50 | 44 | 190 | 123 | 420 | 201 | 1400 | 302 | 8000 | 367 |
| 55 | 48 | 200 | 127 | 440 | 205 | 1500 | 306 | 9000 | 368 |
| 60 | 52 | 210 | 132 | 460 | 210 | 1600 | 310 | 10000 | 373 |
| 65 | 56 | 220 | 136 | 480 | 214 | 1700 | 313 | 15000 | 375 |
| 70 | 59 | 230 | 140 | 500 | 217 | 1800 | 317 | 20000 | 377 |
| 75 | 63 | 240 | 144 | 550 | 225 | 1900 | 320 | 30000 | 379 |
| 80 | 66 | 250 | 148 | 600 | 234 | 2000 | 322 | 40000 | 380 |
| 85 | 70 | 260 | 152 | 650 | 242 | 2200 | 327 | 50000 | 381 |
| 90 | 73 | 270 | 155 | 700 | 248 | 2400 | 331 | 75000 | 382 |
| 95 | 76 | 270 | 159 | 750 | 256 | 2600 | 335 | 100000 | 384 |

Note: "N" is population size
"S" is sample size.

Source: Krejcie & Morgan, 1970

APPENDIX IV
RESEARCH PERMIT



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Ref: No.

Date:

2nd July, 2015

NACOSTI/P/15/9222/6473

Janet Mutanu Wambua
University of Nairobi
P.O. Box 30197-00100
NAIROBI.

RE: RESEARCH AUTHORIZATION

Following your application for authority to carry out research on *“Influence of empowerment programs on sexual behaviour change among high risk group in Kenya; A case of Nakuru West District, Nakuru County,”* I am pleased to inform you that you have been authorized to undertake research in **Nakuru County** for a period ending **25th August, 2015.**

You are advised to report to **the County Commissioner and the County Director of Education, Nakuru County** before embarking on the research project.

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

Said Hussein
SAID HUSSEIN
FOR: DIRECTOR-GENERAL/CEO

Copy to:

The County Commissioner
Nakuru County.

The County Director of Education
Nakuru County.

National Commission for Science, Technology and Innovation is ISO 9001:2008 Certified