# INFLUENCE OF NON GOVERNMENTAL ORGANIZATIONS PROGRAMME DESIGNS ON HIV/AIDS PREVALENCE IN NYANDO SUGAR BELT, KISUMU COUNTY,KENYA.

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UNIVERSITY OF NAIROBI.

# **DECLARATION**

This research report is my original wo	ork and has not been presented for the award of degree
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# **DEDICATION**

I dedicate this research report to my parents Gordon and Joyce Nyanjom for believing in me and giving me the courage to do this course, my siblings Rael, Jack and Eric for their relentless support as I studied this course, to my friends for their continuous support and last but not least to my classmates for their never ending encouragement. Thank you.

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#### ABBREVIATIONS AND ACRONYMS

**AIDS:** Acquired Immunodeficiency Syndrome

**ANC:** Ante natal care

**ART:** Anti-Retroviral Therapy

**ARV:** Anti-Retroviral

**FHI:** Family Health International

**FHOK:** Family Health Options Kenya

**GFATM:** The Global Fund for AIDS, Tuberculosis and Malaria

**HIV:** Human Immune deficiency Virus

**KAIS:** Kenya Aids Indicator Survey

**KDHS:** Kenya Demographic Health Survey

**KNASP:** Kenya National Aids Strategic Plan

**MAP:** Multi-country Aids Project

**NGO:** Non-governmental organization

**NRHS:** Nyanza Reproductive Health Society

**PATH:** Partner in Appropriate technology in health

**PCT:** Provider Initiated Counselling and Testing

**PMCT:** Prevention of Mother Child Transmission

**PEPFAR:** President's Emergency Plan for Aids relief

**RH:** Reproductive Health

**STI:** Sexually transmitted infections

**TB:** Tuberculosis

**UNAIDS:** United Nations Programme on HIV/AIDS

**UNGASS:** United Nations General Assembly Special Session on AIDS

**VCT:** Voluntary counselling and testing

**VMMC:** Voluntary Medical Male Circumcision

WHO: World Health Organization

#### **ABSTRACT**

HIV prevalence among adults aged between 15-64 years has decreased nationally from 7.2% to 5.6% in the year 2012 according to the Kenya Aids Indicator Survey, while among the children aged 18 months to 14 years it was 0.9%. Prevalence among adults varied by regions with the highest being Nyanza region where we have two sugar belts and the lowest being the North Eastern region. Most regions have also showed substantial decrease in prevalence with the notable ones being Coast at 4.3% from 8.1%, Nairobi at 4.9% from 8.8% and Rift valley at 3.7% from 6.3%. Prevalence rates are a reflection of both new infections within a group and deaths of those infected. Since time immemorial different programmes have been put into place by different NGOs. There are several interventions that have been dealing with the issue of HIV/AIDS in this country and specifically in Nyando Sugar Belt, however, much more needs to be done as there is still a gap especially on the designs of these HIV/AIDS related programmes. The purpose of this study was to investigate how the NGOs programme design influences HIV/AIDS prevalence in Nyando sugar belt. Sugar belts being regions where the HIV prevalence is normally high due to the disposable income and the migration of the employees from one sugar factory to another. The objectives of the study were to establish the level at which stakeholder related designs influenced HIV/AIDS prevalence,, to assess the extent to which NGOs management oriented designs influenced HIV/AIDS prevalence, to investigate sustainability related designs of NGOs and its influence on HIV/AIDS prevalence and to also determine how the application and intensity of activity design influences HIV/AIDS prevalence in Nyando Sugar Belt. This study used the Descriptive Survey and correlational research designs. The target population consisted of CEO's of the NGOs and the community beneficiaries. The sample size was 331. The study used the simple random sampling technique to get the sample from the beneficiaries and purposive sampling for the CEO's of the non-governmental organizations Data collection was through questionnaires for the beneficiaries and data from the CEO's was collected with the help of an interview schedule. On validity and reliability of the instruments, pilot testing was carried out to ensure this. The data collected from the field was analyzed and interpreted using the Statistical Programme for Social Sciences. Standard multiple regression, correlation and Pearson chi square test of independence methods of data analysis were employed. The study concluded that some programme designs did not match the people's needs and that management oriented designs were not fully functional except for competent staff. The findings show that stakeholder oriented designs had a generally low influence on HIV/AIDS prevalence in the region with a variation of 5.7%. They also revealed that there were no measures to ensure sustainability of the projects except an initiative for circumcision and that activities were not evenly distributed in the region. The study recommended continuous involvement of community members in the programmes and activities and proper campaigns to create awareness among the residents so as to seek various services. It is hoped that the findings of this effective study may help donors, programme staff of various prevention interventions in NGOs and all stakeholders to adapt, modify and come up with comprehensive programmes in future.

#### **CHAPTER ONE**

#### INTRODUCTION

## 1.1. Background to the study

Over two decades since the first AIDS case was discovered in Kenya, HIV/AIDS still remains a huge problem for the country in its efforts for social and economic development. Responses to the pandemic have evolved over time as people become aware and as services have developed to confront this epidemic. Today in Kenya the HIV epidemic is better understood. Greater international and national commitment to address HIV and AIDS throughout the world has been seen through the United Nations General Assembly Special Session on AIDS (UNGASS), The Abuja Declaration, and the Millennium Development Goals. This commitment has led to greatly increased resources and international support, including the World Bank Multicountry AIDS project (MAP), The Global Fund for AIDS, Tuberculosis and Malaria (GFATM), The US president's Emergency Plan for AIDS Relief (PEPFAR) and other substantial bilateral, multilateral and charitable efforts. (Aids in Kenya-Trends, Interventions and Impact, 2005).AIDS has become a tragedy of devastating proportions in Kenya. The lives of infected individuals, their families and communities, the companies they work for, and the country as a whole has been affected by the HIV/AIDS epidemic (Rau, Forsythe and Okeyo, 1996).

In Asia the prevalence rate is 0.1% according to Asia statistics 2012 while in China specifically, three major initiatives are being scaled up concurrently, first the government has prioritized interventions to control the epidemic in drug users, sex workers and men who have sex with men and plasma donors as this are the main ways in which people are getting infected in the country, Second, routine HIV testing is being implemented in populations at high risk of

infection. Third, the government is providing treatment for infected individuals On the other hand according to UK statistics 2012, the prevalence rate falls between 0.2-0.3% and a major worry in that area is that many infected with HIV are not accessing testing services soon enough. In 2012 47% of all people newly diagnosed with HIV were diagnosed late. To address this issue, in August 2013 the UK government announced that HIV self—testing kits will be available for the public to buy once the kits have passed certain regulations. This is a positive move to them towards getting people to access testing earlier in the comfort of their own homes. This can lead to much more people knowing their HIV statuses early enough and hence if there is also need for medication they can do so promptly. And when is one the drugs it lowers the partners chance of getting infected (UNAIDS, 2012)

In South Africa, according to the 2012 statistics, they have been intensifying the fight against HIV/AIDS by integrating tuberculosis into its efforts against the epidemic due to the relationship of the two diseases. VMMC has also been on the rise to help reduce the infection rates in the country. However, before many leaders have impeded the efforts because they doubted the science behind AIDS and ARVs. Some of the other prevention programmes that are being implemented in the country include Prevention of mother to child transmission, creating HIV and AIDS awareness, condom use and distribution, HIV and sex education in schools. South Africa also has the largest ART roll out programme in the world, with a prevalence rate of 17.3% and this is impressive especially so after years of doubting the effectiveness of the treatment at the highest levels of government and the initial delay and slow pace of delivering a public ARV programme (UNAIDS, 2012)

According to 2012 Nigeria statistics, the prevalence rate of the country is 3.7%, however, it has the second highest number of new infections reported each year Some of the key HIV/AIDS

programmes that they have designed for their people include sex education, condom promotion, media campaigns to raise public awareness, prevention of mother to child transmission and care and treatment of those living with HIV (UNAIDS, 2012)

HIV prevalence among adults aged 15 to 64 years in Kenya decreased nationally from 7.2%, as measured in KAIS 2007 to 5.6% in 2012. HIV prevalence among children aged 18 months to 14 years was 0.9%. HIV prevalence among adults varied by region with the highest prevalence in Nyanza and lowest prevalence in the Eastern North region. While most regions showed a decreased prevalence from 2007, substantial drops were identified in the Coast, Nairobi and Rift Valley regions. Levels of HIV testing have increased with 72% of adults aged 15 to 64 years in 2012 reporting ever having been tested for HIV, a significant increase from 34% in 2007. Despite the increase in HIV testing levels, 53% of survey participants found to be infected during KAIS 2012 were not aware of their HIV infection. However, this was a substantial improvement from 2007 where over 80% of HIV-infected persons did not know they were infected. The proportion of men who were circumcised increased nationally from 85% in 2007 to 91% in 2012. Nyanza region observed the highest increase in male circumcision rates, from 48% in 2007 to 66% in 2012. Low levels of consistent condom use were observed among individuals who reported a sexual partner of discordant or unknown HIV status. This observation held for both women and men aged 15 to 64 years. Ninety-two percent of women who gave birth between 2007 and 2012 and attended antenatal care (ANC) those pregnancies had been tested for HIV infection at ANC, compared to 65% in 2007. Of those who were diagnosed with HIV at ANC, 90% received either maternal or infant antiretroviral prophylaxis to prevent mother-to-child transmission of HIV (PMTCT). Reported use of co-trimoxazole was 42% among HIV-infected persons aged 15-64 years. However, use of co-trimoxazole among those who were aware of their HIV infection was high, at 89%. Fifty-eight percent of HIV-infected persons aged 15-64 years were eligible for antiretroviral • therapy (ART) treatment for HIV infection based on a CD4+ T-cell count of 350 cells/μl or less or reported history of current tuberculosis treatment. Of those, 63% were currently on ART. Among those on ART, 78% achieved viral suppression. However, viral suppression among all HIV-infected persons, regardless of awareness of HIV status and ART use was low at 40% (KAIS, 2012)

From the 2001 Abuja Declaration and the 2005 Gaborone Declaration to the 2012 African Union Roadmap on Shared Responsibility and Global Solidarity for AIDS, TB and Malaria Response in Africa, the African Union has long taken a stand in solidarity with the tens of millions of people in Africa affected by HIV. African governments are also steadily decreasing their reliance on donor funding for those efforts. Kenya, Lesotho, Nigeria, South Africa, Swaziland and Zimbabwe have demonstrated committed leadership to ensure that the resource gap is funded from public domestic sources. This trend will help tip the dependency balance, but as African economies grow, public investments for social protection must also grow. Rau, Forsythe, Okello 1996). Kenya has implemented a wide range of HIV prevention programmes, and countless organizations are working to prevent HIV transmission from small, grassroots groups to religious institutions to sophisticated mass media outlets. Almost all Kenyans have been exposed to HIV prevention messages and many have benefited from specific services such as VCT, PMCT, condom distribution, and a safer blood supply. A challenge for the future will be to assess which of these multiple prevention interventions are the most effective in changing behavior, which are most cost efficient, and which need improvement. Continuing a focus on preventing new HIV infections will be essential as Kenya enters the AIDS treatment era.(Rau, Forsythe and Okeyo, 1996).

Some of the programmes that have been or are being implemented since the discovery of HIV/AIDS are awareness creation, HIV testing and counselling, HIV prevention, Treatment and Care and Education programmes. HIV testing and counselling is a programme that has widely expanded across Kenya since the beginning of the millennium. In 2000 there were only three voluntary counselling and testing (VCT) sites nationwide; by 2010 there were 4,438. Alongside voluntary testing, provider initiated counselling and testing (PCT) has expanded and is now available in 73 percent of health facilities. PCT is when individuals are offered a HIV test whenever they go to a health facility, rather than patients having to ask for a test. One of the 2010 targets set in was to test 2 million Kenyans for HIV annually. In order to reach the target, international development organizations and the Kenyan government introduced a number of new initiatives. One such programme, launched in late 2009, aimed to provide door-to-door HIV testing and counselling for those living in remote areas with little access to health care. This scheme raised concerns from Human Rights Watch, who urged the government to ensure principles of counselling, consent and confidentiality would be properly adhered to (KNASP 2005/06-2009/10)

The government's enhanced focus on testing has been reflected by the percentage who have tested for HIV. In 2003 only 15 percent had taken a test compared to 37 percent in 2007. Actionto improve access to testing facilities and a high-profile media campaign that ran between 2002 and 2005 is thought to have contributed to the increase in HIV testing uptake. Increased testing rates have meant that record numbers of Kenyans have been tested in recent years. In the year 2010, it is estimated that more than 5.7 million Kenyans aged 15 years and over received HIV testing and counselling. 73.5 percent of women and 58.6 percent of men have been tested at least once. The disparity between the number of men and women who access HIV testing has

continued, but efforts to introduce community-based testing programmes have been successful in increasing uptake among men (KDHS, 2009)

### 1.2.Statement of the problem

AIDS has become a tragedy of devastating proportions in Kenya. The lives of infected individuals, their families and communities, the companies they work for, and the country as a whole has been affected by the HIV/AIDS epidemic. The prevalence data also show the steady increase in infection rates in the country (Rau and Mboya, 1996). Kenya seems to be performing well on policy formulation and planning as well as setting up legal frameworks on AIDS however concrete programmes to implement these provisions and the arising issues are still lacking. Also although so much money has been pumped into AIDS programmes year in year out yet there is very little to show for it. One of the reasons for the country's poor indicators was that much of the money was spent on salaries, per diems and administration. Kenya has also been performing poorly on prevention, care and treatment because programmes on drug delivery are ineffective. Lack of logistics is thus denying thousands of people the benefit of services and impacting negatively on the mitigation of the problem. Could the HIV prevalence also be a case of corruption which is said to be rampant among those heading these HIV/AIDS programmes. Instead of total concentration on the AIDS scourge which is still killing many people in the county (Ogot, 2004). Kenya's HIV prevalence peaked during the late 1990s and, according to the latest figures, has dramatically reduced to around 6.2 percent. This decline is thought to be partially due to an increase in education and awareness, but also from high death rates. Whilst many people in Kenya are still not being reached with HIV prevention and treatment services

and yet access to treatment is increasing, where could the programmes and their designs be going wrong? (Rau and Mboya, 1996).

There is often a lack of capacity at the local level to collect the information necessary to target interventions and monitor prevention efforts. The lack of information about local epidemics stymies national efforts to scale up effective programmes. When resources are limited, prevention efforts should target areas where the potential for preventing infections is greatest. These areas are called "priority prevention areas" (FHI, 2004). The sugar belt area signals an area that may have much higher incidences of infection in the future unless prevention efforts are undertaken yet little research has been done in these areas. For example most research done by bodies such as KAIS and KDHS mostly focusses on the prevalence rates in the different regions in the country and behavioral indicators for comparison (KAIS, 2009). The level at which NGOs stakeholder related designs influence HIV prevalence has not been investigated. According to Rau and Mboya (1996), over a period of years there have been no major efforts towards the programme designs. NGOs management oriented designs influence on HIV prevalence has also not been tackled by most researchers. Despite the important developments, there still remains strong undercurrent of skeptism or downright opposition to more aggressive positions on HIV/AIDS prevention and care. Sustainability of most NGOs trying to influence HIV/AIDS prevalence is at stake and even the activity designs are ineffective, therefore there was need to investigate the Non-Governmental Organizations HIV/AIDS programme designs and their influence on HIV prevalence in Nyando sugar belt at present.

#### 1.3 Purpose of the study

The purpose of the study was to investigate how the NGOs programme design influences HIV/AIDS prevalence in Nyando sugar belt, Kenya

# 1.4. Objectives of the study

This study was guided by the following objectives:

- i. To establish the level at which NGOs stakeholder related designs influence HIV prevalence in Nyando Sugar Belt, Kenya.
- To assess the extent to which NGOs management oriented designs influence HIV prevalence in Nyando Sugar Belt, Kenya.
- iii. To investigate sustainability oriented designs of NGOs and its influence HIV prevalence in Nyando Sugar belt, Kenya.
- iv. To determine how the application of intensity of activity designs in NGOs influences
  HIV prevalence in Nyando Sugar belt, Kenya.

### 1.5 Research questions

The following research questions were used to guide the study:

- i. To what level do NGOs stakeholder related designs influence HIV/AIDS prevalence in Nyando sugar belt?
- ii. To what extent does NGOs management oriented designs influence HIV/AIDS prevalence in Nyando sugar belt?
- iii. How does NGOs sustainability related designs influence HIV/AIDS prevalence in Nyando sugar belt?

iv. To what extent does the application of intensity of activity design influence HIV/AIDS prevalence in Nyando sugar belt?

## 1.6 Research Hypotheses

The study was guided by the following hypotheses:

- i. Stakeholder related designs have an influence on HIV/AIDS prevalence.
- ii. Training as sustainability oriented designs has an influence on HIV/AIDS prevalence.
- iii. The level and intensity of activities in the NGOs programme designs has an influence on HIV/AIDS prevalence.

## 1.7 Significance of the study

It is hoped that the findings of this study will be used by the various donors such as USAID who inject a lot of funds to the NGOs for the implementation of various HIV/AIDS programmes, programme staff of the various prevention interventions in NGOs towards improving their services. It is also hoped that the findings would be used by the Government of Kenya in learning how to run their programmes to so as to get effective results, the scholars of various universities to add to their academic knowledge and for reference and all the relevant stakeholders to strengthen, adopt, modify and come up with new and comprehensive programme designs for the country.

#### 1.8 Basic assumptions of the study

The study was designed on the premise that Nyando sugar belt has had a series of NGO programmes that have been implemented and are still being implemented. The study was also guided on the assumption that the sample size is adequate and will give a real picture of situation and respondents give truthful and accurate information.

# 1.9 Limitations of the study

The study could have been conducted in all sugar belts in Kenya but because of time, financial constraints and them being far apart this was not be possible. Nyando Sugar belt is a large area covering many constituencies and it was going to take a lot of time to collect data from the area however this limitation was overcome by engaging some research assistants so as to ensure that no town or constituency was left behind in the research study and that the findings are a true representation of Nyando Sugar Belt. Another limitation was reaching the CEOs of the NGOs currently implementing in the area, however the researcher set appointments with them due to their busy schedules so as to be able to interview them and get their input.

# 1.10 Delimitations of the study

The study was carried out in Nyando sugar belt which is in Nyando District, neighboring Kisumu District in Nyanza region of Kenya. The researcher assured all involved that the purpose of the study was not for victimization and that the information provided will be confidential and will only be used for the purpose of the study. The researcher is also familiar with the vernacular language spoken in Nyando Sugar belt and therefore this combined with both English and Kiswahili made it easier to collect all the relevant information needed for the study. This study will be de-limited to the use of questionnaires and interview schedules as the main instruments of data collection. The study was confined to the CEO's of the NGOs that are implementing various programmes in the area and the beneficiaries of these programmes.

## 1.11 Definitions of significant term used

HIV Prevalence- The percentage of the population that is affected with HIV

at a given time.

**Stakeholder Involvement-** This is the involvement of affected and interested groups or

individuals that allows informed and engaged

participation.

Sustainability of programmes- This is an organizations ability to fulfill its mission and

serve stakeholders over time.

**Intensity and level of activities-** This is the quality or condition of an activity having great

energy, strength and concentration and the nature of use of

the activities.

**Management of programmes-** This is the function of coordinating the efforts of people to

accomplish programme goals and objectives using

available resources efficiently and effectively.

**Sugar belt-** are regions whereby the main activity that takes place is

the planting of sugarcane and processing.

**Programme design**
This is the activity of progressing from a specification of

some required programme to a description of the

programme itself.

## 1.12 Organization of the study

This research project is organized in five chapters: Introduction, review of related literature, research methodology, data analysis, interpretation and discussion of the study, conclusion, recommendations and suggestions for further research.

Chapter one basically gives the introduction and describes the background of the study, statement of the problem, purpose of the study, objectives of the study, research questions, significance of the study, basic assumptions, limitation, delimitations of the study and organization of the study.

Chapter two provides a review of literature regarding the study as well as the theoretical and conceptual framework whereas Chapter three explains the methodology which had subsections on research design, target population, sample size and sample selection techniques, data collection instruments and measurements, data collection procedure, data analysis plan, pretesting of research instruments and finally ethical consideration.

Chapter four has data analysis presentation and discussion and finally the fifth and last chapter gives a summary of the findings, conclusion and recommendations.

#### **CHAPTER TWO**

#### LITERATURE REVIEW

#### 2.1 Introduction

This chapter reviews theoretical and empirical literature related to the study based on the following themes: stakeholder oriented designs, level, management oriented designs, and sustainability related designs and application of intensity of activities. This chapter builds on the introduction and goes ahead to provide an insight into the study with the help of the theoretical and conceptual frameworks. This chapter apart from also looking at the gaps in the body of knowledge, it also looks at the works of various researchers and scholars who also contribute to this study.

#### 2.2 Overview of HIV/AIDS programme designs

In USA, the response to the AIDS epidemic has produced mixed results. HIV prevention efforts have not always been successful. Despite the seriousness of the epidemic, particularly in certain geographic areas and among certain demographic groups, the USA lacked a comprehensive plan on AIDS until 2010 in July when a strategy was launched, it is structured around three core aims: reducing new HIV infections, increasing access to care and improving health outcomes for people living with HIV, and reducing HIV-related disparities and health inequities. Various HIV/AIDS organizations have also been formed in various cities in the states, which have different programmes designed to help the people, for example, in Alabama there is AIDS Action Coalition which focusses on healthcare, education and emergency financial assistance for people with HIV/AIDS and their families, in Arizona there is the AIDS network of Arizona whose programme is designed for HIV prevention, health and nutrition education for adults over the age of 45, those who are infected by HIV and need support training and spiritual

guidance in churches are also not left behind in Chicago where there is the Access Community Health Network/Grand. Accordingly, the Strategy recommends that HIV prevention efforts are intensified in the communities where HIV is the most heavily concentrated. The Strategy is careful not to endorse one prevention method, such as condom use, education or testing, over another. Instead, it insists that 'overlapping, combination' approaches that have been proven to work and are cost-efficient be used to target high-risk populations in the states. During the early years of the epidemic, the USA's prevention efforts primarily targeted people most at risk of acquiring HIV. In the new millennium attention has also been placed upon people living with HIV. (UNAIDS 2012).

There is a HIV adult prevalence rate of 1%. Some of the programmes that have been designed in the area include HIV testing and this varies in the region. To encourage uptake of HIV testing, the CHAA Eastern Caribbean Community Action Project II is training peer educators how to provide counselling and rapid testing, to heighten access for marginalized communities. This will also relieve testing and counselling pressures on national health centres. There is also the provision of condoms and information, although condoms is still a taboo amongst certain groups in the Caribbean, HIV prevalence is much higher among communities living near the bateyes (sugar plantations), than among the population at large in countries such as the Dominican Republic. This is due to a lack of sex education, more apparent sex work, male migrants sharing sexual partners, and a lack of access to national HIV prevention efforts in these communities. Prevention of mother to child transmission is also being implemented, media campaigns, as well as HIV/AIDS education in schools (UNAIDS, 2012).

The prevalence rate is China as well is 1%, partly because of the national failure to educate Chinese citizens about AIDS in the 1980s and 1990s, stigma and discrimination towards

those living with HIV in China is still a major problem. Stigma, fear and discrimination constitute a vicious circle which fuels a hidden epidemic, presenting serious obstacles to the design and implementation of effective HIV prevention programmes. HIV/AIDS education has also greatly improved in the country, there is also condom use programme which is reaching high levels, prevention of mother to child transmission which is a core part of China's national HIV strategy as well as Voluntary HIV testing and counselling. In Tanzania, according to 2012 HIV/AIDS statistics where the prevalence rate is 6.5%, some of the programmes that have been designed for the population to help towards dealing with the epidemic are the VCT services which have been increasing rapidly and hence leading to an increased number of people who know their status and also going further to have Community Based VCT to individuals who are unwilling or unable to access standard clinic based VCT which is often some distance from the communities. They also have the condom programme, prevention of mother to child transmission, youth sex education, however it is not widespread and comprehensive enough (UNAIDS,2012).

The HIV prevalence rate in Kenya peaked during the late 1990's and according to the latest figures, it has dramatically reduced to 5.6%. In the year 2007, 12 million women were living with HIV/AIDS compared to 8.3 million men globally. In 2001, report on the special session of the General Assembly on HIV/AIDS, the United Nations secretary general warned that HIV/AIDS was reversing decades of development in the hardest hit regions of the world. It also tends to change family composition and the way communities operate. In South Africa, 5 million people are infected and it's the fastest growing epidemic in the world. This decline is thought to be partially due to an increase in education and awareness but also from high death rates. The recent decrease in HIV prevalence rates in some regions of the country is also as a

result of the increased involvement by the Government of Kenya to continually support the various Non-Governmental HIV/AIDS programmes and rely less on the donors or international community for support so that this pandemic can be managed and controlled. The current number of people living with HIV in Kenya is 1.6 million, prevalence rate of adults aged 15 to 49 is 6.2%, 1.4 million people aged 15 and above living with HIV, 800,000 women aged 15 and above living with HIV, 220,000 children aged 0 to 14 living with HIV, 1.1 million orphans due to HIV and 62,000 deaths due to HIV in 2011. Urban populations have higher HIV prevalence of 10% than the rural populations 6%. Regional variations are also significant. Adult prevalence in other provinces ranges around 5%, with the exception of North Eastern province, where prevalence is less than 1%, it is the only region of the country where the epidemic is low level. Initially HIV/AIDS was branded as a disease of only particular groups in the early days however the virus does not discriminate as it infects and affects anyone (UNAIDS, 2011).

The following table illustrates HIV prevalence of different regions in Kenya.

Table 2.1 HIV prevalence of the different regions in Kenya

Region	2007	2012
Central	3.6 %	3.8%
Coast	8.1 %	4.3%
Eastern	4.6 %	3.7%
Nairobi	8.8%	4.9%
Nyanza	14.9 %	15.1%
North Eastern	0.5%	
Rift Valley	6.3 %	3.7%
Western	5.4 %	4.7%

Source: KAIS 2007 and 2012.

Many questions have been raised as to why many people get infected daily when most people know how to prevent transmission of HIV or are aware of the disease, unfortunately there are no easy answers to this question, but conquering the global pandemic will not be accomplished solely by global efforts. Conquering the pandemic requires comprehensive action especially at the local level in the thousands of communities and districts where transmission is most likely to occur or continue and in this case at Nyando Sugar belt. There is surely a global HIV epidemic, but it is comprised of thousands of local HIV epidemics. It all boils down to the NGOs programme design and how effective they are towards dealing with the epidemic and 'Getting to zero'.

However, increased rates of testing do not always accurately reflect an increased number of people who know their status. This is because people might become infected after an earlier negative test, or may not have received the results. For example, almost two thirds of HIV infected people surveyed and who thought they knew their status mistakenly thought they were HIV negative. Often women will be afraid to disclose their status to their husbands because they are worried they may be stigmatized, assaulted or thrown out of the family home. It has even

been reported that women fail to seek antenatal care from fear of their HIV status being disclosed during routine HIV testing (KAIS 2007). Table 1.1 illustrates HIV testing among persons aged 15-64 years old.

Table 2.2 HIV testing among persons aged 15-64 years by sex

Gender	2007	2012	
Female	41%	80%	
Male	25%	63%	
Overall	34%	72%	

Source: KAIS 2007 and KAIS 2012

In matters to do with condom distribution in the country, the Kenyan government with the help of International Non-Governmental Organizations has only actively promoted condom use since 2001, when an estimated 12.8 percent of its population was infected with HIV. That year, the government announced its intention to import 300 million condoms. Since then, condom distribution has been radically scaled up; 10 million were distributed in 2004 and 124.5 million in 2008. However there is still a gap in this programme design as many people do not know how to correctly use the condom and thus interfering with the essence of promoting condom use in the first place. There have been a number of other obstacles either preventing people from accessing condoms, or preventing people from wanting to use them. In particular, Kenyans have often received conflicting messages about condom use. Many religious leaders have expressed opposition to condom use. Preliminary results from the 2008/2009 Kenya Demographic and Health Survey revealed that of respondents who in the last 12 months had sex with two or more partners, only 32 percent of women and 37 percent of men reported using a condom. A 2011 study in Kilifi district, found that only 1 percent of married couples regularly used condoms. Reports of people washing and re-using condoms, during condom shortages,

indicate that more needs to be done to ensure people have consistent access to condoms. The female condom uptake is also very low with very few people accessing and using the condoms and there are cases of reported shortages of the same every now and then even in NGO projects such as Aphia Plus which has condom distribution and demonstration as one of their programmes (KDHS, 2008/2009).

When identifying stakeholders, it is not just part of the start-up, the list must be reviewed at regular intervals. The relative importance of each changes with time and through the stages of the project. It is a serious risk to fail to cooperate with or recognize a stakeholder. Ground rules should also be set at the outset as poor stakeholder control will lead to chaos and demotivation of the team. The stakeholders are inside the organization and therefore it is important to ask the sponsor and customer to get involved in the activity of stakeholder identification since some stakeholders impact both. It is important to identify all the stakeholders as early as possible as failure to engage them may be fatal (Young, 2010). Management of these programmes is a dynamic process that utilizes the appropriate resources of the organization in a controlled and structured manner to achieve some clearly defined objectives identified as strategic needs. It is often conducted within a defined set of constraints. The way forward now being adapted by many organizations is to use management to manage the change. Since programmes are about change- creating something or a state we need but do not have, then it seems the natural management process to adapt. In many cases, we see the need for more than one programme to achieve the final outcome desired. It is often convenient to divide the work involved into a collection of projects across an organization, particularly where different national cultures may have an influence or functional requirements make implementation relatively easier to accomplish (Young 2010). A major challenge faced by countries that have begun to fight HIV/AIDS is how to effectively identify, disseminate and replicate best practices and models for districts and communities (FHI, 2004).

The success of these NGO HIV/AIDS related programme design also goes hand in hand with factors such as stakeholder involvement, the management of these programmes, sustainability and the level and intensity of the activities.

#### 2.3 Stakeholder related designs

Each organization has multiple stakeholders including community leaders, staff and clients. No organization can be sustainable over time without knowing its internal and external stakeholders, understanding their needs and expectations, accurately assessing the relative priority of each group of stakeholders' vis-à-vis the others, and addressing the needs of the various stakeholders in a balanced fashion. Organizations must recognize their stakeholders and that their needs may change over time, and they must consciously change and adapt as needed (Gitonga, 2010).

NGOs have also tended to be highly focused on achieving their objectives but sometimes less willing to share their experiences with other local stakeholders since they are highly responsive to donor demands. In the past this has hampered the implementation of health programmes and compromised the delivery of good healthcare. Case in point in Nigeria, whereby sex education is traditionally a very private topic and its discussion is normally seen as inappropriate. However, successful delivery of sex education to young people is reliant on increasing the participation of community leaders, who are also stakeholders, in the design, planning and implementation of such programmes (Shimwati 2003). At the end of any project it is the stakeholders who will really decide whether it has been successful. They will let you know if they consider the project

met their expectation or conversely if you have failed as they are frequently an ignored group (Young, 2010).

HIV/AIDS treatment is also another programme in Kenya aiming at prevention. In 2003 only 5 percent of people needing ART were receiving antiretroviral therapy. By 2009 the number of people receiving antiretroviral therapy had significantly increased to 336,980. However, due to a 2010 change in WHO treatment guidelines, which recommend starting treatment earlier, the proportion of people eligible to receive antiretroviral treatment remained at only 48 percent. Under the previous guidelines, treatment coverage would have been 65 percent. By 2010, accessto treatment had increased further with 432,621 receiving treatment, around 61 percent of those in need. Since that year, treatment access has risen by a further 59 percent. The expansion of antiretroviral treatment has led to a 50 percent decrease in AIDS-related deaths since 2005.In 2011 a Kenyan pharmaceutical company was given the green light by the WHO to start producing antiretroviral drugs. This could result in significant savings for the government's treatment programme, as ARVs currently have to be imported from India (UNAIDS, 2000)

Despite an increase in access to HIV treatment for children, the overall coverage for children remains extremely low. Only 31 percent of children living with HIV in need of treatment are receiving it. A child's access to treatment can sometimes be inhibited by reasons other than the reach of treatment services. According to Human Rights Watch reasons for this include: neglect on part of the children's caregivers; a lack of accurate information about medical care for children; and the stigma and guilt associated with HIV and AIDS. Adequate nutrition for people living with HIV is essential. Yet, as poverty levels are high in Kenya and food shortages frequent, people living with HIV are often unable to eat a healthy, balanced diet. Evidence shows that malnourished people are less likely to benefit from antiretroviral treatment and are at a

higher risk of quicker progression to AIDS. In addition, taking treatment without food can be very painful. Obtaining antiretroviral medication for people leading nomadic lifestyles can also be difficult just s for those in the sugar belt regions who move from one factory to another looking for better employment opportunities and greener pastures for their families (Wanjiru,2013).

# 2.3 Management oriented designs of the programmes

When it comes to management, the NGOs and their staff have little input when it comes to programme design and implementation as there is normally a top down approach to this, the bureaucratic structure of management. In a few cases, the directors and managers of various programmes are normally involved in the planning and design of the various programmes. Very few efforts have been put in place to target the NGO executives to help them improve their management and leadership skills as this always goes hand in hand with how the programmes will be designed and how they will eventually be implemented successfully. The society is in constant need of people and organizations capable of being innovative in order to overcome new social needs. It is not only a question of managing better but also thinking strategically about the future in terms of the programme designs. For example in South Africa Free State where there was once stock outs in ARV and this showed how the ARV treatment programmes can be victims of poor management and budgetary constraints, factors that could worsen as treatment programmes aim to expand and if poor economic conditions continue. In Nigeria on the other hand, a study for health care providers found that many of them had not received sufficient training on HIV prevention and treatment and many of the health facilities had a shortage of medication, equipment's and materials. The management of any given programme and the

availability of trained and qualified personnel is very key towards successful implementation (UNAIDS, 2012).

The Prevention of Mother-To-Child Transmission programme efforts in Kenya have rapidly expanded. There are now more than 3,397 health facilities offering PMTCT services. In 2011 an estimated 67 percent of pregnant women living with HIV received the most effective antiretroviral regimen for preventing the transmission of HIV to their babies. Prevention services for pregnant women must continue to grow as HIV transmission from mother-to-child is still high. For example, an estimated 1 in 5 babies born to HIV-infected mothers are infected with HIV and PMTCT services are still only available in half of the country's health facilities. In August 2009 the Kenyan government introduced the more effective combination therapy to replace single-dose nevirapine to prevent mother-to-child transmission. The government also emphasized the importance of male involvement in PMTCT programmes and in 2010 introduced a Sh240 million campaign to encourage partner testing, exclusive breastfeeding and to deliver antiretroviral treatment to more children who need it. Between 2009 and 2011, Kenya's drive to extend PMTCT services halved new HIV infections among children. However, the '2013 Progress Report on the Global Plan' by UNAIDS found that PMTCT coverage fell by 20 percent in 2011-12. As a result, there were an estimated 13,000 newly infected children in 2012. This was due primarily to disruptions in health services. From December 2011 to October 2012, doctors and nurses went on a series of strikes to put pressure on the government to increase healthcare funding (KAIS, 2012).

#### 2.4. Sustainability related designs of the programmes

According to Gitonga (2010), Sustainability is a measure of an organization's ability to fulfill its mission and serve its stakeholders over time. Designing a project sustainability plan involves

coming up with exit and sustainability plan, how a project will live longer to benefit current and future generation. Organizational sustainability is the ability of the organization to secure and manage sufficient resources to enable it to fulfill its mission effectively and consistently over time without excessive dependence on any single funding source. Analyses have shown that individual and community participation in the decision making, project design and implementation process is more significant than any other factor in achieving sustainable healthy practices and optimal use of healthcare resources, for it creates a feeling of ownership. It can therefore be inferred that non- participation by beneficiary communities impairs the success and sustainability of a health projects (Shimwati, 2003) In Tanzania, the efforts by the government to sustain the various NGO projects are still low as they are heavily reliant on donor funding to continue with the various programmes that have been started.

Voluntary Medical Male Circumcision is one of the recent HIV/AIDS programmes which significantly reduce a man's risk of acquiring HIV during heterosexual intercourse. In many districts of Kenya circumcision is a cultural process. Voluntary medical male circumcision programmes were therefore concentrated in those districts that did not hold this tradition especially the Nyanza region in Kenya where this study focuses on. Rates of circumcision increased from 10,000 to 90,000 in just over a year during 2009. In 2010, the rate of circumcision continued to rise to an estimated 139,905, falling just below the annual target. Increasing circumcision among older, sexually active men has been identified as critical if HIV infection is to be reduced among this age group. In 2012, a new initiative was introduced to increase the number of circumcised men. The initiative involved handing out vouchers to men who had the procedure, which could be exchanged for money upon attending a follow-up appointment. They were also encouraged to bring a friend who is interested in becoming circumcised. (ECR, 2004)

# 2.5 Application and intensity of activities

Various activities contribute towards the prevention of HIV/AIDs in the society. These activities include education/ creating awareness of the disease, conducting outreaches. Medical camps whereby people can go and get services such as HIV testing and counselling, condom use demonstration and distribution, peer education activities, making referrals for treatment, conducting trainings especially for the staff to continuously equip them with the relevant knowledge and skills, All these activities when carried out well are effective towards the prevention of the disease and thus a lower prevalence rate in Nyando sugar belt. In Nigeria, there has been some restrictions on condom promotion and the Men who have sex with Men (MSM) have also not been adequately reached because of the laws that prohibit their activities. These same people are the ones who also have relationships with heterosexual couples and if programmes are not designed to adequately reach them as well some of the efforts towards prevention might end up being futile. With the appropriate design being the foundation of any programme, the activities also have to be in tandem with the designed programme as the level and implementation of activities is what makes it easier for all the stakeholders to assess if the designed programme is really of help to them. Delays in funding by the donors also tend to derail the activities that had already been planned for a particular programme and such interferences normally lead to a disconnect therefore making it difficult to truly know if the programme is being effective or not (UNAIDS, 2012).

HIV and AIDS education and awareness programme is an essential part of HIV prevention. In Kenya AIDS education is part of the curriculum in both primary and secondary schools, and even in colleges and universities and for a number of years Kenya has delivered educational campaigns to raise nationwide awareness of the issue. As a result, awareness about HIV and

AIDS in Kenya is high. In Kenya's national, population-based survey, nearly all adults aged 15-64 had heard about AIDS, 90 percent knew that a healthy-looking person could be infected with HIV and most knew how to reduce their chances of becoming infected with the virus. Awareness of the need to use condoms was high with 75 percent of women and 81 percent of men in this age group aware that condoms reduce the risk of HIV infection. The challenge is that the awareness programmes are designed in such a way that does not give room to future follow ups on those who got the information and if they are indeed putting the information into positive and good use. Other challenges include not having enough time in the curriculum, a lack of teacher training and support, reluctance by parents and the Ministry of Education to talk openly about sex and condoms and perhaps more information needs to be included because as time goes by there are new developments on the same taking place (FHI/AIDSCAP, 1996)

#### 2.6. Theoretical Framework

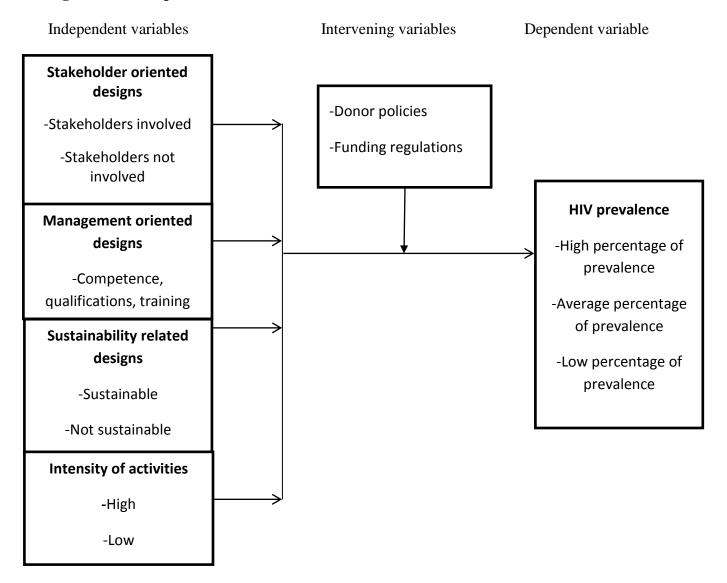
Theoretical foundations and frameworks normally describe and inform the study and also provide future developments. This work will adopt the Cognitive Dissonance theory by psychologists Leon Festinger which stresses the fact that people tend to seek consistency in their beliefs and perceptions, and what happens when one of our beliefs conflicts with another previously held belief? Many HIV/AIDS programmes that have been designed have normally been based on the beliefs that the people in charge of designing the programmes have on the disease. This can result to very good programmes that when implemented will be beneficial or it could result to programmes that end up not being productive to the people. In most cases the beliefs that people have are normally false and might therefore provide a shaky foundation for any programmes. The term Cognitive Dissonance is used to describe the feeling of discomfort that results from holding two conflicting beliefs. When there is a discrepancy between beliefs,

something must change in order to eliminate or reduce the dissonance. Till date many programmes have been designed and implemented as a result of the many beliefs that people have towards HIV/AIDS. According to Festinger, this calls for some change and perhaps its time the designers of the various programmes embrace change and came up with more effective and comprehensive programmes that can go a long way towards dealing with the HIV prevalence in Nyando sugar belt. Psychologist Leon Festinger further says that cognitive dissonance centered how people try to reach internal consistency. He suggested that people have an inner need to ensure that our beliefs and behaviors are consistent. Inconsistent or conflicting beliefs leads to disharmony, which people strive to avoid. In his book A Theory of Cognitive Dissonance, Festinger explained, "Cognitive dissonance can be seen as an antecedent condition which leads to activity oriented toward dissonance reduction just as hunger leads toward activity oriented toward hunger reduction. It is a very different motivation from what psychologists are used to dealing with but, as we shall see, nonetheless powerful. "The amount of dissonance people experience can depend on a few different factors, including how highly we value a particular belief and degree to which our beliefs are inconsistent. Cognitive dissonance can often have a powerful influence on our behaviors and actions.

### 2.7. Conceptual Framework

This study looks at four independent variables which are level of stakeholder involvement, level and intensity of activities, management and sustainability of the programmes. There is also the intervening variable which is donor requirements and policies which also affect the prevalence rates.

**Figure 2.1 Conceptual Framework** 



# 2.8 Summary of literature review

All these factors in relation to the NGOs programme design have some effects on the HIV/AIDS prevalence in Nyando sugar belt, Kenya. Many NGOs have been implementing various HIV/AIDs programmes in the area but there is need to design comprehensive intervention programmes and if possible the NGOs to come together as they are implementing their programmes because in the long run they are all working towards a common goal in the area. This chapter covers literature review and is divided into five subsections which are: an overview of HIV/AIDS programmes, the level of stakeholder involvement which looks at the various ways the stakeholders of different programmes are treated whether they are involved or not as they are very key, the management of the programmes and how issues such as competency and training is very important in the management of the programmes, sustainability of the programmes which is an indicator that whatever was implemented was effective and lastly the level and intensity of programme activities which entails the various activities included in the designs and carried out in the programmes all with an aim of reducing the prevalence rate. This chapter also covers the theoretical and conceptual framework of the study and the summary of the literature review.

### **CHAPTER THREE**

#### RESEARCH METHODOLOGY

### 3.1 Introduction

This chapter described the research methodology employed in the study. It comprises of research design, target population, sample size and sampling techniques, research instruments, validity and reliability or research instruments, data analysis and ethical considerations in the study.

### 3.2. Research Design

This study adopted Descriptive survey research design. The descriptive survey is a method that involves seeking the opinion of a large group of people questions about a particular issue according to Frankel and Wallen (2000). Descriptive survey design is a method of collecting information by interviewing or administering questionnaires to a sample of individuals hence suitable for extensive research. It is an excellent vehicle for the measurement of characteristics of a large population (Orodho 2003). The choice of this design is dictated by its ability to elicit a wide range of information about the relationship between the NGOs programmes design and its influence on the HIV/AIDS prevalence rate on Nyando sugar belt. This approach is also used in preliminary and exploratory studies to allow the researcher gather information, summarize, present and interpret for the purposes of verification. The survey design is also preferred because it is assumed that when all items are covered, no element of chance is left and the highest accuracy is obtained (Kothari 2004). This research design maintains a high level of confidentiality, it is convenient and enables data to be collected faster, enables questions to be asked personally in an interview or impersonal through questionnaires about things which cannot be observed easily. It also gives the study an opportunity to get an accurate view of response to

issues as well as test theories on social relationship at both the individual and the group level (Kothari 2004). Descriptive survey research design is appropriate for this study because it enable the collection and analysis of both quantitative and qualitative data. On qualitative, the study employed interviews to collect data on how the NGOs programme designs influence HIV/AIDS prevalence while on the quantitative approach the study used closed ended questionnaires to collect data on how the NGOs programme design influences HIV/AIDS prevalence in Nyando sugar belt.

# 3.3. Target Population

The target population should have some observable characteristics, to which the researcher intends to generalize the results of the study (Mugenda and Mugenda 2003). And according to Ngechu (2004), a population is a set of people, services, elements, events, group of things or households that are being investigated. Since there are only 5 NGO's currently implementing in Nyando sugar belt, the study took into consideration 500 beneficiaries from the five NGO's and all the CEO's of the organizations. The study therefore was conducted among 2505 people, 2500 beneficiaries and 5 programmes CEO's as the target population.

# 3.4 Sample size and Sampling techniques

This section looks at the sample size and the sampling technique used to select the population to represent the entire target population.

### 3.4.1. Sample Size

A sample can be defined as a portion drawn from a population, the study of which is intended to lead to statistical estimates of the attributes of the whole population. Going by the 1999 census, Nyando district where the sugar belt lies has a population of 299,930 with various

small towns which include Muhoroni, Chemelil, Ahero. Miwani, Koru, Kibigori and Fort tenan. According to Mugenda and Mugenda (2003) and Nyinya (2007), a large sample size reduces the sampling error. The sample size generally depends on factors such as the type of research design, the various variables in the study, the size of the accessible population and the method of data analysis. This used the Simple random sampling technique. According to Mutea Rukwaru (2007), this is sampling where every member of the population has an equal chance of selection into the sample. To ensure true randomness, the method of selection must be independent of human judgement. Although non response is high in this technique, the researcher will ensure that she has contacts of the respondents for guidance and follow up.

Krejcie and Morgan (1970) recommend the table (Appendix 5) for determining sample size depending on the target population size. However, it is important for a researcher to consider whether the sample size is adequate to provide enough accuracy to base decisions on the findings with confidence.

For a target population of 2505 people, the sample size therefore will be 331.

# 3.4.2 Sampling procedure

The study used simple random sampling to select the beneficiaries of the various programmes being implemented in Nyando sugar belt and purposive sampling for the CEO's of these programmes. According to Mugenda and Mugenda (1999), Purposive sampling is a sampling technique that allows the researcher to use cases that have the required information with respect to the objectives of his or her study. Cases are therefore handpicked because they are informative or they process the required characteristics. In this study, purposive sampling was used because there are only 5 NGO's currently implementing their programmes in the region, this being a small number it is important to sample all of them.

#### 3.5 Research Instruments

The study used questionnaires and structured interviews to collect information from the respondents. The questions in the questionnaires were closed ended and according to Mugenda and Mugenda (2003) this refers to questions which are accompanied by a list of all possible alternatives from which the respondents select the answer that best describes their situation This will help in the collection of quantitative data. This group of respondents comprising of the CEO's of various NGOs and the beneficiaries of the programmes, there is diversity in the type of programmes they deal with and the designs hence the choice of the two instruments to collect data.

An interview is a conversation between the interviewer and the respondent with the purpose of eliciting certain information from the respondent. Obtaining information and insights by talking directly with other people is, of course, a continuing activity of all people or persons helping to carry out projects of whatever nature (Rukwaru 2007). The study used an interview schedule which is structured. This instrument is advantageous because it allows the interviewer to develop a rapport with the interviewee and also helps the interviewer to cover all dimensions of investigation through probing of participants.

The questionnaires and the interviews were both used to source data from the respondents, both the CEO's of the various NGOs in Nyando sugar belt and the beneficiaries of these programmes too. The information sourced was based based on stakeholder involvement, level and intensity of activities, management and sustainability of the various programmes.

### 3.5.1. Pilot Testing of the instruments

The pilot study was conducted to check for the reliability and validity of the questionnaire and to check for their ethical appropriateness. According to Orodho (2004) piloting addresses several questions including: Are the questions measuring what they are supposed to? Do the respondents interpret all the questions the same way and do the questions provoke a response? Pilot testing is important in research because it reveals vague questions and unclear instructions in the instruments used to collect data. It also captures important suggestions and comments from the respondents that enable the researcher to improve the efficiency of the instrument and make some adjustment in strategies and approaches so as to maximize the response rate. According to Mugenda and Mugenda (2003), the purpose of pre-testing the instrument is to ensure that the items in the instrument are stated clearly and have the same meaning to all respondents and the respondents on which the instrument is pre-tested should not be part of the selected sample. A pilot study was carried out in the Western sugar belt region. A sample of 15 beneficiaries each will be drawn from 5 NGOs implementing HIV/AIDS programmes in the area together with together with their CEO's.. The research instrument will be administered twice to the same group of respondents with an interval of 3 weeks during piloting. The piloted NGOs and the beneficiaries will not be included in the actual study which will take place in Nyando sugar belt. This was guided by Mugenda and Mugenda (1999) who says that piloting should involve 1% and 10% of the total sample.

### 3.5.2 Validity of the instruments

A research instrument is said to be valid if it measures what it is supposed to measure and if the data collected through it actually represents the respondent's opinions (Amin, 2005). It is the degree to which results obtained from the analysis of data actually represent the phenomenon under study (Mugenda and Mugenda 2003). In this study, pilot testing was used as an important step in making sure that the instrument is valid for the purposes of the study. Validity of the instruments was done with the help of the worthy and able lecturers who are experts in research methods from the Faculty of Project Planning and Management of The University of Nairobi, to find out whether the questionnaire covers the conceptual domains of the research. Their recommendations and suggestions were used to improve on the instruments to ensure that maximum validity is achieved.

## 3.5.3. Reliability of the instruments

According to Mutea Rukwaru (2007), when we speak of an instrument being reliable, we mean it is stable. It does not change what or how it measures from time to time if the variable has not changed. Reliability is the level of internal consistency or stability of the research tool over time. It is the extent to which a research project or a measuring device would produce the same results if used again on different occasion with the same objective of the study, (Mulwa 2006). To ensure that the data collected is reliable, a comprehensive item analysis will be done to ascertain that the questions asked are not ambiguous.

The researcher tested the reliability of the instruments through pilot testing.. An instrument is reliable if it produces the same results when applied to the same people. The test retest method will be used to assess the reliability of the data. This will involve administering the

questionnaires twice, a correlation co-efficient will be calculated to indicate the relationship between the two set of scores. Pearson product moment correlation co-efficient was used to determine the correlation co-efficient.

$$r_{xy} = S_{xy}$$

$$S_x S_y$$

Where:

X- result of the first score

y -result of the second score

r xy-Correlation coefficient between x and y

 $S_xS_y$ -Covariance between x and y

Cov 
$$(x,y)$$
- $\underline{1} \sum x_1 Y_1$ - $\overline{x} \overline{y}$ 

N

# 3.6. Data collection Method

The researcher identified the research topic with input from the supervisors and defended it before a panel of University of Nairobi experts. After incorporating the corrections, the researcher will sought permission from the Ministry of Higher Education, the National Commission of Science, Technology and Innovation through the Board of Post Graduate Studies of the University of Nairobi to grant research permit and authority to conduct research in Kisumu County. The researcher then visited the sample area and sought permission from the relevant authorities and management before embarking on data collection. The research assistants used in data collection were trained on the processes of administering the questionnaires, conducting interviews and on ethical issues. The researcher sought cooperation and use of valued time of the

respondents by firstly explaining the intent of the study and reassuring them about confidentiality of their feedback.

# 3.7. Data Analysis techniques

Data analysis is the examining of what has been collected in a research and making deductions and references, Kombo et al (2006). Data analysis seeks to fulfill research objectives and provide answers to the research questions. The data from this study was analyzed quantitatively and descriptively using Statistical Programme for Social Sciences (SPSS). The descriptive statistics such as means, frequency and percentages were used to analyze responses from the respondents on particular issues. Variances and standard deviation were used to look at the differences in prevalence in the area and how they are influenced by the programme designs. Other methods also used were Standard multiple regression, correlation and Pearson's square test of independence. Mugenda and Mugenda (1999) equate quantitative approach to the scientific method which is traditionally regarded as the conventional mode of inquiry in both research and evaluation. A qualitative data analysis is a kind of data that gives information about judgmental opinion of the respondents. This approach has often been used in a study which does not yield discreet numerical data (Mugenda and Mugenda 1999). Qualitative data from the field was transcribed and organized into various emerging themes and incorporated into the study report.

#### 3.8. Ethical considerations

According to Mulwa (2006), he describes ethical standard as the standard of behavior and practical procedures that a researcher is expected to follow. A researcher must endeavor to follow all the ethical requirements throughout the study. The first ethical consideration was to

abide by procedure of entry to the community by seeking a permit from the National Commission of Science, Technology and Innovation to conduct the research. The researcher ensured that there was informed consent from the respondents before administering the questionnaires and before the interviews conducted.

The researcher assured the respondents that the information collected will be treated with confidentiality and that it will only be used for academic purposes and not passed to any other third party.. The respondents were also informed of their rights which included ignoring issues they would not wish to discuss or respond to. To ensure full co-operation from the respondents, the researcher explained the significance of the study and their participation to them.

#### CHAPTER FOUR

### DATA ANLAYSIS, PRESENTATION, INTERPRETATION AND DISCUSSION

### 4.1 Introduction

In this chapter the results of the data analysis are presented. The data were collected and then processed in response to the problems posed in chapter 1 of this dissertation. Four fundamental goals drove the collection of the data and the subsequent data analysis. These goals are; to establish the level at which NGOs stakeholder related designs influence HIV prevalence, assess the extent to which NGOs management oriented designs influence HIV prevalence, investigate sustainability oriented designs of NGOs and its influence HIV prevalence and to determine how the application of intensity of activity designs in NGOs influences HIV prevalence. The objectives have been achieved. The findings presented in this chapter demonstrate the potential for merging theory and practice.

# **4.2 Response Return Rate**

Three hundred and thirty one respondents were approached to give their views on how the NGOs programme design influences HIV/AIDS prevalence in Nyando sugar belt, Kenya. A total of 331 respondents were targeted. Out of these, 320(98.2%) of the expected sample return achieved through administering questionnaires, consisted of the community beneficiaries. For the chief executive officers, only 3(60%) of the expected 5(100%) were achieved through administering interview schedules.

# 4.3 Demographic Data of the Respondents

In order to establish the characteristics of the sample respondents, as a determinant of the richness of the views obtained and biasness elimination, information concerning their age, gender and education level was sought. The results are presented in table 4.1.

**Table 4.1 Demographic Characteristics of the respondents** 

Demographic Charact	teristics	F	%
Sex	Male	176	54.6
	Female	147	45.4
	Total	323	100.0
Age	below 18yrs	47	14.7
	18-35yrs	117	36.2
	36-50yrs	132	40.8
	51 and above yrs	27	8.3
	Total	323	100.0
Education level	informal education	11	3.4
	primary level	54	16.6
	secondary level	133	41.1
	college/polytechnic	88	27.3
	University	38	11.7
	Total	323	100.0

The results in table 4.1 indicate the demographic characteristics of the respondents. With regard to gender, male respondents, 176(54.6%) were more than the female respondents 147(45.4%). This was because in Nyakach, men knew more information about NGOs and their programs about HIV/AIDS, even though they were also easily accessed than the women. Among the approached, most of the respondents were aged 36-50 years, 132(40.8%), followed by those aged between 18-35 years. The least were those aged 18 years and below, still teenagers and those aged 51 years and above, older adults. Majority of the respondents had also achieve only

secondary school education, 133(41.1%). 88(27.3% had college/polytechnic. Only 38(11.7%) had a university degree, and 11(3.4%) had informal education.

# 4.3.1 Overview of HIV/AIDS prevalence in Nyando Sugar Belt

To investigate how the NGOs programme design influences HIV/AIDS prevalence in Nyando sugar belt, Kenya, the respondents were asked to rate the HIV/AIDS prevalence. Regression, Chi square and Correlation analysis were then carried out to find the extent of the influence of the designs on HIV/AIDS prevalence. Table 4.2 shows the prevalence of HIV/AIDS according to the respondent's views.

Table 4.2. HIV/AIDS prevalence in Nyando sugar belt

HIV/AIDS	prevalence	F	%
Prevalence	Low Prevalence	37	11.6
	High Prevalence	283	88.4
	Total	320	100.0

The results in table 4.2 indicates that 283(88.4%) of the respondents had observed that HIV/AIDS prevalence was high in the region while only 37(11.6%) saw that it had low prevalence. The level of stakeholder's designs, management of programmes, level and intensity of activities and sustainability of the programmes was established through the following objectives.

# 4.4 NGOs Stakeholder Related Designs Influence on HIV Prevalence

To establish the level at which NGOs stakeholder related designs influence HIV prevalence in Nyando Sugar Belt, Kenya, a standard multiple regression was performed. The dependent variable was the prevalence of HIV/AIDS while the independent variables (which were the related designs) included; involvement of community members, stakeholders

involvement, distribution of antiretroviral therapy, and campaigns for adequate nutrition. The results are presented in table 4.3as shown below.

Table 4.3 Regression Model for influence of stakeholders related designs on HIV prevalence

Stakeholders related designs	В	Std.	В	Sig	
		Error			
Constant	4.422	.354		.000	
Involvement of community members	0.074	.079	.056	.346	
Stakeholders involvement	.283	.089	.187	.002	
Distribution of antiretroviral therapy	.224	.080	.018	.004	
Campaigns for adequate nutrition	.067	.076	.054	.374	

 $R^2=0.057$ , F=4.72, Sig value=.001, df=316,

The regression results in table 4.3 indicates that the overall model explained 5.7% of variation in the HIV prevalence ( $R^2$ =.057) and the results were statistically significant at p=.05, F(4,315)=4.72, p<.05.Consideraing the effect of each stakeholder related designs, stakeholder's involvement by the Non-Governmental Organizations in the HIV/AIDS programs had the highest unique contribution that was significant ( $\beta$ =.187, p<.05). The results imply stakeholders related designs had a small but significant influence on HIV/AIDS prevalence in the region, with specifically involvement of stakeholders having the largest contribution to the community. Involvement of community members had a small insignificant impact as displayed in the results. A CEO at Family Health Options Kenya which is implementing the Aphia Plus project in the region was asked to whether they involved community members in the HIV/AIDS programmes, he noted,

We involve them through Psychological support groups and development projects.

This is not enough and sufficient since reduced funding from the donors is almost bringing things to a halt.

This is a clear indication that involvement of community members is at stake as contributed by several factors as financial constraints and poor strategies of involving them. Concerning involvement of stakeholders, there was a significant unique contribution a reflection of the past findings, for instance, the results agree with those of (Shimwati 2003) that successful delivery of sex education to young people is reliant on increasing the participation of community leaders, who are also stakeholders, in the design, planning and implementation of such programmes .Furthermore, (Young, 2010) proposed that at the end of any project it is the stakeholders who will really decide whether it has been successful. They will let you know if they consider the project met their expectation or conversely if you have failed as they are frequently an ignored group. The results in table 4.3 further indicates that the distribution of antiretroviral therapy emerged to have had a significant impact as well, this could be attributed to a 2010 change in WHO treatment guidelines, which recommend starting treatment earlier, the proportion of people eligible to receive antiretroviral treatment remained at only 48 percent. Under the previous guidelines, treatment coverage would have been 65 percent. By 2010, access to treatment had increased further with 432,621 receiving treatment, around 61 percent of those in need. Since that year, treatment access has risen by a further 59 percent. The expansion of antiretroviral treatment has led to a 50 percent decrease in AIDS-related deaths since 2005.In 2011 a Kenyan pharmaceutical company was given the green light by the WHO to start producing antiretroviral drugs. This could result in significant savings for the government's treatment programme, as ARVs currently have to be imported from India (UNAIDS, 2000).

# 4.5Management Oriented Designs and its influence on HIV Prevalence

To assess the extent to which NGOs management oriented designs influence HIV prevalence, respondents were asked state whether there were enough NGOs dealing with AIDS related projects in the region, staff competency, enough human capacity to handle the programs and financial capacity of the NGOs to carry out the programs, the results were presented in frequency counts and percentages in table 4.4

Table 4.4 Management Oriented Designs and HIV/AIDS prevalence

Program designs	SD	D	NS	A	SA	Mean	Std
There are numerous	89(27.8)	86(26.9)	68(21.2)	55(17.2)	22(6.9)	2.48	1.12
NGOs in the area							
dealing with AIDS							
related programs							
NGO's have	42(13.1)	33(13.1)	27(8.4)	103(32.2)	115(35.9)	4.0	1.03
competence staffs who							
handle HIV/AIDS							
issues in the area							
NGOs have enough	46(14.4)	52(16.2)	92(28.8)	65(20.3)	65(20.3)	3.16	1.316
number of people who							
are managing the							
various programmes in							
the area							
Financial capacity of the	84(26.2)	69(21.6)	77(24.1)	48(15.0)	42(13.1)	3.33	1.356
NGOs in terms of the							
resources used to run							
the HIV/AIDS							
programmes is							
sufficient.							

From the results in table 4.4, it is clear that most of the management oriented designs have not succeeded towards the influence of the prevalence of HIV/AIDs prevalence in the region. For instance 89(27.8%) of the respondents stated that there were very few NGOs dealing with HIV/AIDS related programmes, besides, the financial capacity of the NGOS was not sufficient to aid the implementation of these programmes according to 84(26.3%) of the

respondents. However, NGOs had a competent staff who can handle the HIV/AIDS issues in the area. An interview with a CEO to find out whether they had competent staff to handle the programmes revealed positive results, he revealed that,

We have a competent staff, even though understaffed against male loads

The results shows that most of the NGOs had competent staff as agreed by many CEOs who were interviewed, this indicates acquisition of competent staff as a way of programme management succeeded. The results meet the requirements of (UNAIDS, 2012) that the management of any given programme and the availability of trained and qualified personnel is very key towards successful implementation. On the other hand, other factors such as financial capacity had an influence as it reflected a negative influence, implying that there were no sufficient funds to manage the programmes in the community towards influence of HIV/AIDS prevalence.

# 4.6 Sustainability Oriented Designs and its influence on HIV Prevalence

In order to investigate sustainability oriented designs of NGOs and its influence HIV prevalence, respondents were asked to share their views on sustainability designs as formulated by the researcher on a questionnaire in order to collect sufficient information. The results are presented in frequency counts and percentages as shown in table 4.5.

Table 4.5 Sustainability Oriented Designs and influence on HIV/AIDS prevalence

SUSTAINABILITY	SD	D	NS	A	SA	Mean	Std
MEASURES							
Ownership of the	79(24.7)	97(24.7)	79(24.7)	26(8.1)	39(12.2)	2.24	1.26
HIV/AIDS programs is							
high							
Many plans have been put	93(29.1)	98(30.6)	71(22.2)	44(13.8)	14(4.4)	2.33	1.16
in place to ensure							
sustainability of HIV							
related projects							
There is high involvement	94(29.4)	84(26.2)	74(23.1)	29(9.1)	39(12.2)	2.48	1.32
of community members of							
HIV related projects to							
ensure sustainability							
New initiatives have been	49(15.3)	29(9.1)	67(9.1`)	66(20.6)	109(34.1)	3.49	1.47
introduced to increase							
circumcision among men.							

KEY: SD-STRONGLY AGREE; D-DISAGREE; A-AGREE; SA-STRONGLY AGREE

### **Std-Standard Deviation**

From the results in table 4.5, there is a clear outcome that ownership of the programmes is low, 97(24.7%) supports this. Many plans have also not been put in place to ensure sustainability as suggested by 93(29.1%) of the respondents, and in addition, 94(29.4%) states that the involvement of the community members is minimal. On the other hand, circumcision seems to be highly encouraged by the NGOs and initiatives have been put in place to ensure this, 109(34.1%) supports this. Even though most of the sustainability measures to ensure sustainability have not been achieved, circumcision as one of the measures is succeeding. An overview of the literature from a similar research has revealed that voluntary medical male circumcision programmes were concentrated in districts that did not hold this tradition especially the Nyanza region in Kenya where this study focused. Rates of circumcision increased from 10,000 to 90,000 in just over a year during 2009.In 2010, the rate of circumcision continued to rise to an estimated 139,905, falling just below the annual target. Increasing circumcision among

older, sexually active men has been identified as critical if HIV infection is to be reduced among this age group. In 2012, a new initiative was introduced to increase the number of circumcised men. The initiative involved handing out vouchers to men who had the procedure, which could be exchanged for money upon attending a follow-up appointment. They were also encouraged to bring a friend who is interested in becoming circumcised. (ECR,2004). This technique is the only one that could determine the sustainability, even though just one aspect of HIV/AIDS prevalence.

### 4.6.1Relationship between Training as Sustainability Oriented Design and HIV prevalence

Pearson chi square test of independence was also carried out to find out the influence of training on the residents confidence of sustaining the projects. The results are presented in table 4.6

Table 4.6 Chi Square Test on Training as Sustainability Oriented Design

		Have confidence to take over			
		No	Yes	Total	
Training Not trained	Count	136	42	178	
	% of Total	42.5%	13.1%	55.6%	
Trained	Count	58	84	142	
	% of Total	18.1%	26.2%	44.4%	
Total	Count	194	126	320	
	% of Total	60.6%	39.4%	100.0%	

Pearson Chi square value=41.84, p=.000

The results indicate that there is a significant relationship between training and sustenance of the projects. X(1,318)=41.84, p<.005. This implies that inadequate training had resulted in lack of confidence to handle the project in case the NGOs stop. This has an implication that NGOs have

done very little on sustainability of the projects as a way of influencing the prevalence of HIV/AIDS in the region. From the results, 42.5% of those who were not trained did not have the confidence to take over the projects for sustainability while 13.1% of the respondents not trained had the confidence to take over the projects. On the other hand, those who had been trained and did not have the confidence to take over were 18.1% while those who were trained and had the confidence to take over were 26.2%. Therefore from the results, training accounted for 39.4% of sustainability of the projects while 60.6 %( inability for the projects to remain sustained was caused by lack of proper training). In addition to these, one of the Chief executive officers in one of the prominent NGO in Nyanza (Family Health Options Kenya) serving a slightly large population in the area was asked to give his view on some of the measures put in place to ensure that there was ownership and sustainability of the projects, his response revealed that sustainability programs were not as effective as expected, he noted

No measure has been put in place. Programmes depend on donor support, and if there is none of this supports it become hard to put in place any measures.

The response shows a clear indication of lack of stability in the projects after the donors have stopped sponsoring the programs. It also indicates that there are no serious measures that have been incorporated to ensure sustainability. Another CEO at Nyanza reproductive Health Society had different situation, he noted that,

The NGO cannot sustain itself in case of withdrawal of donor funding, we therefore work with the ministry of Health staff so that they take part in service provision.

These results further explain a lot about the sustainability of the programmes in the region. The sustainability of the programmes is low as there are no proper measures put in place

to enhance long term and continuous service to the community members. The situation is largely attributed to non-participation of community members as revealed by the results. There is a great similarity with other findings which inferred that non- participation by beneficiary communities impairs the success and sustainability of a health projects (Shimwati, 2003). In Tanzania, the efforts by the government to sustain the various NGO projects are still low as they are heavily reliant on donor funding to continue with the various programmes that have been started.

### 4.7NGOs Level and Intensity of activities and HIV Prevalence

To determine how the application of intensity of activity designs in NGOs influences HIV prevalence, Pearson product moment correlation was carried out. The relationship between HIV/AIDS prevalence and the extent of the application of intensity of activity design was sought. The results are as shown in table 4.7.

**Table 4.7 Correlation between HIV Prevalence and Level and Intensity of Activities** 

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	Correlations		Activities carried
		HIV prevalence	out by NGOs
HIV prevalence	Pearson Correlation	1	.330**
	Sig. (2-tailed)		.000
	N	320	320
Activities carried out by NGOs	Pearson Correlation	.330**	1
	Sig. (2-tailed)	.000	
	N	320	320

<sup>\*\*.</sup> Correlation is significant at the 0.01 level (2-tailed).

The results in table 4.7 indicates that there is positive significant correlation between the level and intensity of activities carried by NGOs and HIV prevalence in the region as shown by

Pearson product moment correlation, r=.330, p<0.01. This imply that the activities carried out, which include creation of awareness of the disease through campaigns, conducting outreaches, HIV testing and counseling, condom use demonstration and distribution, peer education activities, making referrals for treatment, conducting trainings especially for the staff to continuously equip them with the relevant knowledge and skills have significantly had an effect on HIV prevalence. This agrees with the interview guide carried out with the chief executive officers when they were asked whether these activities were in line with the demands of the community members of Nyando Sugar Belt. One of the chief executive officer from Nyanza Productive Health Society NGO noted that,

These services are in line with the needs of the community members, in fact, they are offered on demand of the community members. They are not force to undergo circumcision, instead, they are educated and willingly accept the importance of circumcision.

The results above indicate that NGOs activities have had some impact on HIV prevalence in the community, however, there are still some challenges that limit the impact of activities as found out in previous research. These challenges include not having enough time in the curriculum, a lack of teacher training and support, reluctance by parents and the Ministry of Education to talk openly about sex and condoms and perhaps more information needs to be included because as time goes by there are new developments on the same taking place (FHI/AIDSCAP, 1996). Otherwise the correlation could be implying a high positive significant relationship between the activities carried out on HIV in the region and HIV prevalence.

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#### **CHAPTER FIVE**

### SUMMARY OF FINDINGS, CONCLUSIONS AND RECOMMENDATIONS

### **5.1 Introduction**

This chapter elucidates summary of the findings, conclusions, contributions to knowledge, recommendations and suggestions for future research studies. The summary of the findings have been presented as per the objectives of the study, whereas the conclusions accommodate the entire study. Recommendations are the results of the gaps in the research areas and the solutions to the findings. Finally, contributions to the body of knowledge and suggestions for further research are imperative into this timely and important topic.

# **5.2 Summary of Findings**

The main purpose of this study investigates how the NGOs programme design influences HIV/AIDS prevalence in Nyando sugar belt, Kenya. A correlation survey was utilized to measure the relationship between HIV prevalence and the NGOs designs in dealing with it.. Triangulation was carried out using qualitative interviews employed in a descriptive research design to establish the relationship, with a view to improve unearth the setbacks and improve the NGOs programmes and designs in management of HIV/AIDS related diseases in the region. The objectives were therefore discussed as per the findings from chapter four.

# **5.2.1 NGOs Stakeholder Related Designs**

These included the involvement of community members, Stakeholders involvement, Distribution of antiretroviral therapy, and Campaigns for adequate nutrition. According to (Gitonga, 2010), Organizations must recognize their stakeholders and that their needs may change over time, and they must consciously change and adapt as needed. In the presented findings, stakeholder's involvement by the Non-Governmental Organizations in the HIV/AIDS

programmes had the highest unique contribution that was significant ( $\beta$ =.187, p<.05). Distribution of antiretroviral therapy emerged to have had a significant impact as well, ( $\beta$ =.224,p<.05). This shows that the two designs had a high influence on HIV prevalence in the area as used by the NGOS as strategies. Other designs considered to be of importance were not found to be significant perhaps due to some factors that the research did not have a clear interest in. The results therefore indicated that stakeholders related designs had a generally low influence on HIV prevalence when they were considered cumulatively, explaining 5.7% of variation in the HIV prevalence. It can be deduced that the percentage is minimal and NGOs did not fully harmonize their designs to the required influence in the region.

# **5.2.2 NGOs Management Oriented Designs**

The NGOs Management Oriented Designs included incorporation of competent staff who handle HIV/AIDS issues in the area, enough personnel who are managing the various programmes in the area and the NGOs financial capacity of the NGOs in terms of the resources used to run the HIV/AIDS programmes. According to the findings, NGOs had competent staff who can handle HIV/AIDS issues in the area as proposed by 115(35.9%) of the respondents, this is an indication of competitive personnel in the management of the HIV/AIDS programmes. However, most of the respondents were not sure whether the NGOs had enough number of people who managed the programs, what could be attributed to involvement of few community members. It is also clear that the NGOs did not have sufficient funds to facilitate their effectiveness on managing HIV/AIDS related issues. Most of the respondents 84(26.2%) reported that they had insufficient funds. When regression was carried out, the results revealed that competent staff was found to have the greatest influence, (β=.168, p<.005). Competent staff

is one of the greatest indication of a working NGO. They can greatly influence the prevalence of HIV/AIDS in the region.

# **5.2.3 NGOs Sustainability Oriented Designs**

NGOs sustainability oriented designs were investigated through assessment of the ownership of the NGOs in the communities, plans towards ownership, involvement of community members of HIV/AIDS related projects to ensure sustainability, and whether initiatives have been introduced to increase circumcision among men. The later was found to be very effective, and had a high influence on HIV/AIDS prevalence in the region. Figure 4.6 showed that 109(34.1%) having positive comment on the initiatives put in place by the NGOs to ensure continued circumcision among men. Ownership of the programs was low as supported by 97(24.7%) of the respondents. According to (ECR, 2004) findings, new initiatives were introduced to increase the number of circumcised men. The initiatives involved handing out vouchers to men who had the procedure, which could be exchanged for money upon attending a follow-up appointment. They were also encouraged to bring friends who were interested in becoming circumcised. However, many plans have also not been put in place to ensure sustainability as suggested by 93(29.1%) of the respondents, and in addition, 94(29.4%) stated that the involvement of the community members was minimal. (Shimwati, 2003). Found out that non- participation by beneficiary communities impairs the success and sustainability of a health projects, which has also reflected in these findings.

### 5.2.4 NGOs Activity Designs and HIV Prevalence.

The NGOs activities were found to have a significant relationship with the prevalence in the area. Pearson product moment correlation value of .338 was achieved. This is a slightly moderate correlation according to many findings. However, It does not account much on the prevalence of HIV/AIDS in the region. The findings from the interviews that the services offered are in line with the needs of the community members, and in fact, offered on demand of the community members are somewhat positive to the influence of the NGOs. The respondent had detailed information that beneficiaries are not forced to undergo circumcision; instead, they are educated and willingly accept the importance of circumcision. The activities were however not found to be evenly distributed in the area, there was a tendency of clustering, an aspect that does not put into consideration the entire community. Even though a report on circumcision was that it matched the requirements of the community beneficiaries, most of the other activities such as distribution of the antiretroviral therapy did not match the demand of the community in Nyando Sugar belt!

The findings were largely attributed to the challenges as outlined in the literature review, which included include not having enough time in the curriculum, a lack of teacher training and support, reluctance by parents and the Ministry of Education to talk openly about sex and condoms and perhaps more information needs to be included because as time goes by there are new developments on the same taking place (FHI/AIDSCAP, 1996).

### **5.3 Conclusion**

From the research findings, the designs that the NGOs were using did not really match the demand of the community as indicated by the respondents. Involvement of the community members is a key aspect towards the influence of HIV prevalence in any given region, in this case, it had a very small insignificant impact. This is a clear indication that the NGO need to revise their strategies especially that which involves the involvement of community. The campaign strategy did not also have a significant influence, implying that it was hardly done by the NGOs contrary to the researcher's assumption that this must have been one of the key strategies used by the NGOs towards their influence on HIV prevalence. Campaigns are a proper way of communicating to the community members the importance and consequences of not taking consideration of the disease, and the importance of avoiding stigmatization. Therefore if this strategy was not used then the NGOs need to step up and include the strategy in their programmes.

The management oriented designs were not fully functional except the acquisition of competitive staff that handled the HIV/AIDS patients, and financial capacity of the NGOs. These two aspects are very important and if practiced with a lot of seriousness among the NGOs dealing with HIV/AIDS related problems, there will be a high influence of the programmes to the community. This was also true as discussed by (UNAIDS, 2012), that the management of any given programme and the availability of trained and qualified personnel is very key towards successful implementation. On the other hand, groundwork management and number of NGOs in the region did not have a significant influence in the study, though according to the literature findings, they have a significant influence.

Sustainability of the NGO oriented designs, here the question of (What is the future of the programs?) is very difficult to answer. Looking at the findings, there is a gap that is created. As much as the NGOS are trying, especially creative new initiatives in circumcision, there are other aspects critical to the sustenance of the programmes that cannot be ignored. The futures of the programmes are not assured due to low involvement of community beneficiaries in NGO programmes. The number of trained personnel who were confident of taking over the programmes were very few. Most of them were not confident. This means that the kind of training that was done is not sufficient to ensure sustainability of the NGO programs. In addition, very few people were trained according to the results in this study; this should be revised by the NGOS. It can therefore be concluded that very few plans are underway to see sustainability of the NGO oriented programmes and this is a point of rectification that should be taken into consideration.

Activities carried out are slightly in line with the demands of the community as shown in the findings. This is very significant to the results as it has a high influence towards the prevalence of HIV/AIDS in the area. The relationship was though small as compared to the expectations of the community beneficiaries. This is attributed to other factors that determined the prevalence of HIV/AIDS in the region by the NGOs. For instance, there were very few NGOs and the activities that are put in place are few and concentrated. This largely affects the NGOs influence in the region. In conclusion, there would be a big difference in the region were it that the NGOs worked hand in hand with the donors to provide sufficient funds towards the prevalence of the HIV/AIDS in Nyando sugar belt region.

### 5.4 Recommendations

From the research study carried out, the following recommendations were made:

- Involvement of the community members in their HIV/AIDS related activities.
   Stakeholder involvement should as well be improved and proper allocation of the funds towards the same be made.
- 2. There should be disbursement of funds by the government to the local communities or through the Ministry of Health to deal with the problem. Donors should also be approached to help the local NGOs to deal with HIV/AIDS related programs. In addition, proper campaigns should be carried out to create awareness among the residents so as to seek theses services.
- 3. There should be more and continuous involvement of community beneficiaries in the programmes. They NGOs should also put in place more effective initiatives apart from circumcision only. The government should aide in ensuring that in case an NGOs directs its efforts in a region, more community members are involved rather than the staff only.
- 4. The NGOS should do a thorough research to get clear statistics of the residents in the areas where they are carrying out their activities. This can help them to have activities that meet the demand of the community beneficiaries.

# 5.5 Contribution to the Body of Knowledge

Objectives	Contribution
To establish the level at which NGOs	NGOs must involve the community members
stakeholder related designs influence HIV	in their HIV/AIDS related activities.
prevalence in Nyando Sugar Belt, Kenya.	Stakeholder involvement should as well be
	improved and proper allocation of the funds
	towards the same be made.
To assess the extent to which NGOs	The government should disburse funds to the
management oriented designs influence HIV	local communities or through the ministry of
prevalence in Nyando Sugar Belt, Kenya.	health to deal with the problem. Donors should
	also be approached to help the local NGOs to
	deal with HIV/AIDS related programs. In
	addition, proper campaigns should be carried
	out to create awareness among the residents so
	as to seek theses services.
To investigate sustainability oriented designs	NGOs should involve more community
of NGOs and its influence HIV prevalence in	beneficiaries in their programs. They should
Nyando Sugar belt, Kenya	also put in place more initiatives apart from
	circumcision only. The government should
	aide in ensuring that in case an NGOs directs
	its efforts in a region, more community
	members are involved rather than the staff
	only.

To determine how the application of intensity
of activity designs in NGOs influences HIV
prevalence in Nyando Sugar belt, Kenya

The NGOS should do a thorough research to
get clear statistics of the residents in the areas
where they are carrying out their activities.

This can help them to have activities that meet
the demand of the community beneficiaries.

### **5.6 Suggestions for Further Studies.**

- 1. No studies have been carried out on Effective HIV prevention strategies by the NGO.

  There is therefore need for researchers to carry out this study in order to help effective measures towards dealing with both beneficiaries; those affected and those vulnerable.
- 2. Studies concerning rate of mitigation of HIV related diseases has not been carried out of recent, the present studies only concentrated on the stakeholders oriented designs and their influence on HIV prevalence, it is therefore necessary to carry out a study on the relationship between stakeholder's efforts and the rate of mitigation of HIV related ails.
- 3. The present study covered lightly on the activities that are carried out by NGOs and their influence on HIV prevalence, no studies have been done on effective activities towards HIV prevalence in the region, and the study could be timely.
- 4. There is need for studies to be carried out on the influence of the central government towards NGOs efforts in dealing with communities vulnerable to HIV/AIDS prevalence. The relationship between the government and NGO's strategies used on handling HIV/AIDS disease in the region should be established.

### REFERENCES

- AIDSCAP/Family Health International (1996) Aids in Kenya, Socioeconomic Impact and Policy Implications. USA.
- Babbie E (2009) The practice of social research, wads work
- Bethwell . A . Ogot (2004), *Politics and the Aids Epidemic in Kenya 1983-2003*. Anyange Press Limited, Kisumu.
- Burke, R. (2003). Project management: planning and control techniques. Chichester: John Wiley & Sons.
- Chandra, P. (2002) *Projects Planning, Financing, Implementation and Review*. (5<sup>th</sup>edition) Publisher, Tata Mc Graw-Hill Publishing Company.
- Chandra, P. (2009), *Projects Planning, Analysis, Selection, Planning, Implementation and Review.* New Delhi: McGraw-Hill
- Cleland, D.I., Gareis, R. (Eds) (1994), *Global Project Management Handbook*. New Delhi: McGraw-Hill.
- Cohen.J, Cohen P, West, S.G & Aiken ,L.S (2003) Applied multiple regression/correlation analysis for the behavioral sciences,3<sup>rd</sup> Ed.Mahwah, NJ: Lawrence Erlbaum Associates.
- C. R. Kothari (1990), *Research Methodology- Methods and techniques* 2<sup>nd</sup> *Edition*. New Age International publishers.
- C. R Kothari (2004), Research Methodology- Methods and techniques, Second revised edition.

  New Age International Publishers..
- CrossWell,J.W (2009), Research design: Qualitative, Quantitative and mixed method. London, Sage publication, INC.
- Decarlo, D. (2004) Extreme Project Management: Using Leadership, Principles, and Tools to Deliver Value in the Face of Volatility. Sanfrancisco: Jossey-Bass

- Dinsmore, P. C., and Irewin, J. C. (2011). *The AMA Handbook of Project Management*. New Yolk: Amacom.
- Donald Kisilu Kombo and Delno. L.A Tromp (2006) *Proposal and thesis writing*. Paulines Publications Africa.
- Egger ,A.N & Carpi A. (2008) Data Analysis and Interpretation. Vision Learning Vol. Pos-1
- Elbeik, S. and Thomas, M. (2008). Project Skills. Great Britain: Butterworth- Heinemann
- Esther Buregyeya, William Bazeyo, Bende. E. Moen, Charles Muchelo, Knut Fyikemes (2008).

  \*\*HIV risk Behavior and work in Uganda: A cross-sectional study.\*\* East African journal of Public health-Volume 5.
- FHI/IMPACT, PATH (2002). Developing Materials on HIV/AIDS/STI'S for low literate audiences.
- Family Health International (2004). Strategies for an Expanded and Comprehensive Response to a National HIV/AIDS Epidemic: A handbook for designing and implementing HIV/AIDS programs. Canada.
- Francis W. Mulwa (2009). *Demystifying Participatory Community Development*. Paulines publications Africa.
- Ginnell, R. M. Jr and Unrau, Y. A. (2011) Social Work Research and Evaluation: Foundations of Evidence Based Research. New York. Oxford University Press
- Gitonga B.A (2010) Project Management Simplified, Community Development Projects

  Approach. Project Support Information Publication Series.www.psi-consultants.org.

- Gwaya,O.A,Masu, S.M & Wanyona, G (2014), A critical Analysis of The Causes Of Project

  Management Failures in Kenya.Blue Eyes Intelligence Engineering & Sciences

  Publication Pvt Ltd.
- Haugan, G. T. (2002). Project Planning and Scheduling. USA: Management Concepts, inc.
- Heagney, J. (2012). Fundamentals of Project Management. USA: American Management Association. (4th ed)
- Heldman, K. (2011). *Project Management Professional Exam Study Guide*. Indiana: John Wiley and Sons inc (6th ed)
- Jack R. Meredith, Samuel J. Mantel (2010), *Project management-A managerial approach*, 7<sup>th</sup> *edition*. John Wiley and Sons INC.
- Kerzner, H. (2001). Project management: a systems approach to planning, scheduling, and controlling (7thed.). John Wiley & Sons, New York

  \*Kenya Aids Indicator Survey 2007-Final report (2009)
- Kerzner, H (2002), Project management- a systems approach to planning, scheduling and Controlling 8th edition, New York, John Wiley & sons Inc
- Kerzner, H (2013), Project management: A systems approach to planning, scheduling and Controlling 8th edition, New York, John Wily & Blackwell.
- Kenya Aids Indicator Survey 2012.
- Kombo D.K. and Tromp L.A.D. (2006). *Proposal and Theses writing*: An *introduction*. Paulines Publication Africa.
- Kothari C.R (1985) .*Research Methodology methods and techniques*. New Delhi Age International Publishers.

- Lewis, J.P. (2004). Project Planning, Scheduling and Control. A Hands- on Guide to Bringing Projects in on Time and on Budget. New York. McGraw-Hill
- Likert R. (1932). A technique for the measurement of attitudes. New York Archives of psychology.
- Liston V. (2008). NGOs and spatial dimensions of poverty in Kenya, paper prepared for the 2008 African Studies Association UK (ASAUK) conference, Preston, Lancashire September 11<sup>th</sup>-13<sup>th</sup> 2008.
- Lock, D. (2004). Advanced Project Management: A Structured Approach. England: Gower Publishing Ltd. (9th ed)
- Maurice Anal (2012). Money circulation in Sugar belt fuel HIV infection in Kenya. Kisumu, Kenya.
- Mugenda O.M and Abel G. Mugenda A.G (1999). Research Methods: Quantitative and Qualitative Approaches. Kenya. Acts Press.
- Mugenda .A.G. (2008), Social Science Research-theory and principles. Kijabe printing press.
- Mutea Rukwaru (2007). Fundamentals of Social Research. Signal Press Limited.
- Nachmias,D & Oso W.Y (2005) A General Guide to Writing Research Proposal and report.

  Replika Press Pvt. Limited, India
- National Aids and STI control programme (2005) Aids in Kenya: Trends, Interventions and Impact. Ministry of Health.
- Orodho A. J. (2003). Essential of Education and Social Sciences Research Method. Nairobi Masola Publishers.
- Potter. S. (2002:50), Doing postgraduate research. London sage publication.

- Sharon Weir, Jacqueline Tate, Sarah Bassett Hileman, Maria Khan, Elizabeth Jackson, Alan Johnston and Charity Herman (2005). *Priorities for Local Aids Control Efforts*. Measure Evaluation Publications
- Simon Pierre Tegang, Gideon Emukule and Boniface Kitungulu (2007), APHIA II Baseline Behavioral Monitoring Survey Report, Coast-Rift Valley 2007, FHI.
- Sunday Nation, 2013- UNAIDS special report. How Africa Turned Aids Around. May 19<sup>th</sup> 2013. Nation Media Group printers.
- Taylor B, Gautam S and Topash G (2008). A guide for researchers in management and social sciences. A research methodology book.
- The Standard Newspaper-Standard Extra February 6<sup>th</sup> 2013. *Progress in Kenyan Doctor's quest for elusive HIV cure*.
- United Nations Aid Development 2012, Global UNAIDS report on the Global Aids Epidemic.
- United Nations Aid Development 2000. Use of Antiretroviral treatments in adults with particular reference to limited settings.
- Waddell, D. (2005). Program management: The next step in the evolution of project management? Problems and Perspectives in Management, 3, 160-169.
- Young T.L. (2010). Successful project management-third edition. Kogan Page Limited.

**APPENDICES** 

APPENDIX I: LETTER OF TRANSMITTAL

Jane Nyanjom

P.O.Box 154-40100, Kisumu.

Tel. No. +254 724 788 873

September 2014

Dear Respondent,

I am a final year Master of Arts student in Project Planning and Management at The University

of Nairobi. As part of the requirement for my course, I am carrying out a research titled:

'Influence of Non-Governmental Organizations programme designs on HIV/AIDS

prevalence in Nyando Sugar belt, Kisumu County, Kenya'.

You have been nominated to participate in the research study as mentioned above. The process

will not take more than ten {10} minutes and will be incorporated within your routine. Your

participation is voluntary and you do not risk losing anything if you decline. If you choose to

participate please give us accurate and honest answers. Your responses will help inform future

decisions on how best to deal with the HIV/AIDS prevalence in the area.

I humbly submit my request for part of your time. Your response will be treated with utmost

confidentiality and for the purpose of this study only. Thank you in advance.

Yours faithfully

Sign: ...... Date: ......

Jane Adhiambo Nyanjom

65

### APPENDIX II: QUESTIONNAIRE FOR COMMUNITY BENEFICIARIES

The information obtained from the questionnaires will be treated with confidentiality and only used for analytical purposes in the study. Please read the instructions for each question carefully before giving the required responses.

Tick the appropriate box [		]
----------------------------	--	---

Tick the appropriate box [ $\sqrt{\ }$	]					
PART A: DEMOGRAPHI	C INFORMAT	ΓΙΟΝ				
Name (optional)						
1. What is your sex?						
Male	[]	Fem	ale	[]		
2. What is your age?						
Below 18yrs	[]					
18-35yrs	[]					
36-50yrs	[]					
51 and above	[]					
3. Highest level of educ	ation attained?					
Primary Level	[]					
Secondary Level	[]					
College/Polytechnic	[]					
University	[]					
4. Rate the HIV prevale	nce in Nyando	Sugar belt(pl	ease tick)			
Very low		moderate			Very hig	h
1 2 3	4	5 6	7 8		9	

### PART B: STAKEHOLDR ORIENTED DESIGNS

SD	D	NS	A	SA
	SD	SD D	SD D NS	SD D NS A

KEY: SD-Strongly Disagree; D-Disagree; NS-Not Sure; A-Agree; SA-Strongly Agree

### PART C: MANAGEMNT OF THE PROGRAMMES

	SD	D	NS	A	SA
There are surrous NCOs in the area dealing with AIDS related					
There are numerous NGOs in the area dealing with AIDS related					
programs					
NGO's have competence staffs who handle HIV/AIDS issues in the					
area?					
arca:					
NGO;s have enough number of people who are managing the					
various programmes in the area					

## **KEY: SD-Strongly Disagree; D-Disagree; NS-Not Sure; A-Agree; SA-Strongly Agree**

### PART D: SUSTAINABILITY OF THE PROGRAMMES

	SD	D	NS	A	SA
I have undergone trainings in regards to HIV/AIDS programmes					
in my area					
I have the confidence to take over the HIV/AIDS programmes					
when donor support is no longer available					
Ownership of the HIV/AIDs programmes in Nyando Sugar belt is					
high					
Many plans have been put in place to ensure sustainability of HIV					
related projects					
There is high involvement of community members of HIV related					
projects to ensure sustainability					

New initiatives h	nave been introduced	to increase circumcision			
among men					

KEY: SD-Strongly Disagree; D-Disagree; NS-Not Sure; A-Agree; SA-Strongly Agree

### PART E: DESIGN OF LEVEL AND INTENSITY OF ACTIVITES

	SD	D	NS	A	SA
Many activities are carried out in the HIV/AIDS					
programmes in your area					
programmes in your area					
Activities carried out match the demand of the community					
in Nyando Sugar belt?					
The activit					
ies are widely distributed in the area					
•					
There are many activities done by the NGO's which are					
being ignored by the community members					

KEY: SD-Strongly Disagree; D-Disagree; NS-Not Sure; A-Agree; SA-Strongly Agree

### APPENDIX III: INTERVIEW GUIDE FOR THE CEO'S OF THE NGOS

i.

i.	Answer all questions										
ii.	Tick the provided	l information by the interviewee									
PAR	Γ A: DEMOGRAPHI	C INFORMATION									
1.	Name of the Non-Governmental Organization										
2.	2. Gender of the respondent										
	Male	[]									
	Female	[]									
3.	Age bracket										
	18-35yrs	[]									
	36-50 yrs.	[]									
	51yrs and above	[]									
4.	What is the level of e	education attained?									
	Primary Level	[]									
	Secondary Level	[]									
	College/Polytechnic	[]									
	University Level	[]									
	PART B										
	1. How do you inv	olve the community members in the HIV/AIDS programmes in your									
	organization and	is the involvement enough?									

2.	Do you have sufficient, qualified and competent staff who help in the running of the
	HIV/AIDS programmes in your organization?
3.	What measure have you put in place to ensure that there is ownership and
	sustainability of the programmes once there is no longer any more donor support?
4.	How evenly distributed are the HIV/AIDS programmes in Nyando sugar belt?
5.	Are the activities carried out in line with the needs demands of the community
	members of Nyando Sugar belt?

APPENDIX IV: TABLE FOR DETERMINING SAMPLE SIZE OF A GIVEN POPULATION

N	S	N	S	N	S
10	10	220	140	1200	291
15	14	230	144	1300	297
20	19	240	148	1400	302
25	24	250	152	1500	306
30	28	260	155	1600	310
35	32	270	159	1700	313
40	36	280	162	240	317
45	40	290	165	250	320
50	44	300	169	2000	322
55	48	320	175	2200	327
60	52	340	181	2400	331
65	56	360	186	2600	335
70	59	380	191	2800	33
75	63	400	196	3000	341
80	66	420	201	3500	346
85	70	440	205	4000	351
90	73	460	210	4500	354
95	76	480	214	5000	357
100	80	500	217	6000	361
110	86	550	226	7000	364
120	92	600	234	8000	367
130	97	650	242	9000	368
140	103	700	248	10000	370
150	108	750	254	15000	375
160	113	800	260	20000	377
170	118	850	265	30000	379
180	123	900	269	40000	380
190	127	950	274	50000	381
200	132	1000	278	75000	382
210	136	1100	285	100000	384

 ${\bf N}$  is the population size

 ${\bf S}$  is the sample size

(Krejcie and Morgan 1970)

### APPENDIX V: LETTER FROM THE UNIVERSITY



# UNIVERSITY OF NAIROBI COLLEGE OF EDUCATION AND EXTERNAL STUDIES SCHOOL OF CONTINUING AND DISTANCE EDUCATION KISUMU CAMPUS

Our Ref: UON/CEES/KSM/4/13

Your Ref:

Telephone: 057-2021534 Ext. 28626

University of Nairobi Plaza Oginga Odinga Street, P.O. Box 825, KISUMU, Kenya.

1st October, 2014

### TO WHOM IT MAY CONCERN

RE: JANE ADHIAMBO NYANJOM - REG NO: L50/60879/2013

This is to confirm to you that the above named Jane Adhiambo Nyanjom\_is a student of the University of Nairobi, College of Education and External Studies, School of Continuing and Distance Education undertaking Masters in Project Planning and Management in Kisumu Campus and she has successfully completed her course work and examinations as required.

In partial fulfilment of the requirements for the Masters in Project Planning and Management, Jane is undertaking research for her Masters Project. We therefore request you to allow her access the data/information she may need for the purpose of her study. Any assistance, information or data collected is needed for academic purposes only and will therefore be treated in strict confidence.

We would appreciate any assistance that may be given to her to enable her carry out the study.

Thank you.

Dr. Raphael O. Nyonje, PhD RESIDENT LECTURER

KISUMU CAMPUS

01 001 2017

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### APPENDIX VI: LETTER FROM NACOSTI



### NATIONAL COMMISSION FOR SCIENCE, TECHNOLOGY AND INNOVATION

Telephone: +254-20-2213471, 2241349, 310571, 2219420 Fax: +254-20-318245, 318249 Email: secretary@nacosti.go.ke Website: www.nacosti.go.ke When replying please quote 9<sup>th</sup> Floor, Utalii House Uhuru Highway P.O. Box 30623-00100 NAIROBI-KENYA

Ref: No.

Date:

31st October, 2014

### NACOSTI/P/14/9034/3677

Jane Adhiambo Nyanjom University of Nairobi P.O. Box 30197-00100 NAIROBI.

### RE: RESEARCH AUTHORIZATION

Following your application for authority to carry out research on "Influence of Non-Governmental Organizations Programme Design on HIV/AIDS prevalence in Nyando Sugar Belt, Kisumu County, Kenya," I am pleased to inform you that you have been authorized to undertake research in Kisumu County for a period ending 28<sup>th</sup> November, 2014.

You are advised to report to the County Commissioner and the County Director of Education, Kisumu 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 FOR: SECRETARY/CEO

Copy to:

The County Commissioner
The County Director of Education
Kisumu County.



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

### APPENDIX VII: RESEARCH PERMIT

THIS IS TO CERTIFY THAT:

MISS. JANE ADHIAMBO NYANJOM

of THE UNIVERSITY OF NAIROBI,

154-40100 Kisumu, has been permitted
to conduct research in Kisumu County

on the topic: INFLUENCE OF NON-GOVERNMENTAL ORGANIZATIONS PROGRAMME DESIGN ON HIV/AIDS PREVALENCE IN NYANDO SUGAR BELT,KISUMU COUNTY,KENYA.

for the period ending: 28th November,2014

Applicant's Signature

### CONDITIONS

- 1. You must report to the County Commissioner and the County Education Officer of the area before embarking on your research. Failure to do that may lead to the cancellation of your permit
- 2... Government Officers will not be interviewed
- 3. No questionnaire will be used unless it has been approved.
- 4. Excavation, filming and collection of biological specimens are subject to further permission from the relevant Government Ministries.
- You are required to submit at least two(2) hard copies and one(1) soft copy of your final report.
- 6. The Government of Kenya reserves the right to modify the conditions of this permit including its cancellation without notice specific conditions.

Permit No: NACOSTI/P/14/9034/3677
Date Of Issue: 31st October,2014
Fee Recieved: Ksh 1,000



ALSecretary
National Commission for Science,
Technology & Innovation



REPUBLIC OF KENYA



National Commission for Science, Technology and Innovation

RESEARCH CLEARANCE
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Serial No. A

2785

and InnovCONDITIONS: see back page

### APPENDIX VIII: MAP OF KISUMU COUNTY

Map of Kisumu County and the associated constituencies.

