

**COMMUNITY PARTICIPATION IN DECISION  
MAKING IN MOSQUITO CONTROL IN  
MALINDI DISTRICT, KENYA.**

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## DECLARATION


This thesis is my original work and has not been presented for a degree in any other university or any other award.

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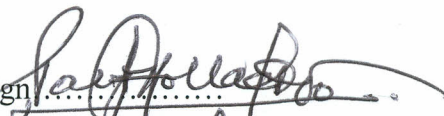
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## DEDICATION

**To my dear husband, David Ndua for your love, financial support and dedication;  
and to my lovely children, Christine, Caren and Claire for their moral support.**

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## LIST OF ABBREVIATIONS

CG	-	Community Groups
DALYS	-	Disability Adjusted Life Years
FGDs	-	Focus Group Discussions
GIS	-	Geographic Information System
GOK	-	Government Of Kenya
HIS	-	Health Information Systems
ICIPE	-	International Center of Insect Physiology and Ecology
KEMRI	-	Kenya Medical Research Institute
MCM	-	Municipal Council Of Malindi
MOH	-	Ministry Of Health
PUMMA	-	Punguza Mbu Malindi
RBM	-	Roll Back Malaria
SSA	-	sub - Saharan Africa
TOTs	-	Training of Trainers
UN	-	United Nations
UNDP	-	United Nations Development Programme
UNICEF	-	United Nations Children's Funds
WB	-	World Bank
WHO	-	World Health Organization

## DEFINITION OF TERMS

**For purposes of the current study, the following terms are defined:**

### **Medical sociology**

Medical sociology is a discipline that tries to understand how communities define illnesses and diseases and their interpretations on symptoms.

### **A stakeholder**

A stakeholder is anyone who has a stake in what happens. The term forces us to think about who will be affected by any project, who controls the information, skills and money needed, who may help and who may hinder. It does not follow that everyone affected has an equal say; the idea of the ladder is to prompt thinking about who has most influence.

### **Community**

A specific group of people, often living in a defined geographical area, who share a common culture, values, and norms and who are arranged in a social structure according to relationships the community has developed over a period of time. The term “community” encompasses worksites, schools, and health care sites.

### **Community Participation**

These are procedures whereby members of a community participate directly in decision-making about developments that may affect the community

### **Mosquito Control**

These are approaches used to manage mosquitoes with an aim of reducing their population in a given areas

**Decision Making**

This is a cognitive process of reflecting a course of action from among multiple alternatives.

**Partnerships**

This is when a number of different interests willingly come together formally or informally to achieve some common purpose. The partners don't have to be equal in skills, funds or even confidence, but they do have to trust each other and share some commitment. In participation processes - as in our personal and social lives - building trust and commitment takes time.

**Urban**

Urban areas can be defined in terms of the *built-up area* or, the areas for which it provides services and facilities - the *functional area*. The *functional area* may embrace not only the *built-up area* but also free standing settlements outside the urban area together with tracts of surrounding countryside if the population in these surrounding areas depends on the urban centre for services and employment and finally *density* of either of population or of buildings can be used as an indicator of urbanization.

**Community Groups**

These are associations of individuals who have come together for a common interest or specific goals.

## ABSTRACT

This qualitative study was conducted in Malindi District to document and highlight the process and challenges of community participation in decision making in mosquito control. A total of 4 focus group discussions were conducted with members from organized community groups involved with mosquito control activities, 8 individual interviews were held with stakeholders and key individuals from organized community groups while 8 observations were made during groups and PUMMA meetings, Interviews were tape-recorded, transcribed and translated before coding was done using QSR Nvivo7.

Results from the study shows that voluntary community groups under the umbrella of PUMMA (*PUNGUZA MBU MALINDI*), which is an umbrella body, that coordinate mosquito control activities are carrying out activities aimed at creating awareness on mosquito control to Malindi residents. Major activities included observance of annual mosquito field event, buying and selling insecticide treated bed nets, draining and filling and educating residents on mosquito control. Perceived social pressure, perceived importance to mosquito control and perceived benefits were cited as individual intentions to join voluntary community groups dealing with mosquito control activities. The decision to form an umbrella group PUMMA was reported to be as a result of lack of coordination and support by Municipal council, feeling of neglect and mis-trust from the Green Town Movement and the need to work together for a common goal. Recognition, support and supervision, training, success in previous activities by PUMMA and expectations of “better things to come” motivated the groups towards decisions for mosquito control activities while lack of tools and finances to support group activities, volunteerism and low knowledge by community members on mosquitoes hindered group decision making power.

Community groups under the umbrella of PUMMA are contributing to mosquito control activities. The success in their activities, training and support makes them feel recognized and appreciated. However considerations should be made on how this can be continuous and sustainable. The individual intentions to joining volunteer groups action is needed as this influences individual decision to joining mosquito control groups. Stakeholders support and networking is needed to supplement group efforts.



## CHAPTER ONE: INTRODUCTION

### 1.0. Background

Communities living in the tropics suffer most of the diseases that affect mankind. The mosquito-borne diseases that potentially pose the greatest threat to communities living in sub Saharan Africa include malaria, lymphatic filariasis, Dengue and yellow fever. These diseases cause tremendous pain and suffering, ranging from deformities to blindness, brain damage and death. The spread of any mosquito-borne disease is likely to be aided by the fact that the human population is non-immune and susceptible. This susceptibility is exacerbated by the population's little knowledge about mosquito-borne diseases or anti-mosquito measures to minimize the risks of infection. Moreover, cultural beliefs and practices perpetuate the prevalence of the disease.

Malaria is one of the most significant causes of morbidity and mortality in the world, and remains not only a major cause of much suffering and death, but also the cause of many social and economic problems (Breman 2001; Snow 1994). It is estimated that malaria kills between 1.5 and 2.7 million people globally each year and between 300 and 500 million others fall ill from it, often severely (WHO, 1998). In Africa, malaria is responsible for an estimated 1 million deaths, mainly infants and children under the age of 5 years, annually, especially in remote areas with poor access to health facilities. With acute disease, a child may die within 24 hours of infection. Pregnant mothers are 4 times more likely to suffer malaria attacks, causing low weight babies and still births,

endangering the health of the women and prospects for the new born (Lindsay *et al.*, 2000). Outside tropical Africa, malaria deaths occur mainly among non-immune newcomers to endemic areas, for example, among agricultural workers, miners and settlers in newly colonized areas (WHO, 2000).

Acute febrile illness, chronic debilitation, complication of pregnancy and impairment of the physical development and learning ability among children are typical consequences of malaria, and represent a huge negative social impact in the high burden areas (Holding *et al.*, 2001). Furthermore, the macroeconomic toll is severe, particularly in sub-Saharan Africa, since malaria may cost more than one percentage point of economic growth every year. A high proportion of the urban population may be at risk of severe disease due to delayed acquisition or lack of protective immunity (Sachs *et al.*, 2002).

Malaria affects six out of the eight targets of the United Nations Millennium Development Goals (MDGs). It has therefore become the top development concern for Kenya, as 70% of the total population (20 million) is at risk of infection. It contributes the highest morbidity and mortality of all infectious diseases. Throughout the country, malaria accounts for about 30% of all outpatient clinic visit (Snow *et al.*, 1998). Every year about 34,000 children below five years of age are estimated to die of illnesses related to malaria – about 93 of them each day. About 145,000 children below five years are admitted to hospitals due to malaria. Worse of all, Kenya is experiencing a resurgence of highland (unstable) malaria, which is associated with high case fatalities. People

resident in areas of high transmission usually suffer several attacks every year. Each such episode may last about 5 to 15 days, often incapacitating the victim (WHO 1995).

According to the national malaria strategy of (2001-2010) which was drafted following Abuja Declaration by African Governments in 2000, there is a projection to significantly reduce malaria related morbidity and mortality (GOK, MOH 2001)

Malaria is endemic in Malindi and like in other parts of Coast Province, the disease has a major impact on socio-economic activities in the region. Estimates of infant and child mortality on the Kenyan coast show that at least 58 infants per 1000 live births and 12 children per 1000 aged between one and four years die of malaria each year (Snow *et al.*, 1994). The threat to the disease is increasing with the spread of malaria transmission in urban environments (Robert *et al.*, 2003; Keiser *et al.*, 2004) posing a threat to non immune residents.

Community groups in Malindi are participating in mosquito control activities. The municipal Council of Malindi, following the introduction of primary health care programmes in 1990 initiated these groups. The groups were provided with support, supervision and training until 1995. These groups carried out activities such as making and selling insecticide treated bed nets, treating manholes using HS oils, organizing and participating in community clean up days and educating the residents on keeping their environments free from mosquitoes (Kibe *et al.*, 2006). Recently, these groups have reformed and set up an umbrella group known as Punguza Mbu Malindi (PUMMA), whose aim is to reduce mosquitoes in the area.

This study aims at investigating the role of community groups in decision-making and implementation of mosquito control as well as stakeholders' perceptions of the appropriateness and sustainability of the groups' activities in Coastal Kenya. It is hoped that the information will contribute to recommendations on how mosquito control programmes in the area can be strengthened in locally appropriate ways and ultimately contribute to promoting health, increased productivity, and socio economic growth in the District.

## 1.2. Literature review

### 1.2.1. Malaria burden and distribution

Over 40% of the world's population is estimated to live in areas where they are at risk of malaria transmission (WHO, 2002). The majority (90%) of the burden of disease is in Sub-Saharan Africa (WHO, 1993). It is estimated that malaria contributes to a loss of 39 million disability-adjusted life years (DALYS), of which 34 million are in Africa alone (WHO 1999). Despite tremendous efforts to control this disease, malaria remains a public health problem in more than 90 countries (WHO, 1999). Today, malaria is the top killer disease in sub-Saharan Africa.

Out of the world's estimated 500 million new infections and 1-2 million malaria deaths reported annually, Africa bears the heaviest burden, with an estimated 200-450 million cases of fever in children (Breman *et al.*, 2001) and up to 175 deaths per 1000 live births occurring before the age of five years (WHO, 1996). The total days of labor lost, coupled with costs of treatment and the high mortality associated with the disease makes it a serious obstacle to social and economic development (WHO, 1996, Breman *et al.*, 2001) (**Table 1**). The persistence of endemic malaria in the tropics and particularly in Africa, is contributory to a perpetual state of depressed economic growth in these regions (Sachs J and Malaney P 2002). It's estimated that the annual direct and indirect cost of malaria in Africa alone are more than \$2000 million (WHO 2000): endemic countries lose several percentage points of gross domestic products every year.

**Table 1: Burden of malaria: some data**


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Countries at risk	100
Persons at risk	$2400 \times 10^6$
Clinical cases per year	$300 - 500 \times 10^6$
Deaths per year	$1.5 - 2.7 \times 10^6$
In sub Saharan Africa	
Population living in highly endemic areas	74%
Children likely to die before 5 years of age	5%
Direct and indirect cost of malaria	$\$2000 \times 10^6$

---

In Kenya, malaria is at the forefront among the health problems of the country. The disease accounts for 30% of all outpatients to health facilities, and 19% of all hospital admissions to our health facilities and results to the death of an estimated 34,000 children below the age of five years annually (GOK, 2001). The actual number of malaria cases that occur annually throughout the country are estimated to be about 4-5 million (source). Due to climatic and geographic factors, the disease occurs in different parts of the country in epidemic form. Perennial transmission of cf occurs along Kenya's coast and around Lake Region (Roberts, 1974), due to presence of conducive climatic and ecological conditions (Snow *et al.*, 1999) that favor survival and relative abundance of vectors. In these areas, nearly everyone carries the disease in most parts of the year (GOK, 2001), children and pregnant women being the worst affected. However, marked

variation in malaria prevalence may occur at times in these areas, due to the effect of topographical variation in local differences in entomological and parasitological parameters determining transmission (Copeland, 1994). Recently, epidemics of malaria have been reported in the high altitude areas like Kericho, Nandi and Kisii, previously thought to be malaria free zones (source). Currently, malaria is the leading cause of morbidity and is impacting much pressure on the already ailing economy of the country in terms of cost of disease control and loss of man hours lost (GOK, 1999).

Malaria is a highly endemic disease and ranks top in the list of the ten leading causes of morbidity in all public health institutions in Malindi (HIS Malindi). It accounts for 30 % of outpatients and 20% of inpatients at the district hospital. Malaria transmission occurs throughout the year, with peaks during the rainy season. Those mainly at risk of infection are the tourist, new migrants, pregnant mothers, and young children.

### **1.2.2. Factors affecting distribution of mosquitoes in urban environments**

Several factors significantly affect the distribution of malaria in space and time, between persons and the resulting morbidity and mortality. Some of these factors include: the natural environment through its vector populations, interaction between vector and parasite, parasite determinants and some of its genetically controlled characteristics, host-biological factors, behavioral, socio-economic elements.

Factors pertaining to the natural environment are, for example, availability of the breeding habitats for malaria vectors, which influences the distribution of malaria in an

area. Rainfall produces water pools favored by most vector species, for example, *An. gambiae s.s.* and *An. arabiensis*. The slope of the land and the nature of the soil are some of the other environmentally related factors, which affect the type of surface water available and its persistence and subsequently the increase of local vector populations. The optimal range of temperature and the relative humidity for most vectors is 29 – 30°C and 70 – 80 % respectively (Wernsdorf and McGregor, 1986). Increasing temperature increases the growth of vector population by shortening the interval from oviposition to adult emergence and vice versa. Biological factors, such as immature response and genetics, as well as socio-economic status, living and working conditions, exposure to vectors and human behavior, all play a critical role in determining a person's risk of disease infection and hence illness.

Greenwood (1989) found that climatic and topographic features determine the ecology of both human and arthropod host as well as their contacts. Ponds and reservoirs in an area were found to be important in disease transmission, as they were the breeding sites for mosquitoes. Many other environmental factors have been found to influence the level of exposure of individual resident to mosquitoes in malaria endemic area (Greenwood, 1989). The factors include place and type of residence, use of anti mosquito measures and the position of the house.

Irrigation schemes and hydro-electric projects which have water collection points, were likely to increase the intensity of malaria transmission and may change the seasonal transmission dependent on rainfall into perennial transmission by maintaining a population of the vector anopheline mosquitoes throughout the year (Robert *et al.*, 1985).



Large numbers of *An. gambiae* s.l. found in the rice growing area during the season at Ahero (Githeko *et al.*, 1993) and at Mwea –Tabere Irrigation Scheme (Ijumba *et al.*, 1990) were maintained by irrigation water. Schofield and White (1984) demonstrated that the house design and the surrounding environment were important in protecting its residents from mosquitoes.

On the role of human behavior in relation to vector and the transmission of diseases such as malaria Greenwood (1989) asserted that human behavior operates at several different levels, depending on others involved the social structure of a community could also greatly influence disease transmission. He quantified human behavior in terms of the methods of avoidance of mosquito bites which included insecticides treated nets, house screening, mosquito coils, smoking, aerosols and house construction.

In domestic situation zoo prophylaxis was important in reducing the frequency of mosquito feeding on humans (Hess and Heyes, 1970). All these factors contribute to the degree of man – vector contact.

As the population continues to grow, people move away from the countryside to the cities, attracted by the hope of a better life. At present, one third of Africans in SSA live in cities, and this proportion is likely to grow in the future. At present, the least developed countries experience the highest urbanization rates, often in the range of 2–6% per year (UN, 2002).

The escalation in the incidence of these diseases is closely related to unplanned urbanization, increase in water storage practices, resulting in the creation of favourable habitats for vector proliferation, development of commerce and industrialization and influx of labor from rural to urban areas (Bang 1985, Kudsen *et al.*, 1992).

In urban environments, both man-made and natural habitats provide ideal conditions conducive for the proliferation of mosquito vectors. As a consequence, malaria and dengue have emerged as major health problems in several urban areas, draining on populations living on the fringes of urban settlements, causing much morbidity and mortality and reducing productivity. Robert *et al.*, (1998) identified the presence of market-garden wells in Dakar, Senegal as important larval sites for *An. arabiensis*. Trappe and Zoulani (1987) found ditches, gutters, and tire tracks to be important anopheline larval sites in Brazzaville, Congo. In a newly urbanized area of western Kenya, Khaemba *et al.*, (1994) concluded that *An. gambiae* preferred man-made, temporary pools of water, such as tire tracks and ditches for breeding in the rainy season.

### **1.2.3. Mosquito control strategies**

#### **1.2.3.1. Traditional methods of mosquito control**

Traditionally, and without the enlightened scientific approach, many communities had developed the knowledge that hanging leaves of certain plants on doorways, or burning certain plants and cow dung, were effective deterrents against mosquitoes. For instance, the Kamba, Swahili and Luo communities had identified such plants as *mwenye*, *mukandu* and *kirumbasi* as effective fumigants. By hanging branches from the trees on doorways and on windows, they were able to prevent mosquitoes from entering their dwellings. Today, the Swahili people still burn *Kirumbasi* in small jikos to produce mosquito-repelling incense. Studies by Seyoum A *et al.*, 2002 in Western Kenya showed that *Lantana camara* L. and *Tagetes minuta* L. were used to repel mosquitoes when burned or hanged on the houses. Branches of neem plant (Muarubaini tree) were also said to repel mosquitoes when burned. Burning of baobab seed was also said to be a form of repellent to mosquitoes.

#### **1.2.3.2. Preventing mosquito bites through modern methods of control**

Modernization has brought about new methods and tools for mosquito control. They include alternative pesticides that would prevent mosquitoes from transmitting disease causing parasites from human to human, new forms of residual pesticide spraying and strategies for monitoring their use and improved barrier methods such as bed nets.

#### **1.2.4. Limitations against mosquito control**

Current strategies for mosquito control involve vector control to reduce densities of biting mosquitoes. The use of insecticides and larvicide's over the years is responsible for the development of resistance against these chemicals in mosquitoes and has rendered them ineffective in many places. A major problem with malaria control is the emphasis on treatment rather than prevention. Other possible factors such as human activities favoring mosquito- breeding sites, unplanned settlements due to rapid population growth, adverse socio - economic conditions, leading to inadequate health budget to fight mosquitoes and cultural conditions of the settlers such as the type of dwelling used; prevailing disease control policies, strategies, and resources and public order problems have been sited as limiting mosquito control

#### **1.2.5. Community participation in decision making on mosquito control**

The importance of community participation and awareness of health issues is becoming increasingly recognized as a key component in disease management. Participation is understood to mean a process of inquiry and dialogue through which persons concerned (stakeholders) share ideas in ways that help them to have a multi dimensional perception of their needs. In this definition, participation is a four phase cycle- problem identification, followed by reflection and deeper analysis, enabling a decision to be made, which is followed by an action plan. This is referred to as participatory model or short – circuiting. Participation aims at empowering the community, which is indicated by the extent to which constituents have control and influence on decision-making such as policy formulation or adoption; economic resources; and knowledge (information).

Decision-making occurs on many levels – international; national; regional (state or provincial); sub district (locality); community; group; household and individual. Cutting across these decision – making levels are various types of people, many of whom may be relevant in design, implementation, monitoring and evaluation of mosquitoes control activities. Those who are particularly relevant, individuals, or groups of individuals with a direct interest or stake in a particular sector, may be referred to as ‘stakeholders’. Those who have a stake in a sector want to have a say in decision-making and the planning of activities within it (sustainable development department, 2000).

### **1.3. Theoretical Framework (s)**

This study draws upon theories and models in medical sociology and other sociological theories to generate a greater understanding of disease management and control. In particular, lay explanations of illness, the sick role, the health belief model and structural functionalist theories such as the systems theory, functionalist theory and division of labour will be included in this discussion.

#### **1.3.1. Lay Explanations of Illness**

Laypersons often perceive health and illness in a manner very different from health professionals, particularly physicians (Kleinman 1988). This phenomenon is shown consistently throughout the literature (Cohen, 1994; Garro, 1994; Hunt, 1994; Furnham, 1994; Heurtin-Roberts, 1993). The physician has a biomedical understanding of health and illness that is in contrast, if not conflict, with the common sense explanations of the layperson. In other words, the explanatory models of patient and practitioner can be very

different. Research by Cohen and associates (1993) has shown that patients have a much greater awareness of the health professionals' explanatory model than the converse. The actions that people take in the interest of health are motivated by their perceptions of symptoms, and their "common sense" medical knowledge.

Explanatory models rely primarily on the subjective interpretations and meanings that individuals assign to symptoms and illnesses. The factors that determine an individual's behavior are numerous and much work has been done to describe them. The problem with this model is that it does not deal with participation and therefore needs other models and theories.

### **1.3.2. Parson's Sick Role**

Talcott Parson's concept of the sick role is one of the major contributions to the socio-cultural study of health and disease and is of considerable importance in this study.

Simply defined, the Parson's sick role is a set of behavioral expectations for an individual who is ill. In this framework, sickness is a disruption of (or deviance from) the normal human condition. It is both biological and social. The expectations of the sick role can be summarized in four categories (Cockerham, 1995; Freund and McGuire, 1992). 1) Being sick constitutes a legitimate exemption from "normal" social roles. The medical establishment must usually recognize this exemption. 2) The sick person is not responsible for his or her condition. The individual does not have control over their illness or its symptoms. 3) The sick person should try to get well. Exemption from social roles is only granted if the sick person is interested in, and attempts to become well. 4)

The sick person should seek technically competent help. A physician should be *consulted and physician advice should be followed.*

This guideline for the behavior of the sick person both demonstrates and supports the social control function of medicine but does not describe actual behavior, only expectations for it. It therefore is limited to the person decision towards action and cannot be applied in this study.

### **1.3.3. The bottom - up approach model**

Low-income communities, whether in urban or rural areas, need certain basic facilities that are difficult or impossible to acquire either due to poverty or other constraints.

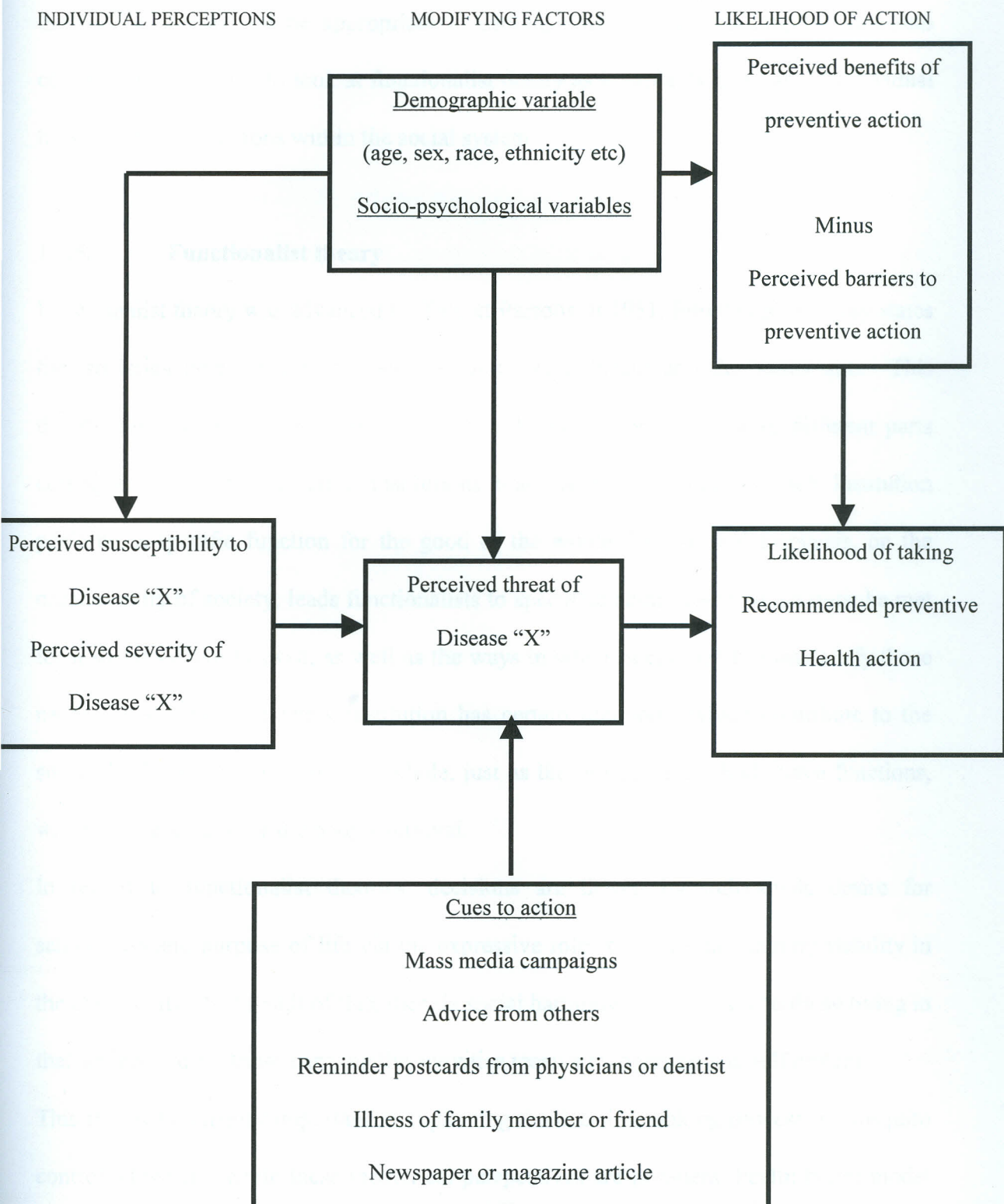
Welfare-oriented governments have, therefore, attempted to provide these basic facilities, but not with great success. Recently new approaches have been adopted to improve the situation by encouraging people to become involved in community-level decision making with respect to their needs and to implement the construction of acceptable facilities. The communities would then shoulder a greater responsibility, leading to development with a higher degree of sustainability. The bottom up approach empowers individuals and communities to manage their own health by giving them access to information, tools and services they need. It calls for a reduced role in governments and international agencies.

#### 1.3.4. The Health Belief Model

One of the most widely accepted standards for understanding health-seeking behavior is the Health Belief Model (Figure 1). The model deserves serious consideration in the context of this research because of its reliance to individual perceptions. It claims to have the capacity to explain the many ways in which different individuals go about maintaining their health. The Health Belief Model relies primarily on the subjective interpretations and meanings that individuals assign to symptoms and illnesses (Punamaki and Aschan, 1994). There are many variables that help form these perceptions. An individual's social and demographic background can have a dramatic influence on their perceptions. Prior knowledge or experience of a disease can also alter someone's perceptions. For those with chronic illness, there is often some sort of lay consultation that takes place before they resolve to take a recommended health action. Also of great importance is information gleaned from mass media. Rising health care costs, and greater alienation from the medical establishment have contributed to an increased reliance on our own "stores" of medical knowledge, and those possessed by other lay persons (Furnham, 1994).



**Figure 1: The Factors influencing individual decision to health action as demonstrated in the Health Belief Model**



This theory can be applied when studying decision making for mosquito control and prevention. However, the theory is limited to individual perceptions and experiences on the illness. It may not be appropriate in dealing with decision making for mosquito control. There is need to look at functionalist theory as it explains more about individual interaction and functions within the social system.

### 1.3.5. **Functionalist theory**

Functionalist theory was advanced by Talcott Parsons in 1951. Functionalist theory states that societies tend towards harmony, stability, equilibrium and the status quo. This theory stipulates that human society is like a biological organism, with different parts corresponding to the different institutions that make up a society. Each institution performs a specific function for the good of the whole. The second emphasis, on the organic unity of society, leads functionalists to speculate about needs which must be met for a social system to exist, as well as the ways in which social institutions satisfy those needs. This is because every institution has certain functions, which contribute to the survival of the social system as a whole, just as the organs of the body have functions, which are necessary for the body's survival.

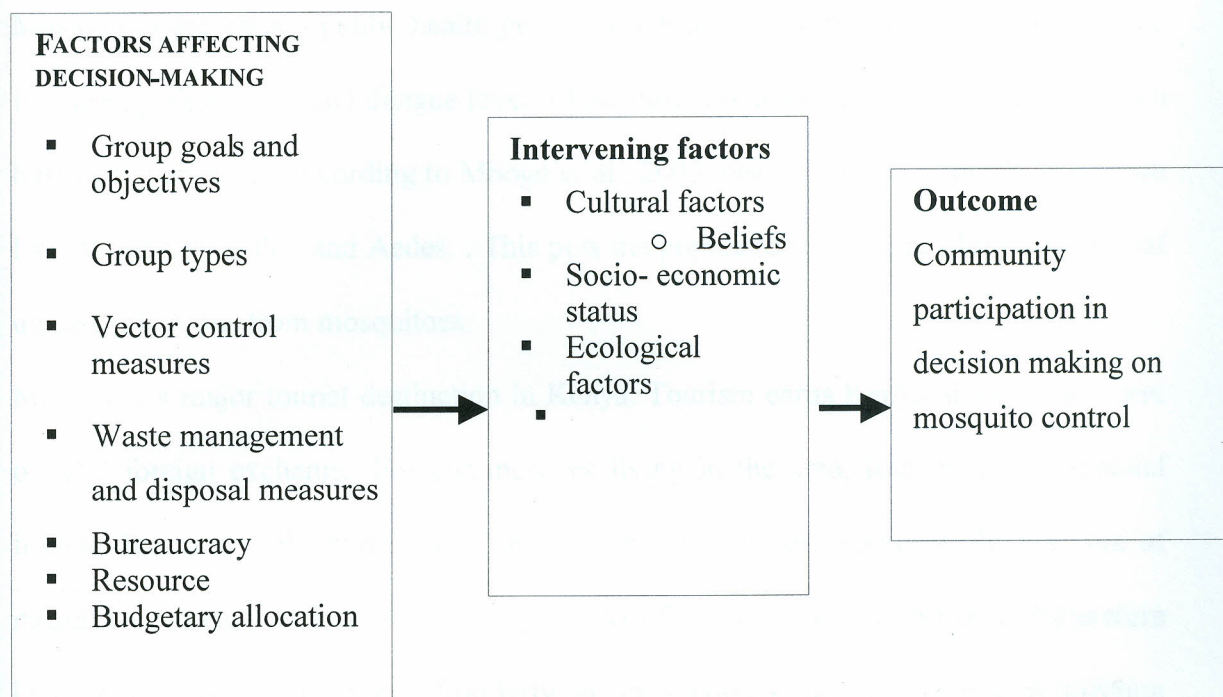
In regard to functionalist theories, decisions are driven by individuals desire for satisfaction and purpose of life via the expressive roles taken in maintaining stability in the community. As a result of this, there is social harmony in the society to those living in that society and for those carrying the activities receive recognition and self esteem.

This makes this theory important in explaining the decision making process in mosquito control. However, while these theoretical perspectives are pertinent, health belief model

is more relevant to this study because it has the capacity to explain the many ways that different individuals go about maintaining their health. The decision-making process, leading to mosquito control by community groups can best be understood in the light of health needs of a given population and their desire to have a wealthy community. In this model, the factors affecting decision making for mosquito control can best be understood in the context of perceived seriousness, perceived susceptibility and knowledge of mosquitoes as determinants of health seeking behaviors. Additionally, the perceived barriers can be understood as the intervening variables such as cultural factors and socio-economic status. The perceived benefits prompt the drive to take action in mosquito control activities. This is summarized in the conceptual framework illustrated below.

#### **1.4. Conceptual Framework**

The conceptual framework, figure 2 below showing the conceptual framework, represents a summary of the relationships across the major factors of decision-making process for mosquito control. The outcome is illustrated on the right, as increases or decreases in community participation in decision making for mosquito control. The centre box illustrates the factors that intervene in the decision making process which are beyond community control. These include cultural factors and socio-economic status. The boxes on the left represent an array of factors related to group and physical environment thought to influence decisions on mosquito control. This framework is designed to facilitate the understanding of factors that influence community participation in decision making on mosquito control in Urban Malindi, Kenya.

**Figure 2: Conceptual framework**

### 1.5. Statement of the problem

Mosquitoes are among public health pests. They bring health problems such as malaria, filariasis, yellow fever and dengue fever. Mosquitoes are also a cause of nuisance to both human and animals. According to Mbogo et al., 2003, mosquitoes of medical importance like *Anopheles*, *Culex* and *Aedes*. . This puts the populations living in Malindi at risk of disease infections from mosquitoes.

Malindi is a major tourist destination in Kenya. Tourism earns Kenya about 15 per cent of total foreign exchange. For communities living in the area, tourism is an essential lifeline. It is one of the main employment sectors in the area. However, the presence of mosquitoes threatens the tourists visiting the area for fear / risk of infection and therefore hinders development of an area. Similarly, the local population is also at risk of infection and this affects the production capability of the population. The lost man-hours due to infections are affecting the social and economic development of the area.

More importantly, pregnant mothers, and young children are also at high risk of infection. It is estimated that infant and child mortality on the Kenyan coast show that at least 58 infants per 1000 live births and 12 children per 1000 aged between one and four years die each year (Snow *et al.*, 1994). The threat of the disease is increasing with the spread of malaria transmission in urban environments (Robert *et al.*, 2003; Keiser *et al.*, 2004) posing a threat to non – immune residents. The disease has major impacts on socio-economic activities in the region.

One of the strategic efforts in the control of mosquitoes in Malindi is involvement of community groups. While attempts are made to form groups, it is not clear to what extent these groups participate in the decision-making. Experience with other community based initiatives shows that limitations in this area have resulted in failures in many such initiatives. In spite of this drawback, community studies documenting the dynamics of community initiatives are needed to establish conditions under which community group participation leads to success.

## **1.6. Overall Objective of the study**

To document and highlight the process and challenges of community participation in mosquito control in Malindi.

### **1.6.1. Specific Objectives**

1. To document the process of decision – making and nature of related activities with regard to mosquito control in Malindi.
2. To explore the community's perceptions of the procedures / actions involved in terms of appropriateness, challenges / constraints faced and sustainability potential.
3. To identify incentives / motivation factors that explain or sustain community participation in the mosquito control efforts
4. To document the coping mechanisms in dealing with the challenges / constraints faced and with what outcomes.

### **1.7. Research questions**

1. What are the key aspects or activities in the process of decision-making on mosquito control activities and in what ways are the local communities involved?
2. How do the community groups perceive their involvement in mosquito control activities, and what are the challenges and incentives that characterize their participation?
3. How have the various stakeholders in mosquito control efforts involving PUMMA groups in Malindi been able to cope with the challenges faced and with what outcomes?

### **1.8. Justification of the study**

Decision-making is an important aspect in any organization, group, community including in mosquito control. However, these decisions are affected by different factors, which not only hinder mosquito control activities but also effective community participation in the control efforts. Similarly, the level at which the community is involved in making decision for mosquito control may influence the degree of participation. In most cases community is consulted on already agreed action. This undermines the knowledge, skills, and experiences of the community. The need to involve the community and all stakeholders at all levels of planning has a potential to develop a sense of ownership and commitment by all, encouraging them to take responsibility and be accountable for their decisions. Having been able to exercise decision-making power it is reported that participants gain confidence (identity) and pride (satisfaction).

There is need to foster community participation in decision-making given the cost and unsustainable effectiveness of the available mosquito control measures. Communities in the current study area have groups that have recently re-formed and re-organized themselves under an umbrella group PUMMA to carry out mosquito control activities. This study will explore the role of these groups in decision-making and implementation of mosquito control in Malindi town and its rural surrounds, and stakeholders' perceptions of the appropriateness and sustainability of the groups' activities. Such information will contribute to recommendations of how mosquito control programmes in the area might be strengthened in a locally appropriate way, and ultimately contribute to promoting health, increased productivity, and socio economic growth in the District.



## **CHAPTER TWO: SITE SELECTION AND METHODOLOGY**

### **2.1. The study site**

#### **2.1. 1. Why Malindi**

Malindi was selected as a study site due to the following reasons: 1) Availability of voluntary mosquito control groups. 2) Literature that provided reports of problems associated with mosquito such as malaria, filariasis and Rift valley fever. 3) Malindi is a major tourist destination. The presence of mosquitoes and reports on diseases transmitted by mosquitoes, threatens the tourist visiting the area. The study would provide viable recommendations that would help in reducing mosquitoes and problems associated with mosquitoes.

#### **2.1.2. Study population**

The study population was primarily members of PUMMA, community groups (CG) and stakeholders reported to be carrying out mosquito control activities in Malindi town. As reported in the description of the study area, Malindi is a tourist town located on the Coastal Kenya. The area is occupied by mainly the Miji-Kenda community with a mixture of people from upcountry. Most inhabitants are employed in the hotel industry while others are in trading, fishing, and employment in public sector and manufacturing industries.

### 2.1.3. Study site

The study was done in Malindi District. Malindi is an old historical Swahili town along the Kenyan coast. It's Kenya's tenth largest urban center, located on the shores of the Indian Ocean in Coast Province 120 km north of Mombasa. (Kenya Central Bureau of Statistics, 1999). Malindi was hived off the greater Kilifi district in December 1996, to become the seventh district in Coast province. It borders Kilifi district to the south, Tana River district to the North and North West and Indian Ocean to the East. The district covers a geographical area of 7605 sq. km, which constitute 9.1% of the total coast province area, and has a coastline of 155 km.

#### Physical Environment

There are beautiful beaches, coral reefs with a rich sea life protected in the Marine National Park, and Arabuka-Sokoke Forest hosting a range of endemic animal and plant species. The highest point in the built-up town is approximately 20 m. above sea level. The town can be divided into three landscape units, 1: the beach, 2: the old reef and lagoons landscape, and 3: an undulating plateau generally above the 4.5 m. contour line. Sandy soils and unstable young dunes characterize the beach zone. The main land uses are related to tourism in the form of beach hotels and villas. The reef and lagoon landscape zone features depressions with clay soils underlain by coral limestone rock, making the area susceptible to water logging, resulting in breeding areas for the malaria mosquitoes. The old town is built in this zone. The plateau is more rural in character with pronounced rock outcrops in the south.

The climate is tropical humid all the year round with a rainy two distinct wet seasons, the long season from April to June, and the short rainy season from October to December. Mean temperatures vary from 23 to 32 degrees Celsius. The rainfall is determined by monsoon winds. The Northeast monsoons giving more or less the dry season and the Southwest monsoons the rainy one. The long rains fall between March and May while the short rains fall between October and November. The average rainfall ranges from 400mm in the hinterland to over 1200mm in the coastal belt. The area lies between the latitude 2.20- degree East and 4 degrees South and longitude 39-degree east and 41.4 -degree East.

### Socio-Economic

The population of Malindi is mixed. The Mijikenda are the original inhabitants of this area. Arabs occupied the town, later followed by Portuguese and the British settlers. Currently quite large groups from up-country with a Kikuyu and Akamba background are settled in Malindi. Quite a large Italian community, referred to as the "new-settlers", live in the coastal zone. Over 80,000 people live in Malindi town.

Tourism is the mainstay of the economy. More than half of the local population benefits directly or indirectly from tourism, but many of the tourist hotels are owned by the Italians and managed by local people. The tourist business is seasonal with more jobs and business during peak times (September – March) while the remaining period which is known as the low season is characterized with poor business and workers lay –offs.

### Governance and political structure

Malindi town is a Municipality managed by an elected Mayor and a Town Clerk. Since 1995, the council has Environment and Public Health Committee. The Mayor is elected by the councilors in office.

### Administrative and political units

Malindi district is divided into 3 divisions namely Malindi, Magarini and Marafa. The district headquarters are in Malindi town. The district is divided into 16 locations and 56 sub- locations. The study area covers urban Malindi and a few villages in the peri- urban areas. The study area, which is Malindi location, has 5 sub- location namely: Shella, Central, Barani, Sabaki and Kijiwetanga.

### *Description of neighborhoods or villages*

The study area covers urban Malindi, which is composed of a series of neighbourhoods, mostly referred to as villages. These villages are rapidly expanding due to rural urban migrations. The description of the neighborhood is as follows:

#### Kisumu Ndogo / Barani

Kisumu Ndogo has an unplanned settlement with more than 20,000 people of mixed background. Majority are Luos thus the name Kisumu Ndogo. Most households have electricity and although the water system is well developed most households have no piped water inside houses and they buy water from water selling points. The area has poor drainage. The roads are weather roads with cartrack depression forming major pools of stagnant water that serve as breeding places for mosquitoes. The area has community groups working on mosquito control.

### Maweni

Maweni is unplanned and poorly drained area. The area is characterized by crowded squatter settlement. The houses are closely built and mainly with local materials, such as mangroves, coral stone, clay, and palm leaves. The sanitation facilities are very limited or absent. There are many boreholes in the area, as the municipal water system is not developed. Garbage collection by Malindi Municipality is very irregular and garbage is mostly spread all over the settlements. There are litterbins in the area built by Malindi green town movement but the litterbins are not regularly emptied and waste material especially plastic paper litter all over the area. The income among the inhabitants of this community is very low. There are community groups working on mosquito control in the area.

### Town Centre

These neighborhoods form the built-up town Centre. Here are located the market, bus park, town hall, most of the shops, and the old city centre. The income of the people living in these areas is medium. The houses are made of stone. Sanitary facilities are based on traditional pit latrines, which fill up quickly in this high-density area. Garbage is a major problem. There were very few litterbins and collection of garbage is irregular, resulting in an indiscriminately dumping anywhere. Waste (grey) water disposal is another problem. The roads are badly maintained and full with potholes. The municipal drainage system is poorly maintained often blocked with plastic papers and containers. Lack of proper maintenance of drains results in standing water and floods.

### Shella

Shella is a low-income neighbourhood adjoining the sea front and the Centre of town. It is one of the older "villages" and was established in the sixties. The inhabitants are predominantly Muslim. There is individual landownership and the area is well planned and well drained. The sanitary facilities are basically pit-latrines and septic tanks. Residents are active in environmental issues. The low income hampers the exhausting of the pits, resulting in a foul smell and contaminated wells. There are many unused / abandoned wells and the area has piped water inside houses. The abandoned wells and sanitary pits are breeding sites for mosquitoes. The road conditions are bad.

### Central Estate

This is an estate with stone houses with a European character built in the seventies. The plots are big and sanitation is reasonable. The inhabitants have a medium income. The drains are poorly maintained and flooded with water which forms mosquito breeding places

### Ngala Estate

Working class occupies Ngala estate. There is individual land ownership and the area is well planned. The municipal water system and sanitation is well developed. Most households have water and electricity. The engineer drainage system is poorly maintained and often blocked resulting in mosquito breeding areas. The clay soil found in the area makes the area to be flooded during the wet seasons. The roads are poorly maintained and there are numerous car track depressions, which are filled up with water when it rains becoming good habitats for mosquito breeding.

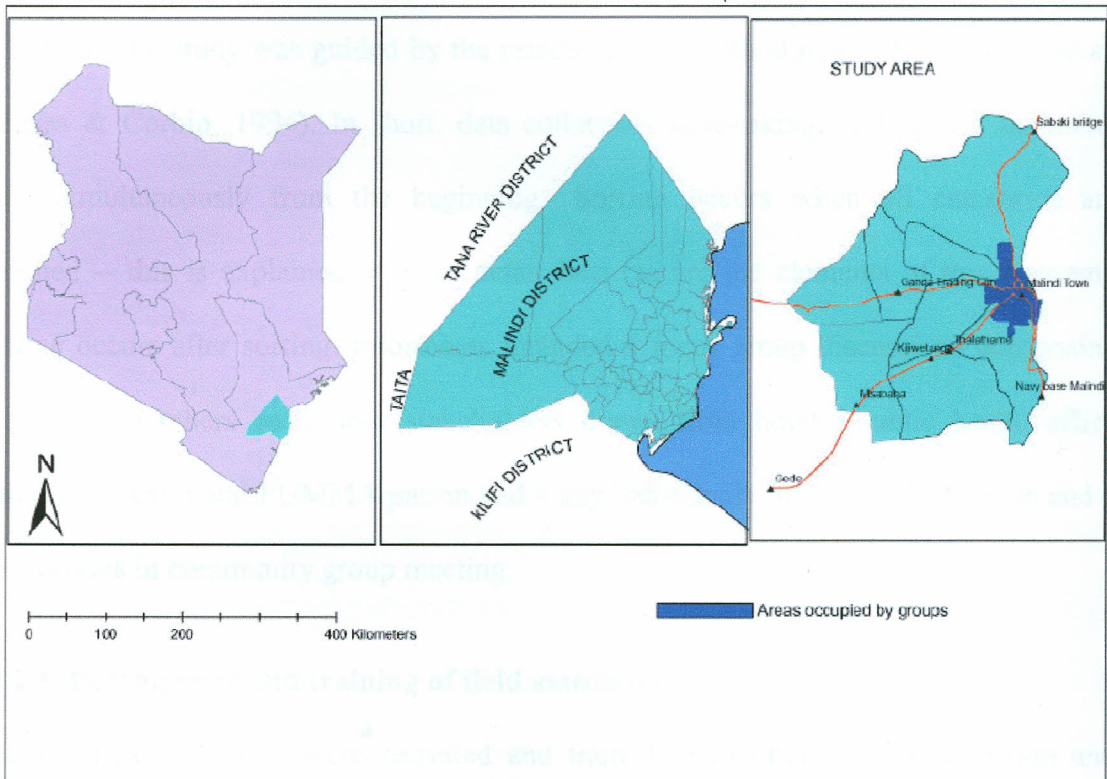
### Sabaki and Kijiwetanga

These areas are in the peri urban areas of the Malindi town. Majority of the people especially men living in these areas work in town and return home in the evening. They are engaged in small-scale farming. The water system is not well developed and households fetch water for domestic use from natural or built water reservoirs.

### Disease incidence

Malaria is ranked first in Malindi among the top five diseases affecting residents. Its mostly affect children under five years and pregnant mothers. It accounts for more than 14,000 outpatients seen annually at the District Hospital. The anopheline vectors of medical importance in this region are *An. gambiae*, *An. funestus*, *An. merus*, and *An. arabiensis* (Mbogo *et al.*, 2003).

**Figure 3: Map of the study area**





## **2.2. Research design**

This is a qualitative study which applied various qualitative methodologies in data collection. The study was guided by the principles and methodology of grounded theory (Strauss & Corbin, 1994). In short, data collection, note-taking, coding and memoing occur simultaneously from the beginning. Sorting occurs when all categories are saturated -- this is explained in more detail later, as are the elements of this diagram. Writing occurs after sorting. Informants included 4 focus group discussions comprising of 8 – 12 members each, four stakeholders drawn from hotels, public health office ministry of health and PUMMA patron and 4 key individuals from PUMMA group and 8 observations in community group meeting.

### **2.2.1. Recruitment and training of field assistants**

Four (4) field assistants were recruited and trained in qualitative data collection and interviewing skills. The training included both theory and practical sessions took 10 days. There were 5 days of theory and 5 days of practicals. The theory sessions covered at the training included a brief description of the research activity, purpose of the interviews, protocol of conducting interviews, interviewing techniques, how to use data collection tools, note taking and obtaining consent and confidentiality. This was followed by a practical session, which was also used as an opportunity to pre test data collection tools. During these sessions all the field assistants had an opportunity to carry out practice interviews in the presence of the researcher. After this there was a feedback session

during which the field assistants were given an opportunity to raise some of the experiences and “lessons learned”. This exercise was useful in checking the correctness and appropriateness of the data collection tools.

### **2.3. Sampling**

Sampling was generally non-random and by convenience, using stratified and purposive sampling strategies to ensure the representation of opinions of different people. The procedures of sampling are detailed in each of the technique used as described in the methods below.

### **2.4. Methods**

#### **2.4.1. Focus group discussions (FGDs)**

Focus group discussions were conducted with four (4) randomly selected community groups’ participating in mosquito control activities. A draft field guide for focus group interviews among community groups affiliated with PUMMA attached in appendices was used in facilitating the discussion. . All groups affiliated with PUMMA (the eight groups) were eligible to participate in the FGDs. A systematic sample with a random start was used to select community groups for FGDs. This was done by listing all community groups and in order to generate a random number which would be used as a starting point. Every 1<sup>th</sup> group was selected. This was done to ensure that the probability of selection was equal for each group. Starting with the first group, discussions were held to a point of redundancy and the target was to interview a minimum of four and a maximum of 8 groups. Similarly, to avoid unbiased representation the selected groups were asked to select 8-12 persons from the active members to participate in the discussions. A letter

stating the purpose of the interviews, criteria for selecting members, time, date and venue for the meeting was sent to the chairman. Usually the interviews were conducted at the community mainly places where the group meet during their meeting. This was because of convenience of the group members and places that they were familiar with. Focus group discussions were tape recorded and hand written notes taken to assist with translation and interpretation on issues. Each discussion was followed by a feedback session where the group participants, the interviewer, and the note taker exchanged comments, questions, and considerations for future interviews. This process was helpful for improving successive group discussions. Discussions were held until a point of redundancy. At the end of the interviews participants were provided with some refreshments.

#### **2.4.2. Individual interviews**

Two categories of groups participated in individual interviews. The first category was that from key individuals from community groups affiliated with PUMMA. Usually those who participated in individual interviews were individuals from the executive arm of the group such as the chairman, secretary or treasurer and were from the groups participating in FGDs. Selecting them from these group was important as it provided good background for validating the information that was collected during the FGD. The interviews were held on the same day after the focus group interviews so as to explore more on the information provided during the focus group discussions. Draft field guide for individual interviews among PUMMA members attached in appendices was used to facilitate the interview.

The second category was that from the stakeholders. A stakeholder was defined as anyone /group/institution having a stake or interest in mosquito control activities. A list of all stakeholders was generated through consultations with PUMMA members during the meetings. The interviews were conducted with those stakeholders who were identified as active in mosquito control activities and those who had in the past 6 months participated in PUMMA related activities. An interview schedule attached in the appendices was used to interview the stakeholders. Some of the questions asked related to their contributions and perceptions in mosquito control activities performed by PUMMA and their views concerning sustainability of these activities. The information collected was analyzed using Arnstein's ladder of participation.

#### **2.4.3. Observation**

The research team attended the community group meetings and the PUMMA meetings through invitations from the respective group chairmen. During the meeting, the research team observed the decision-making through observing the process of the meetings, participation by the members, attendance and issues that were discussed in the meetings. This was done using an observational checklist attached in the appendices. Details of the meeting were written down immediately after each meeting.

**Plate 1: Photo showing community meeting**



**2.5. Interview setting**

The interview setting varied from one interview to the other. However, effort was made to conduct the interviews at the convenience of the interviewees. For instance, those that involved community members were carried out at their meeting places for instance their offices or their preferred areas. On the other hand, those that involved the stakeholders were carried out at their places of work. Prior arrangements were made in identifying the timing and venue for the interviews and a notification made in writing. An official letter to all those participating in the interviews and discussions was sent explaining the purpose of the activity, venue, time and the expected participants.

## 2.6. Data Processing and Management

Field notebooks, tapes with data and electronic databases were stored at the departmental database where access was limited to only those appointed by the departmental head.

During the interviews a tape recorder was used with permission from the participants. At the end of each discussion, the tapes were played to the participants to allow them to confirm and verify areas of ambiguity. Notes were also taken during the discussions by an experienced note taker. Data was then be transcribed and translated from the tapes into word documents.

Data coding was done via QSR Nvivo7. The program helps in creating nodes on textual data with processes for indexing, linking, and searching the data. This included breaking down the data into meaningful pieces, assigning them a node, and categorizing them.

Nodes were grounded into the themes that emerged from the data and establishing relationships between already identified categories, which allowed for the emergence of 'main' and 'sub' categories. Sub-categories reflected the properties or different dimensions of each main node and illuminated the data in ways not provided by the main nodes.

Transcripts were reviewed several times to ensure that all relevant data were systematically assigned a node under the appropriate categories and sub-categories.

Selective nodes included developing core categories and systematically linking them to the other categories. During this process, categories were organized around the main concepts that emerged from the data. Another research analyst was consulted who did analysis using the same transcripts. The results were compared and contrasted. The final nodes structure reflected the use of different analytical procedures, such as pattern identification, clustering of conceptual groupings, axial coding which facilitated the

identification of relationships between variables, constant comparisons, and theoretical memos (Miles & Huberman, 1994a, 1994b; Strauss & Corbin, 1990).

As recommended by Lincoln and Guba (1981, 1985) the credibility, transferability, dependability, and confirmability of the findings were ensured through regular peer debriefing, inter-participants' triangulation of data, and audit trails. Debriefing sessions primarily occurred during the data collection and analyses and during presentations of our preliminary findings to the PUMMA members. Audit trails included logs of methodological decisions, data analyses, developing insights, evolving hypotheses, and emerging relationships between the nodes and sub-nodes. These trails were kept throughout the study.

Analysis of the stakeholder's participation was made in respect to Arnstein's ladder of participation with the aim to investigate the relationship between the stakeholders and PUMMA associated community groups. Using the scale of 1 – 8, the low represented 1 – 4; medium represented 5 and high 6-8. Where a stakeholder was reported not to undertake the activity a – was used.

This study was conducted in conformity with the ethical guidelines of KEMRI. At the beginning of each interview, participants were advised that they could personally withdraw or withdraw information at any time during the interviews, and that the information they shared would be confidential. Verbal consent from the participants was sought before engaging them in the discussions and interviews. A copy of the report was given to the informants.

## CHAPTER THREE: RESEARCH FINDINGS

### 3.1. Characteristics of community groups in Malindi

During the study period, a total of 4 focus group discussions, each comprising between 8 – 12 people, 4 individual interviews selected from community groups and 4 stakeholders interviews selected from stakeholders participated in the study and 8 informal meetings attended for observation.

Community groups comprised residents located within the same geographical area of Malindi and were limited to youth, women or combination of youth and women, depending on the nature and overall purpose of the group. It was further reported that individuals from the community groups provided overall leadership of their respective groups. These groups were reported to be voluntary in nature and conduct activities that focus on mosquito control for the benefit of the community at no cost. Meaning of volunteerism: willingness of an individual community member to join a group that is carrying out mosquito control activities. The activities of the groups are carried out for free.

The members in these groups were said to be unemployed, casual workers, retired and or old men and women. Their level of education was considerably low with some not capable of reading and writing. In one of the focus group discussion, a member summarized their socio – economic status as follows:



“Most of the people you see here are not employed .We were not lucky to go to school. So one is either a housewife and the husband is working, a casual worker or staying with his/ her relatives”

Another one added:

“During our time, especially for those of us who are Muslims, emphasis was on religious teachings and therefore formal education was not taken seriously. Thanks to my husbands work (fisherman) helps in meeting the needs of our family”.

### **3.2. Mosquito control activities in Malindi**

Table 2 shows that different actors carry out various mosquito control activities Malindi. The level of contribution differs from one actor to another due to the comparative advantage of each actor. The MOH, for instance, is carrying out activities related mainly to case management and ITN distribution, whereas the municipal council, which is mandated to carry out vector control, has a very minimal contribution in the mosquito control activities. It was reported that in the past, the MCM was responsible for eliminating or treating mosquito aquatic habitats. This has declined / stopped due to insufficient resources and manpower. The community groups on the other hand are contributing substantially to mosquito control through environmental management activities such as draining or filling areas of standing water and clean up exercises, as well as educating the household owners on how to keep their homestead free from mosquitoes. The Kenya Medical research institute – KEMRI/ ICIPE malaria program is also involved in training and entomological surveys.

**Table 2: Level of contribution of the different actors in the mosquito control activities in Malindi.**

Activities	Ministry of Health	Municipal Council of Malindi	Community groups	Research organizations	Hoteliers	Business community
Treating malaria patients	High	Medium	-	-	-	-
ITN promotion & distribution	High	-	Medium	Medium	-	-
Health Education	Low	Medium	Medium	-	-	-
Treating water bodies	Low	Low	Low	Low	-	-
Filling	-	-	Medium	-	-	-
Draining	-	-	Medium	-	-	-
Clean up exercises	-	Low	High	-	-	-
Spraying inside houses	Low	Low	-	Low	-	-
Adult mosquito trapping	-	-	-	High	-	-
Identification of larval habitats	-	-	low	High	-	-
Training community groups	-	-	-	High	-	-
Collecting recyclable materials	-	-	-	High	-	-
Resources mobilization for mosquito control	Low	Low	Low	Medium	Low	Low

**Key: - = no activity; low = between 1-4; Medium = 5; high = 6-8**

### **3.3. Role of community groups in vector control activities**

The results from the focus group meetings indicate that the intended malaria vector control activities carried out by community groups included the treating of water bodies with used engine oil, the spraying of houses with permethrin obtained from the MCM, the sewing, dipping, and selling of insecticide treated bed nets (ITN), the removal of standing water, the organization of community clean-up days, and the development and sale of products such as neem soap, which is thought to repel mosquitoes. Intended health education activities included home visits to assist with mosquito surveillance and disseminate information about malaria treatment and prevention, and advising residents on how to reduce mosquito-human contact. Most groups reported involvement in more than one activity, and one - The Shella Women Group - reported making and selling ITNs. Included among our groups was 'The Green Town Movement', which in addition to garbage collection, reports serving as an umbrella group for many other community groups. Group members explained that many groups, and their activities, were initiated by the Public Health Department of the MCM in response to increasing malaria and diarrhea prevalence, and decreasing water and sanitation safety.

It was reported that in addition to forming many of the community groups, the MCM also provided training and information, and disseminated materials and equipment to assist with project start-up. The Shella Women's Group for example, reported receiving netting material, sewing machines, and thread to initiate ITN development, whereby the money made from the sales would become a revolving fund for future projects and activities. The Maweni Primary Health Care Group reported that they received training, equipment,

and chemicals for larviciding activity. The equipment included spray pumps, wheelbarrows, and rakes. The MCM provided monitoring, supervision, and guidance to these groups, and held monthly forums with all community groups to share and report ongoing and proposed activities. All respondents reported that the MCM and the MOH discontinued fund and equipment allocation in 1999, citing lack of funds and interest in specific communities as the primary reason. It was also reported that supervision of existing projects declined soon after.

### **3.4. Formation of PUMMA**

During the focus group discussions, it was reported that the community groups were previously under the umbrella of the Green Town movement. But due to lack of poor coordination and mistrust, the community groups felt misused, cheated and the groups not benefiting from the activities. During the focus group discussions, a member stated “The Green Town Movement receives a lot of funds. We got some money from the HABITAT. We did not know how that money was spent. The movement is a one-man affair and was only used as rubber stamps to solicit for funds. We were also called for cleanups to justify the used funds”.

At the same time, the Municipal Council was not supervising or monitoring the group activities. Further, the community groups felt frustrated by lack of supervisory support on the part of the MCM, which was evident in the group discussions, “we are not called for monthly meetings and when we invite them (public health officers) to our meeting they do not attend”.

The training activities provided to community groups by KEMRI were also cited as having contributed to PUMMA formation. A member said, “When KEMRI started their work in Malindi, they came to us and we welcomed them. They trained our TOTs and even some of us (members of community groups). They also attended our meetings ...we learned a lot on mosquito control and we felt the need for working together as we had a common goal of “Punguza Mbu Malindi” reducing mosquito populations in Malindi. We needed a group that could help in co-ordinating our activities. We therefore formed PUMMA in 2004 as an umbrella group that would unit all community groups working in mosquito control activities”

### **3.5. Membership in PUMMA**

PUMMA is composed of members of community groups working in mosquito control groups. During the time of formation 8 groups joined to form the “umbrella group”. These groups are Shella Women group, Maweni community health workers, Maweni PHC, Barani Community health Workers, Ngala Site and service, Kisumu Ndogo Youth group, Malkia Women Group and Genesisi Youth group. The group chairs represent their group in PUMMA. This is according to their constitution although some members from community groups felt that this was not a fair representation as ‘most group chairmen fail to attend meetings due to conflicting roles’. This was verified by the fact that even those who are representing their groups in PUMMA, some of them are not chairmen of the groups.

Other members in PUMMA included the Trainers of Trainers (TOTs), the Patrons and advisors. The TOTs are individuals who have undergone trainings previously organized

by KEMRI and are therefore trainers of the other people working in mosquito control activities. These people were selected from the Public health departments of the municipal council and the ministry of health and public school and community groups. On the other hand, patrons are business people from the area whom the group identified from their participation in previous mosquito control activities organized by the groups and they consulted them to be patrons of the group. Similarly, the advisors included expert who would provide the groups with technical knowledge and advise in their areas of expertise whenever a need arises. They included experts from the Ministry of Health, Municipal council Public health technicians and KEMRI as the groups felt that these were the key institutions that are directly involved in mosquito management. However it was reported that the participation of this individuals is minimal.

“When we call them for meetings they do not come although they help us with contributions when we go to them during mosquito field days” said a respondent.

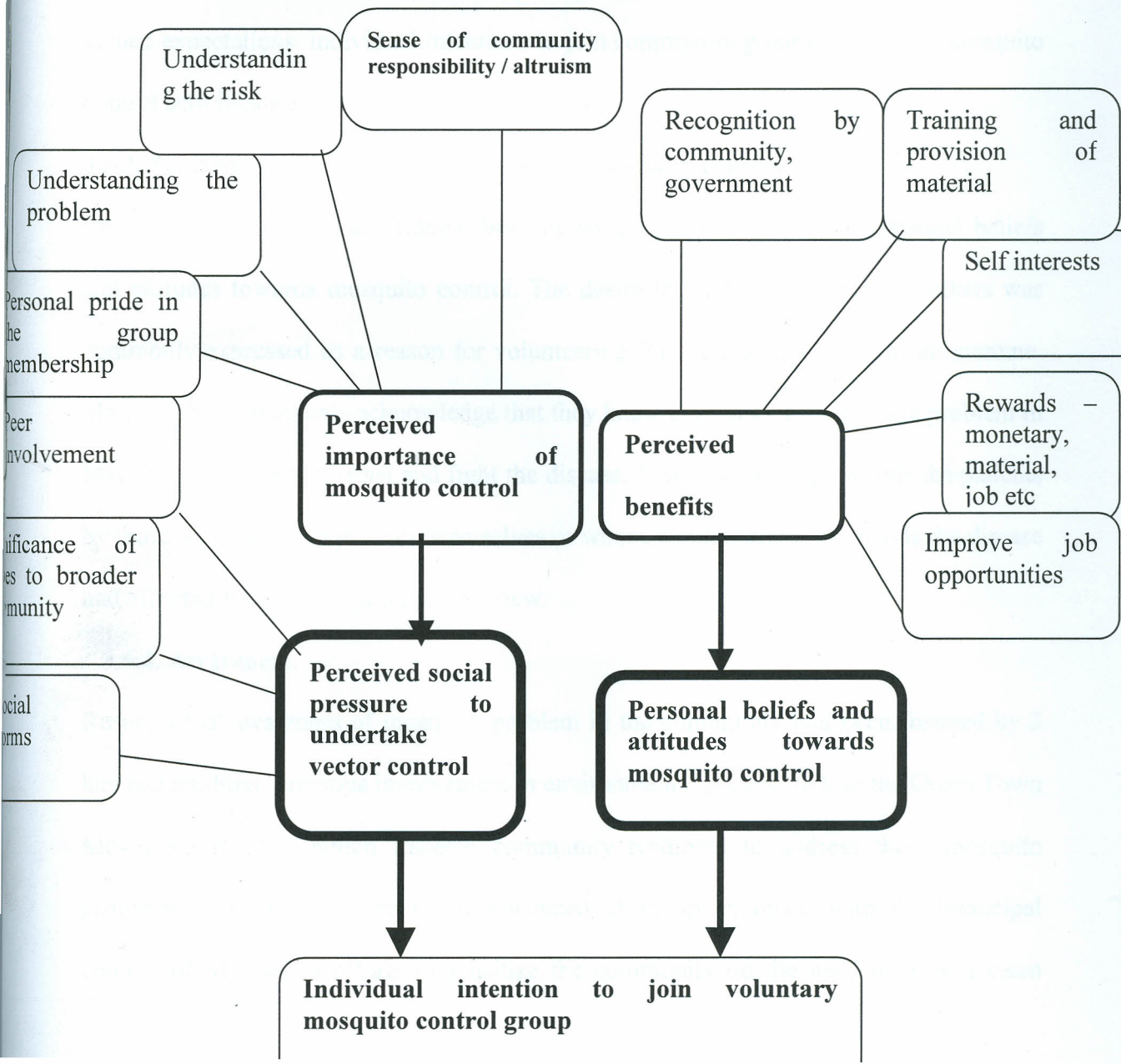
Majority of those interviewed reported that membership in PUMMA was not complete without payment of mandatory registration fee. A community groups were required to pay 500/=, while TOTs pay 200/= and Patrons pay 1000/= every six months. PUMMA board members agreed the fees and even endorsed the fees in their constitution. Although no clear procedures are set in the constitution on how a group was to become a member. It was however clear that the mandatory fees have not been paid by majority of the groups and neither do groups regularly pay after every six months.

### 3.6. Factors motivating community groups in mosquito control

#### 3.6.1. Individual intentions to join community groups

The themes that emerged from the data analysis concerning the factors that motivated individuals to participate in mosquito control activities were classified into 3: perceived social pressure, perceived importance and perceived benefits. These themes are illustrated in the figure below.

**Figure 5: Individual intentions to join community groups:**



### **3.6.2. Perceived social pressure**

Peer involvement, significance of issues to broader community and social norms were classified as perceived social pressure regarding individual intentions in joining mosquito control groups. This included their awareness of the mosquito problem in the community, their conviction that the problem required solutions to be addressed, a sense of community, individual-organizational and/or inter-organizational value congruence, organizational support, and the respondents' belief that their participation would fulfill valued expectations. Individual intentions to join community groups working in mosquito control activities were

### **3.6.3. Personal beliefs and attitudes towards mosquito control**

Perceived importance and personal benefits were classified to include personal beliefs and attitudes towards mosquito control. The desire to work for the good of others was commonly expressed as a reason for volunteering for the mosquito control programme. Many of the respondents acknowledge that they knew the scale of the malaria problem in Malindi and wanted to assist and fight the disease. Empathic feeling towards the patients by those who had been patients themselves or whose close relatives or friends the disease had afflicted further strengthened this view.

### **3.6.4. Awareness.**

Respondents' awareness of mosquito problem in the community had been fostered by 3 key factors. First, previous involvement in environmental groups such as the Green Town Movement (GTM), which fostered community readiness to address these mosquito problems. For example, the GTM organized clean up exercises with the municipal council of Malindi in efforts to sensitize the community on the need to have a clean



environment. This led to establishment of many environmental groups in Malindi. Some of these groups had an objective of controlling mosquitoes.

Secondly, the community of Malindi recognized links between mosquitoes and malaria cases. Data at the time indicated that malaria was a top killer disease and this served as a "wake-up call" to the community.

Thirdly, the fact that respondents personally had experiences of either getting sick or a member of the family or even death of a loved one boosted their desire to get involved in mosquito control activities. As one informant noted: "I lost my child and was told it was malaria. I have to volunteer to do something so that I can help to stop these mosquitoes from breeding here"

### **3.6.5. Individuals' sense of community.**

There were several dimensions to the respondents' sense of community. Among these were a sense of connection with the place (many respondents were born and/or had lived in Malindi for over 15 years), a sense of shared history, and a high understanding of the problem. Participants reported that their altruistic concerns for community predisposed them to participate in the mosquito control activities, as illustrated in the following comments: "I got involved because I do agree with the group. That was something I have always believed in, and so, I wanted to help;" "My group was already involved in similar issues and most of our activities were geared to mosquito control. So, it was only natural that we became members of PUMMA.."

### **3.6.6. Value congruence.**

The match of group roles and/or inter-organizational value congruence was crucial to group involvement in the PUMMA group as indicated in the following quotations:

### **3.6.7. Organizational support.**

Organizational support reinforced the respondents' initial desire to participate in mosquito control activities. As one informant reported:

"Our group was given training by the municipal council on making and selling insecticide treated bednets. We were also given 2 sewing machines and netting materials to start making the nets. This was very supportive of our group as we did not know how to go about making and selling the nets... they trained us and gave us the materials at no cost."

### **3.6.8. Valued expectations.**

Individuals' involvement in the mosquito control activities was also motivated by their expectations. Respondents' expectations were grounded in their belief that the activities had the potential to fulfill some of their personal and/or professional aspirations:

"I felt [that] this was going to be a learning experience for me and I also felt it would help me better my career and wanted to help the community, and if the group was successful, then I would benefit and my group would benefit too".

### **3.6.9. Feelings of achievement.**

Feelings of success were crucial in the individuals' decision to remain involved in mosquito control activities. As respondents suggested, "I want to continue because I feel I am making a difference. "I do things that make me feel good, and I feel good about what we do at the PUMMA." Many respondents insisted that their involvement in the PUMMA had been "very worthwhile, exciting," or "very rewarding.

In addition, respondents suggested that the ratio achievement/effort made their involvement worthwhile. "It has been worth doing. It hasn't taken up too much time and it's just little things you do here and there that make a big difference" a member of community group commented.

Respondents' feelings of achievement were enhanced by several processes. First, self-actualization played a big part in the individuals' feelings of success. Individuals' involvement in the groups was described as "very valuable learning experience " that enhanced their personal and professional feelings of efficacy and their self-concept.

One respondent summarized the above by emphasizing: "It has been a learning experience. I have personally grown a lot... It has broadened my whole perspective on people's role in the community, and I also believe I have become a better teacher because of that experience".

### **3.6.10. Partnerships with other stakeholders**

First, multiple partnerships strengthened the individuals' feelings of actualization because they allowed for skills and knowledge transfer. Participants increased their knowledge in

community activation, the formation and implementation of collaborative initiatives and specific leadership skills.

Stakeholders such as hoteliers and members of the business community were said to have assisted the groups with equipment such as spray pumps, wheelbarrows and rakes. Respondents also reported that the training of group members and the donation of tools and equipment were motivating factors in make decisions and greatly enhanced the group's desire to conduct various activities.

A respondent commented: "Its good we have stakeholders especially those who are from hotels and the business community because they support us with wheelbarrows, rakes, nets, foodstuffs and even cash especially during mosquito field days".

Factors such as training and education, tools and equipment and donations from stakeholders were cited as contributing to group motivation towards mosquito control. The MCM initially provided training and information to many community groups, and disseminated materials and equipment to assist with project start-up. The Shella Women's Group, for example, received netting material, sewing machines and thread to initiate ITN development, whereby the money made from the sales would become a revolving fund for future projects and activities. The Maweni Primary Health Care Group received training, equipment and chemicals for larviciding activity. KEMRI has provided trainings to community groups, Trainers of Trainers and Mosquito Scouts.

Respondents also reported that the PUMMA linkage with researchers at the KEMRI/ICIPE malaria programme further contributed to its success. The researchers'

expertise, their training of the Trainer of Trainers (TOTs), Mosquito control action group and mosquito scouts were much valued by the participants.

A member of PUMMA stated: “When KEMRI came here we welcomed them and we wanted to know how they would help us. They first trained TOTs, then members of community groups and now the mosquito scouts. They also called meetings with stakeholders. We did not know a lot about mosquitoes but now we have a lot of knowledge. We want to train other people so that they get the information / knowledge like us”

### **3.6.11. Support and supervision**

The groups recognized and appreciated the time when MCM provided monitoring, supervision and guidance to them and held monthly forums with all CG to share and report ongoing and proposed activities. This led to the recognition and appreciation of the groups’ activities by the community and their leaders. It was also noted that when community leaders, chiefs, and elders actively participated and encouraged specific events, community mobilization and active interest was much greater than events proposed and carried out under the auspices of government intervention. This was especially true of “community clean-up days” and “malaria mosquito days”.

All respondents reported that the MCM and the MOH discontinued fund and equipment allocation, citing lack of funds and interest in specific communities as the primary reason.

It was also reported that supervision of existing projects declined soon after.

Second, the individuals' feelings of affiliation and their satisfaction at working collaboratively with other group members further reinforced their feelings of success and enhanced their positive attitude toward the group and its members.

As one participant pointed out: "We like and we trust each other... there is a bonding that has developed, and it's really nice."

Thirdly, the respondents' perception that the PUMMA had progressed was essential in the respondents' decision to remain involved in the PUMMA. Respondents insisted that progress was felt in many different areas, such as increased community awareness around mosquito control issues, increased involvement in the PUMMA, the effective implementation of multiple activities by PUMMA members, and positive changes in community members.

"We have seen PUMMA bring the community together around this issue in a way that hasn't happened before... It's amazing. It's wonderful... the mosquito field day. We also saw tangible things arise from our involvement. We did get the 10 group joining the PUMMA and that's something very big" stated a respondent..

Finally, perceived met expectations (each PUMMA member entered the group with a specific set of expectations generated by their personal or professional experiences with the issues at stake), provided that these expectations were valued by respondents, and inter-organizational benefits (e.g., increased organizational visibility) further enhanced the respondents' feelings of achievement and their desire to remain involved in the group.

“The partnerships with other agencies were very good for everybody. They gave us tools, foodstuff, cash, nets and technical support which added credibility to the PUMMA, but the PUMMA also brought issues that these stakeholders were dealing with more into the front light, particularly with the media attention that we got. So, these partnerships enhanced all the organizations that were involved and we made tremendous progress because of that. It's very rewarding” said one of the respondent.

Respondents expressed that the PUMMA' success was fostered by volunteer membership, and stakeholders support

### **3.6.12. Volunteer membership.**

Respondents felt that it was the membership's commitment and hard work without pay that enabled the group to be successful and inspired them to remain in the PUMMA.

A respondent commented: “Commitment and interest from every member is essential in a project. PUMMA wouldn't have been successful without everybody's involvement and collaboration, without dedicated members who had a vision of controlling mosquitoes in Malindi “punguza mbu Malindi” vision and made things happen, people who were devoted to make this happen”

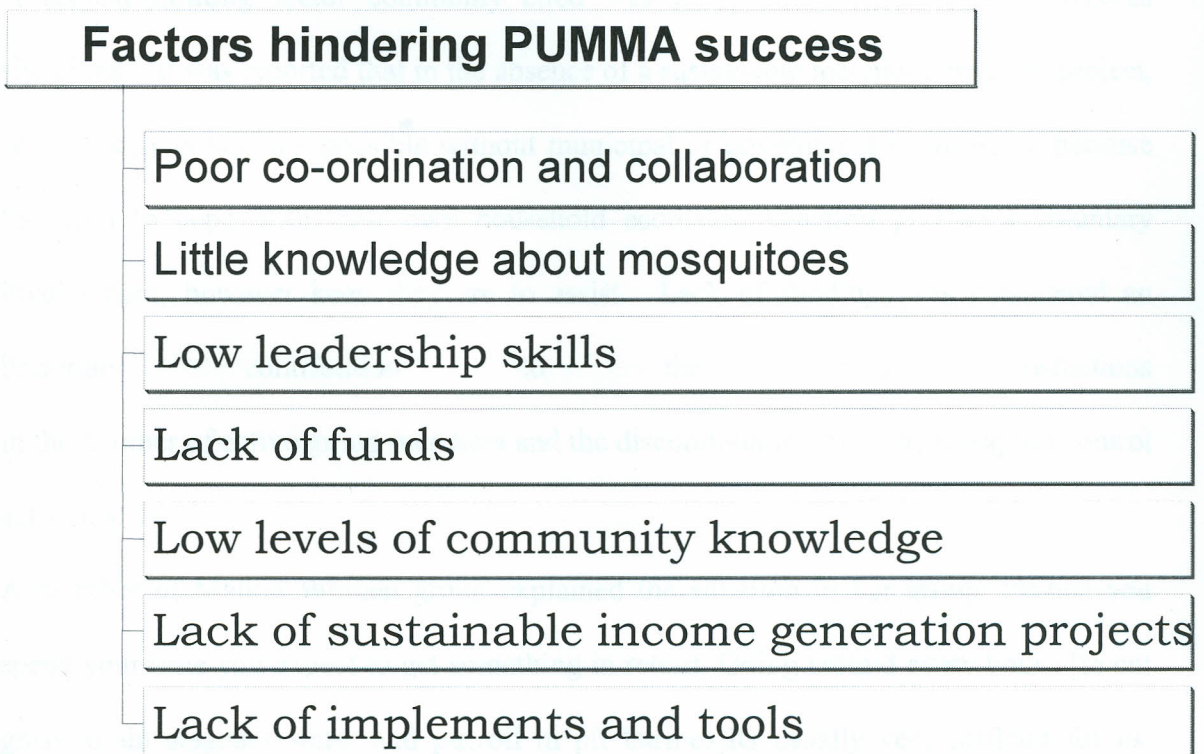
The involvement in the PUMMA of people with different stakeholders at the time they needed them enriched the PUMMA and fostered its success. Respondents emphasized the benefits of multiple partnerships in projects such as the PUMMA. These benefits included the effective use of multiple resources and talents, a broader understanding of

issues, higher feelings of organizational efficacy, and increased public awareness and support. Multiple partnerships, particularly with municipal and health agencies, also fostered the PUMMA' visibility, credibility, and legitimacy, and facilitated reciprocal benefits (e.g., the achievement of shared goal) for all the groups that were involved in the mosquito control activities.

### 3.7. Factors Inhibiting group decisions toward mosquito control

A few participants suggested that economical, community-specific, and personal and organizational factors might have prevented individuals from getting involved in mosquito control activities or might have limited group success in their activities. The figure 6 below gives some factors as stated by the participants.

**Figure 6: Factors hindering PUMMA success**





### 3.7.1. Lack of sustainable income generating projects

Lack of sustainable income generation projects being incorporated into the groups' activities. Members of the Shella Youth Group, for example, explained that their efforts to produce and sell ITNs were hindered by cheaper ITNs already in the market.

A member explained that a single roll of netting costs Kenya Shilling (Ksh) 9000 (USD 117.65), binding material costs Ksh 3000 (USD 39.22), and thread, needles, and insecticides cost Ksh 1000 (USD 13.07). This makes about 9 nets. We sell one net at Ksh 1500 (USD 19.61) which is considerably high compared to the Ksh 350 (USD 4.57) cost of other nets in the market.

### 3.7.2. Lack of funds and incentives

A second limiting factor commonly cited was group members' personal financial situations. It was reported that in the absence of a sustainable income-generating project, control activity was not possible without municipal or government sponsorship because the need to cope with their own household economic situation precludes voluntary involvement, however keen they are to assist. Lack of funding, was considered an important contribution to the recent reductions in the number of active group members and the discontinuation of many mosquito control activities.

A member of Malkia Women group explained the situation in her group: "When you spend your time you expect to get something in return. Going around every house [to cut grass, drain stagnant water and put oil in pit latrines]Its usually very difficult for us.

When we call community members to help us they say we are usually paid by the municipal council to do the work. We sometimes get discouraged when volunteering in this work. Sometimes we spend the whole day especially when we are planning the mosquito field day and get nothing even a cup of tea. When we go home, our husband, children expect that we have come with something. Some of our members have dropped out because when the evening came we want something to eat but there is nothing. We fell misused volunteering but we are also poor and are looking for bread.”

This affected the group’s productivity potential, as almost half of the members who were initially trained on various methods of mosquito control eventually discontinued their participation. It was therefore clear that voluntarism, in the absence of direct gain and when combined with lack of community support, could not be expected from members with low household incomes.

### **3.7.3. Support and supervision**

A third limitation reported was inadequate municipal support in the form of continued / effective training, equipment, supplies and visible endorsement of their role.

Common comments included: “we need tools for clearing the area we live in. We need chemicals and ropes to clean the wells. We need [more] training because some of us do not know what to do or how to do it.”

One group member explained, “We started with as many as 40 members but some people have left. The few of us who are left still do whatever we can [but basically our] activities

were discontinued 3 years ago when we stopped receiving chemicals and equipment from the Municipal Council”.

Others emphasized the lack of supervisory support on the part of the MCM: “We are not called for monthly meetings and when we invite them [public health officers] to our meeting they do not attend”.

An officer from the municipal council confirmed the reports from the groups when asked what assistance the MCM provide to these groups: “There is not much that we can do at the council... the council lacks the resources such and chemicals, equipments and transport. Consequently, we are a skeleton of staff as most of our staffs were retrenched. The ones who are there can not handle all public health problems in the area unless we get more staffs”.

#### **3.7.4. Economic factors.**

Majority of the people who are in PUMMA are either unemployed youth, retired and old men and women or housewives. Unemployment results in low levels of volunteerism. This might have also affected community members' lack of interest in the mosquito control activities. The group has no source of income. Every time they have an activity like the mosquito field day, they seek assistance from well-wishers such as hoteliers, business community or the NGOS working in the area.

“There's a lot of unemployment here and people who were involved in a lot of things have left the area, and nobody has replaced them... Our community is stretched out right now in terms of financial resources. We have fund-raised everybody to death... people can only give so much of their time and money... and there are other things that are going on right now in the community that have people's attention”.

### **3.7.5. Community-specific factors.**

Members of the community felt that the municipal council and KEMRI were paying those who carried out mosquito control activities. This limited the number of volunteers in mosquito control activities as the community did not believe that they were doing the activities for free. Although many of the groups reported receiving token amounts from households for doing control activities, the amount was generally not enough to sustain the group's activities. Reasons given for income generation activities being unsuccessful included some communities within Malindi being accustomed to receiving free or heavily subsidized products, or being unwilling to pay for activities seen as an MCM responsibility.

As one group member reported: “We lack full community support because we are seen as being employed by the municipal council. This is a drawback to our activities”.

### **3.7.6. Organizational characteristics.**

Cutbacks at work, heavier workloads (and thus, felt role overload), and role conflict (i.e., respondents had too many roles and/or individuals' roles were conflictual) also restricted some respondents' involvement in the group. In addition, inter-personal conflicts resulted in some members temporarily decreasing their involvement and, in one case, in a member leaving the group. Finally, it was also suggested that some group members decreased their involvement because they were not meeting their valued expectations (e.g., money, jobs, tools) and/or experienced feelings of burnout.

### **3.7.7. Committee-related factors.**

A few participants felt frustrated by the time and demand constraints that resulted from their involvement in PUMMA. Some members were also frustrated at the lack of involvement and low attendance of their patrons in the meeting. The patrons, municipal and ministry officials lack of involvement increased active respondents' feelings of role overload, and their dissatisfaction toward specific group members, which, in turn, affected their level of commitment. "It's hard to get some people really involved. People commit to do something and then something else comes up, and nothing gets done. It's hard on the other group members. It's discouraging." A member commented.

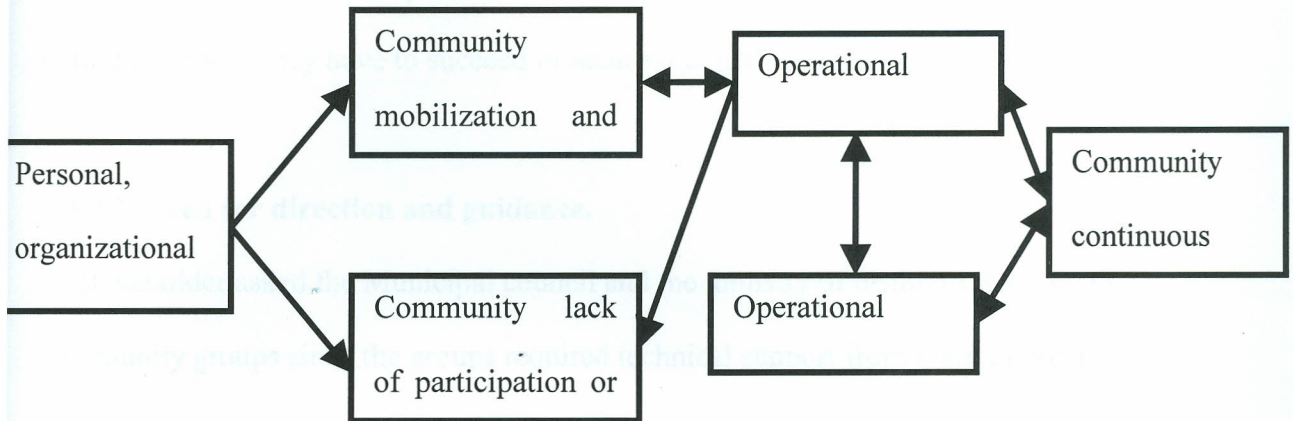
### 3.7.8. Leadership

Leadership squabbles in these groups especially where an individual wishes of becoming an office bearer is not fulfilled. Misunderstandings within and outside the groups have hampered group participation. These have caused some members to resign from groups' activities while some groups have split to form a new group.

Respondents also suggested that inter-group conflicts might have temporarily hindered their enthusiasm toward the project. There were temporary tensions between the PUMMA group and a few community group members. Issues of disagreement centered on role ambiguity (i.e., who should do that and/or what was supposed to be done) and who should implement what activities. As well, a few respondents expressed concern that PUMMA had taken up the roles played by the group instead of playing a coordinating role. Finally, there were also issues related to the PUMMA meetings that bothered some members, particularly the meeting attendance (e.g., meetings lack of quorum), the number of meetings (e.g., too many – met every Wednesday morning), meeting structure (too rigid) and who should attend meeting (scouts and group representative)

In summary, the study findings suggest that specific personal (e.g., community members' awareness of the community issues, the individuals' feelings of efficacy and community, the respondents' beliefs in the PUMMA potential for success), organizational (organizational support regarding the individuals' participation in the PUMMA, respondent-PUMMA value congruence regarding the PUMMA' goals and priorities), and community (e.g., the community's SES) related factors influenced community mobilization, continuous involvement, and/or lack of interest in the PUMMA and mosquito control groups. The inter-relationship of organizational dynamics and feelings of achievement strengthened the respondents' desire to remain involved in the organization. Nonetheless, organizational dynamics (resulting from the relationship between PUMMA members, including their leaders, the respondents' sense of role overload and competing priorities, as well as from the PUMMA' relationship with the individual group also caused some participants to withdraw from or limit their participation in the organization. The above is summarized in figure1, which emerged from the data analyses.

**Figure 7: Summary of factors influencing community participation and involvement in mosquito control activities by community groups in Malindi**



### 3.8. Stakeholders' perception of mosquito control activities in Malindi

#### 3.8.1. Funding opportunities for community groups

A number of stakeholders felt that there are many opportunities that PUMMA could exploit for sources of funds. These included donations from government and non – governmental organizations. They however added that donations are not enough, thus the group should come up with viable income generating activities that would help in sustaining group action. The groups are always coming to us for support whenever they have an activity. This means they have no source of income every time the group (PUMMA) has an activity, they visit the hotels, business community asking for donations. “Donors are spending a lot of money on HIV / AIDS related activities while people are dying of malaria. Some of this money can be directed to supporting the groups because they have displayed the potential of mobilizing other people in the community in



activities aimed at reducing mosquito populations. But the group needs assistance on how they can get the funds because donors will not put their money on groups that are not known to them. The Ministry of Health and the Municipal council need to work with this with the group if they have to succeed in securing funds”

### **3.8.2. Need for direction and guidance.**

A stakeholder asked the Municipal council and the ministry of health to work with community groups since the groups required technical support from them in order to succeed.

“PUMMA cannot work alone .....they require technical push before they do something and succeed. The Municipal council and the Ministry of health have technical experts who need to work with these groups to succeed”.

### **3.8.3. Set attainable objectives**

The group approached the stakeholders at the time when they needed their help. There was a feeling that the stakeholders are tired of PUMMA group seeking assistance from them every time they have activities since that would not sustain the groups.

The stakeholders felt that the group action is good but needs direction and focus. The group is moving on well but lacks direction and funding opportunities. The groups have no source of income and they look for KEMRI to initiate income generating activities.

**Figure 8: Flow chart showing the relationships and decision – making process of the community groups involved in mosquito control activities in Malindi, Kenya.**

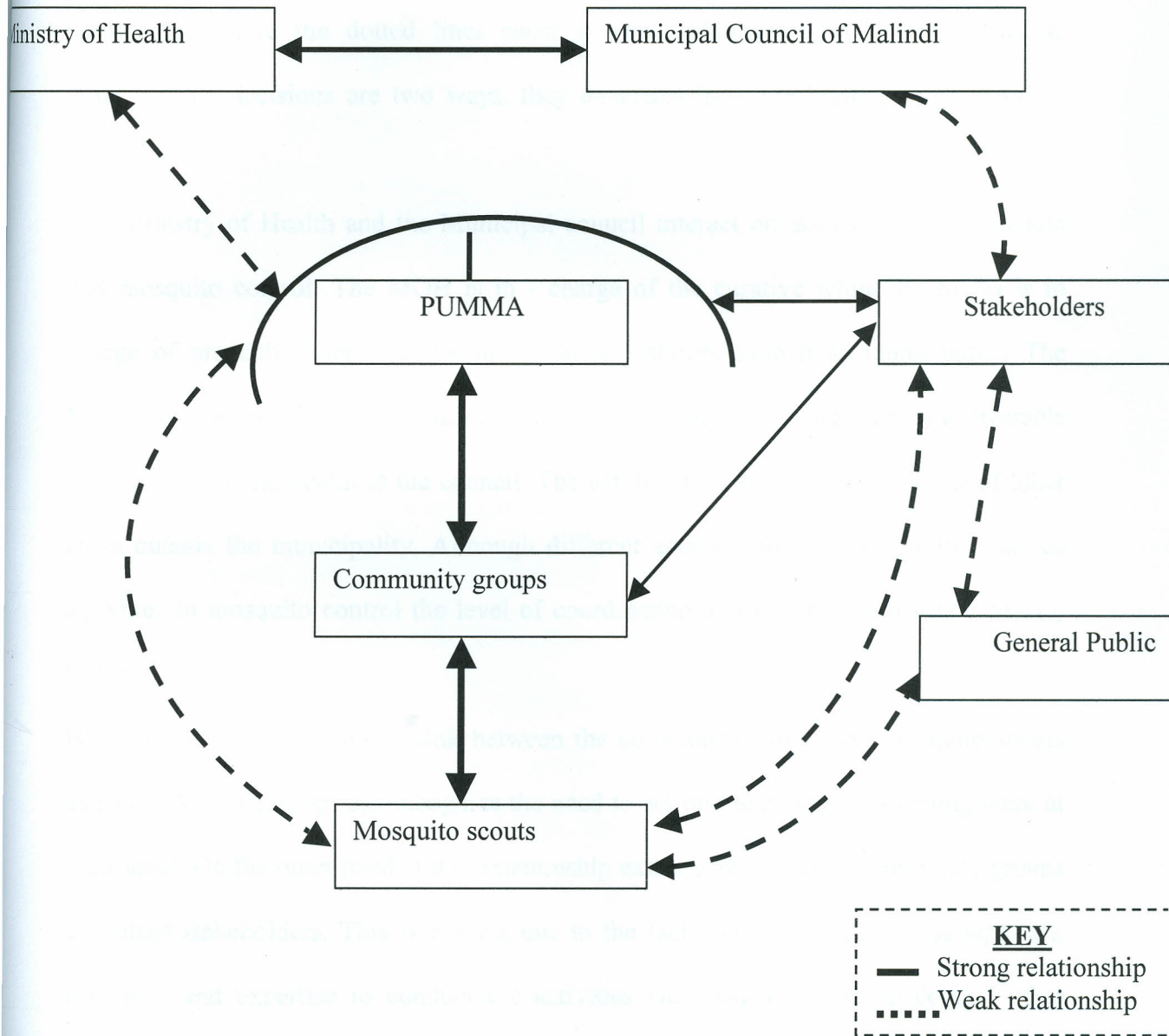


Figure 8 shows the relationships and decision – making process of the different actors involved in mosquito control activities in Malindi, Kenya. The thick lines show a strong relationship while the dotted lines show a weak relationship in decision making. Although the decisions are two ways, they emanates from the bottom from mosquito scouts

The Ministry of Health and the Municipal council interact on issues related to malaria and mosquito control. The MOH is in - charge of the curative while the MCM is in charge of preventive services within the local authority known as municipality. The MOH have seconded the public health officers to the MCM who are directly answerable to the Chief public health at the council. The MOH public health is in - charge of other areas outside the municipality. Although different actors reported carrying out various activities in mosquito control the level of coordination and collaboration was evidently lacking.

However, there exist a strong link between the community group and mosquito scouts and PUMMA. These groups recognize the need to act on the problems affecting them at their level. On the other hand, a thin relationship exists between these community groups and other stakeholders. This is evident due to the fact that the community groups lack resources and expertise to conduct the activities and have therefore to contact other stakeholders for assistance. Needless to say, this assistance is not forthcoming due to fragmentation of tasks and lack of co-ordination in activities planned and thus the groups feel left out by other stakeholders. Moreover, the model depicts a bottom up approach to decision making process

## CHAPTER FOUR: DISCUSSION

### 4.1 Community participation in mosquito control activities

Community participation has been studied previously and credited for its potential in promoting ownership and sustainability of vector control programmes (Curtis 1991, Chikati 2000). Starting in the early 1970s the introduction of primary health care, the strategy that was to achieve health for all by the year 2000, its importance in promoting health is still paramount. Previously, community participation has been effective in control of *Aedes Egypti* in Vietnam (Witch P *et al.*, 1992; Gubler DJ 1996; Nam VS *et al.*, 1998; Nam VS *et al.*, 2005.) Taking *Aedes egypti* control programmes as an example, it is shown that for community participation to work, there must be willingness to define the form participation will take in consultation with the community, and commitment on the part of local governments to addressing local concerns, such as difficulties in targeting control programmes. Results from this study show that communities in Malindi have come together to form community groups to control mosquitoes in the area. Activities such as environmental management by filing and draining aimed at larval control, making and selling insecticide treated bed nets, and health education through community mobilization campaigns known as mosquito day and neighborhood campaigns were activities reported carried out by community groups. Consequently, the formation of PUMMA as an umbrella group to co-ordinate activities of community groups was a strength in community-based programmes. Studies have shown that grass root community based groups can contribute to providing relevant information

to the other members of community. This is important as it will enhance community understanding of the mosquito problems and therefore seek solutions to address the problems (Witch P *et al.*, 1992). This is evidenced by a strong link at the community level in decision-making process for mosquito control in Malindi

#### **4.2. Types and levels of participation in mosquito control activities.**

It's important to understand that different types of participation exist within a specific population. People can participate in their communities in all sorts of ways. Their participation can be in social groups or in activities that are more focused. Most health literature views these types of participation from the perspective of an organization, which is concerned to "increase community participation"(Ziguras SA 1992; Rifkin S, 1986; Lipsky M and Lounds M 1976). A number of authors have commented that an organizational perspective on participation tends to be seen as either a means to achieving an end or as a valuable health promoting activity in and of itself (Oakley.P. 1989; Legge D. 1990; Baum FE 1998). In this perspective participation can be seen as the means of achieving a set objective or goal. Legge (1990) calls this "instrumental" participation. There is less concern with the act of participation and more with the results of participation. The emphasis is on rapid mobilization; direct involvement in the task at hand and the participation is abandoned once the task has been completed. An example would be if an external agency came to a community with a pre-determined programme related to a specific issue such as mosquito control, which required the programme implementers to work with the community. The participation would be limited, solely for the purpose of implementing the programme. Baum (1998) points out that this style of

participation tends to be driven by outsiders to the community and rarely does it result in any shift of decision-making power or resources from the outside implementers to local citizens and their representative agencies.

Participation can also be far more developmental in its aim. In this case, Oakley (1989) comments that the process is "dynamic, un-quantifiable and essentially unpredictable".

The participation is not limited to the life of a particular project but seen as a permanent and intrinsic feature of an organization or community. The critical elements in the process are to increase the awareness of the people and develop organizational capacities.

Engaged, ongoing participation produces the trust and networks that are the oil of social capital (Cox E 1995; Putnam RD. 1993;).

Full, engaged participation does not happen easily. Oakley (1989) indicates that it may start off as marginal participation in which people have relatively little impact on the activity. This will especially be the case where

the motivation for the project comes from outside the community..... Baum (1998)

notes that structural participation (control by the community) will be evident where participation is integral and forms the basis for all activity. This is evident when local

citizens play an active and direct role in the initiative and have the power to determine the direction and actions taken.

Despite considerable literature on the types of participation in health, there is little that provides an insight into which groups of a population are most likely to participate, and in

which type of activity. There is also some lack of literature on social participation or participation in community groups. This study, however, considered participation in a

broad perspective, seeing individuals' institution levels of participation as important. Our

study demonstrates a structural participation where community is seen as an integral part of the activity and forms the basis of all the activities from planning through implementation.

The study demonstrates a model for decision-making in which decisions for mosquito control starts from the bottom (community level). This type of approach is referred to as bottom up approach. In this approach communities identify problems related to their health (mosquitoes) and with resources available to them, they come up with plans for intervention. This is outlined in the principles of primary health care in the Alma Ata declaration. The decision follows a hierarchical order in which the community start from the bottom with identification and awareness of their problems. In trying to solve their problems, they seek external assistance and guidance from external agencies. This way a community is able to supplement resources and needs that are not present in the community. The model for community participation in mosquito control in Malindi is weakened by low participation of the stakeholders from the Municipal council of Malindi, Ministry of Health, hoteliers, and business community. And although there was a general willingness of the stakeholders to support activities organized by mosquito control groups and PUMMA, their participation was seen at the time of implementation. Effective participation call for involvement of all stakeholders at all times of the project (identification of problems, planning, implementation and evaluation) A stakeholder, defined as an individual or group of individuals with a direct interest or stake in a particular sector, should have a say in decision making and planning of activities within it (Chikati 2000). Effective participation calls for partnership and collaboration at all levels

of planning and implementation of activities, thus ensuring full support (Curtis 1991). There is need to strengthen collaboration among the existing actors / stakeholders for optimal utilization of available resources. For example, the Municipal council, Ministry of health and the research organizations can provide knowledge and information as they have the expertise while the hoteliers, business community provide resources such as tools and equipment.

The study reported limited funding opportunities for the mosquito control programmes. The municipal council, which is mandated to carry out mosquito control activities, also had a low contribution towards funding for mosquito control activities. Whereas, there is a high contribution by the ministry of health in case management, there is very low contribution in mosquito control.

#### **4.3. Factors influencing decision making for mosquito control**

Our research indicates that the PUMMA, a small grassroots community group association, has been successful in mobilizing the community groups to respond to mosquito control issues. It also demonstrates that community groups can mobilize other sectors of the community towards achieving a common goal. Partnerships and collaboration with community volunteers, stakeholders and researchers can increase the viability of successful programs that address important health issues. To date, 4 years after its inception, the PUMMA is still active in the community and has been able to participate in Annual mosquito field days, have members trained in mosquito control



activities, and worked closely with stakeholders in providing ITNs to needy and desperate individual in the prisons and rural communities of Mugurureni.

This study presents a coherent and comprehensive model of the factors that foster community participation in decision making for mosquito control in a community - based group. While research suggests that participation may foster effective decisions, there has been little or no systematic or comprehensive research on the factors that facilitated or hindered decision - making process at the community level group.

Findings indicate that community members' positive attitudes towards the addressed issues, recognition of mutual needs and purposes (i.e., individual-organizational and inter-organizational of value congruency), a sense of community, organizational support, feelings of self and organizational efficacy, and positive expectations with respect to personal and organizational gains fostered community members' initial decision to join mosquito control groups. Informants identified further predisposing factors that influenced their sense of efficacy (e.g., previously positive experiences with community programs, the addressed issues, and/or knowledge of the persons susceptible to have a powerful influence on the program) and their awareness of mosquito control activities before the formation of PUMMA (e.g., other voluntary organizations' previous involvement and work in similar or related issues, previous research efforts on environmental managements. As well, the current study has indicated that participants' sense of community was more complex (i.e., had more layers or dimensions) than Wandersman, Florin, and Friedman (1987) definition (e.g., our participants' sense of rooted ness was shaped not only by the number of years spent living in the community,

but also by their identification with the problem). Finally, our respondents further suggested that the community's empathy toward the problem was generated by the respondents' personal experiences (as sufferers), and individuals involved with people who had suffered with the problem.

Findings with respect to the factors that reinforced the respondents' continuous involvement in a community-based project indicate that organizational membership, partnerships with stakeholders and felt success were crucial to sustain community members' interest and involvement. As well, participants' feelings of efficacy and subsequent active participation in a specific community project were facilitated by specific organizational processes, such as consensual decision making and the implementation of action plans with feasible goals, social support and recognition. Informants additionally indicated that increased feelings of affiliation with organizational members, self-actualization, and the fulfillment of valued expectations, whether personal or organizational, further motivated them to maintain their organizational membership. Moreover, the organizational leader's ability to be task-oriented, collaborative, open, sensitive to people's differences and strengths, and to hold deemed reasonable expectations with respect to the participants' involvement and roles also strengthened their desire to remain in the organization. Interestingly enough, many of the factors that fostered community mobilization and continuous involvement are similar to those fostering the effectiveness of community participation and involvement (Butterfoss, Goodman, & Wandersman, 1996; Gottlieb *et al.*, 1993; Kegler, Steckler, Malek, & McLeroy, 1998a; Kumpfer *et al.*, 1993; Parker *et al.*, 1998; Wandersman, Valois, De La Cruz, Adkins, & Goodman, 1996).

Some of the participants' identified barriers to community's mobilization, including lack of community support and participation, community members' negative attitudes towards specific issues, the difficulty of mobilizing individuals in economically disadvantaged communities, felt lack of expertise and technical support, inter-person and group conflicts, unrealistic time-frames, role overload, and felt inadequacy (i.e., lack of training, specific issues, and/or specific organizational processes). Some of these findings support the barriers Cameron et al. (1994) identified for resident participation in the Better Beginnings Better Futures project (e.g., lack of time, felt lack of skills, residents feeling intimidated by professionals). As well, respondents suggested that certain board-related factors (e.g., some organizational members' lack of commitment, meeting structure and times) tended to foster withdrawal from some members. Our findings also suggested additional inhibitors to community involvement. Participants in this study reported that felt role conflict (i.e., participants had too many roles and/or participants' roles were conflictual), role ambiguity (i.e., participants had different or unclear expectations with respect to their roles), specific individuals' fear (e.g., fear of professional redundancy, shyness and social fear), and specific community-related factors (e.g., an "apathetic" community, too little or already overworked volunteers) further hinder community participation and the intervening organization's efficacy. However, the presence of participant-perceived barriers may not be as important as the fact that these barriers are addressed to the satisfaction of the organizational members and continued to be addressed in that manner.

## CHAPTER FIVE: CONCLUSIONS

- Building upon existing community resources is critical for successfully obtaining community support for focused initiatives in promoting community participation in mosquito control.
- Communities wishing to promote mosquito control should examine and catalogue existing strengths (e.g., organizations already involved in similar issues and/or individuals with specific expertise and interest in the diverse domains of the identified issues), and find means of bringing those strengths together.
- Successful collaborations involve multiple partnerships that facilitate skill and knowledge transfers and acquisitions, and allow collaboration of members to maximize their power through joint action, which increases their feelings of personal and organizational efficacy. Multiple partnerships also facilitate reciprocal benefits (e.g., the achievement of shared goals) for all the organizations that are involved in the project.
- Communication skills, interest, and commitment are essential to community involvement. Inversely inter-group conflicts, lack of training, unrealistic time frames, participants' role overload and competing work priorities may be barriers to effective participation.

## CHAPTER SIX: RECOMMENDATIONS

1. The municipal council, ministry of health and research institutions need develop guidelines for community actions in mosquito control activities. This would help in guiding planning and implementation of mosquito control programmes organized by community groups
2. The role played by community groups in mosquito control is commendable. However, lack of funding, support and continuous training will result to frustrations and burnt out. It's therefore important that the initiatives by community groups are supported financially and technically. Community groups need to consult and work together with the relevant stakeholders such as municipal council, ministry of health, hoteliers and business community. This will help in resource mobilization that would help in supporting community initiatives in mosquito control.  
There is a need to have a sustainable funding not just from the donors for mosquito control activities. Guidance, supervision and monitoring of mosquito control activities need to be enhanced by the municipal council public health officials.

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## 8.0. APPENDICES

### Data collection tools

#### 1) Draft Field Guide for individual Interviews among PUMMA members.

Interview No ..... Date .....

Name of group represented.....

Name of interviewer .....

Start time .....Stop time.....

#### Before interview:

Briefly introduce yourself and state the purpose of the study. Seek informal consent to tape the discussion assuring the participant's confidentiality. Tell the participant the time expected for the interview.

#### Check recorder and start the discussion

##### 1) Individual's details

Tell me a little bit about yourself and where you live.

##### 2) Can you tell me more about PUMMA

Details – find out how the group first started, how the decision to start the group was arrived at, its aims and objectives.

##### 3) Membership

How many people are in PUMMA

Where are members of your group drawn from? *PROMPT*

- Community groups
- TOTs
- Community members
- Stakeholders
- Others

Who qualifies to be a member?

Who decides on who should join PUMMA

##### 4) Relationship to the community groups

How does PUMMA relate to community groups?

Meetings, implementation, funding, training

##### 5) Can I ask more about the mosquito activities...

**What if any activities do you currently carry out in mosquito control?**

For each activity:

Details - find out what it is, when they do it, how often, when is the last time. Get all details on the last time and ask if it was typical. Get explanations

Decision-making: How do you decide on what activity to do? Which tools do you use? How did you get the tools? How do you carry out your activities? Who is involved and what are their contributions

**6) Who else is involved in your activities?**

For each one mentioned

In what way (probe: e.g. funding; training; equipment/tools, action) are they involved?

At what stage in your groups' existence did they get involved? And how? (Did you go to them, or they came to you?) How did they learn about your activities?

**5) What problems** do you encounter when carrying out your activities? (Participation by members, leadership, resources, economic demands, external pressure,

For each problem probe how they solve it out

**6) What do you suggest** should be done to improve PUMMA activities in particular and mosquito control activities in the area?



## 2) Draft Field Guide for focus group interviews among community groups affiliated with PUMMA.

Greetings as culturally appropriate. My name is ..... I am from KEMRI and currently a student at Kenyatta University. I am carrying out a study on malaria prevention and control in the community. Your group has been selected from a list of all groups affiliated with PUMMA to participate in the study. The purpose of this study is get views on how malaria and mosquito control activities are carried out in this area. This information will provide valuable information for making recommendations on how the activities can be strengthened. The information will also be used in writing report / thesis for my studies. Feel free to discuss with me, as all the information that you will provide will be treated in confidence. Your name and information that may identify you, as a participant shall not be given to anyone. Our conversation will be recorded using a dictor phone and notes taken. This will help in obtaining accurate information. After the interview, the discussion will be typed and a copy will be brought back to you for verification and corrections as appropriate. I hope that you will feel free to discuss with me about mosquito & malaria and other issues involve your group. You are not under any obligation to participant in the study but is my desire that you do so. Do you agree?

Yes -----

No-----

If yes thank the respondent and continue with the interview.

### 1) Individual's details

Tell me a little bit about yourself and where you live.

**2) Can I ask more about your group?** When was the group started and the activities did you carry out. For each activity mentioned in mosquito control find out the details of what it is, when they do it, how often, when is the last time. Get all details on the last time and ask if it was typical. Get explanations

Decision-making: What made you decide to carry out that activity? What criteria? Who?

### 3) Who else is involved in your activities?

For each one mentioned

In what way (probe: eg funding; training; equipment/tools, action) are they involved?

At what stage in your groups' existence did they get involved? And how? (did you go to them, or they came to you?)

How did they learn about your activities?

### 4) What problems do you encounter when carrying out your activities?

*Probe:* Participation by members, leadership, resources, economic demands, external pressure,

For each problem probe how they sought it out

### 5) Can you tell me more about PUMMA?

*Probe:* how the group first started, how the decision to start the group was arrived at, its aims and objectives.

### 6) Membership in PUMMA

Who qualifies to be in PUMMA group? How is the decision on those who join PUMMA arrived at? Is your group affiliated with PUMMA? Who represent your group in PUMMA? How did you decide on who should represent the group in PUMMA?

### 7) What is the relationship between PUMMA and community groups?

Why did you decide to join PUMMA? What can you say are the benefits of being in PUMMA. *Probe:* Technical advice, meetings, implementation, funding, training etc. How does PUMMA relate to community groups?

### 3) Draft Field Guide for individual Interviews among stakeholders in mosquito control in Malindi Kenya.

Greetings as culturally appropriate. My name is ..... I am from KEMRI and currently a student at Kenyatta University. I am carrying out a study on malaria prevention and control in the community. You have been selected from a list of all major stakeholders in mosquito and malaria control to participate in the study. The purpose of this study is get views on how malaria and mosquito control activities are carried out in this area. This information will provide valuable information for making recommendations on how the activities can be strengthened. The information will also be used in writing report / thesis for my studies. Feel free to discuss with me, as all the information that you will provide will be treated in confidence. Your name and information that may identify you, as a participant shall not be given to anyone. Our conversation will be recorded using a dictor phone and notes taken. This will help in obtaining accurate information. After the interview, the discussion will be typed and a copy will be brought back to you for verification and corrections as appropriate. I hope that you will feel free to discuss with me about mosquito & malaria and other issues involve your organization. You are not under any obligation to participate in the study but is my desire that you do so. Do you agree?

Yes -----

No-----

If yes thank the respondent and continue with the interview.

#### 1) Individual's details

Tell me a little bit about yourself and where you live.

**2) Can I ask more about the groups?** Do you know of any group working on mosquito activities? For each of the group mentioned ask what activities the group is involved with? For each activity mentioned in mosquito control find out the details of what it is, when they do it, how often, when is the last time. Get all details on the last time and ask if it was typical. Get explanations

Decision-making: who decides on what activities to carry out? What criteria? Who?

#### 3) Who else is involved in the activities?

For each one mentioned

In what way (probe: e.g. funding; training; equipment/tools, action) are they involved?

At what stage in the groups' existence did you get involved? And how? (did you go to them, or they came to you?)

How did you learn about their activities?

**4) What problems** do you encounter when carrying out your activities? (participation by members, leadership, resources, economic demands, external pressure,

For each problem probe how they sought it out

### 5) Can you tell me more about PUMMA?

Details – find out how the group first started, how the decision to start the group was arrived at, its aims and objectives.

### 6) Membership

Are you a member of PUMMA? How are decisions on those who join in PUMMA arrived at? (Who qualifies; who decides on who should join PUMMA or what criteria is followed)

### 7) What is the between PUMMA and community groups and stakeholders? (What can you say are the benefits of being in PUMMA.

*Probe:* Technical advice, meetings, implementation, funding, training)

How does PUMMA relate to stakeholders?

### 8) Where were the groups 5 years ago, where do you see them today and where do you see them 5 years to come. For each of the period find out the explanations on the answers given.

### 9) In your opinion what advice can you give to mosquito control groups?

#### 4) Observational tool

Direct observation of community group and PUMMA members during group meetings.

Group name: .....Date of the meeting.....

**Key: A = Adequate NA = Not Adequate NA/NO = Not applicable or not observed**

Observation criteria		A	NA	COMMENTS	NA/NO
1	Keeps the group focused on meeting its purpose and responsibilities				
2	Prepares an effective agenda for meetings				
3	Writes effective minutes or notes				
4	Supplies information from the meeting to appropriate individuals				
5	Other stakeholders attends the meetings				
6	Groups representation				
7	<p>When needed, uses consensus-building skills as follows:</p> <ol style="list-style-type: none"> <li>1. Identifies the type of decision needed (debatable, exploratory, negotiated, routine, emergency decisions)</li> <li>2. Provides a clear definition of the problem (What is the problem? How did we get here? What are the effects of the problem?)</li> <li>3. Communicate a clear understanding of who has the responsibility for the decision</li> <li>4. Uses effective communication and open-ended questions for producing ideas (What results do we want? What solutions can we think of?)</li> <li>5. Selects an appropriate size of group for decision making</li> <li>6. Provides a means for effectively testing different alternatives relative to the problem (What decision is best for us?)</li> <li>7. Elicits ideas from others on how to make change go smoothly</li> <li>8. Presents an honest commitment to the group decision-making process (Who will do what by when? Where?)</li> </ol>				

Observation criteria	A	NA	COMMENTS	NA/NO
How?) 9. Obtains agreement on the procedures and methods for decision making prior to deliberation of the issue 10. Asks key or clarifying questions 11. Keeps the group focused on the task 12. Summarizes the discussion and decisions				
7 Manages group dynamics				

Further comments:.....

.....

.....

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**AN INVESTIGATION INTO THE FACTORS AFFECTING THE GROWTH OF  
WOMEN-OWNED SMALL AND MICRO ENTERPRISES IN KENYA: A CASE  
OF SELECTED MARKETS IN NAIROBI PROVINCE**

**BY:**

**RACHEL N. KARANJA**  
**D53/6186/2003**

**A RESEARCH PROJECT REPORT SUBMITTED IN PARTIAL FULFILMENT  
OF THE REQUIREMENT FOR THE AWARD OF THE DEGREE OF MASTERS  
OF BUSINESS ADMINISTRATION.  
(ENTERPRENUERSHIP)**

**SCHOOL OF BUSINESS**

**KENYATTA UNIVERSITY**

Karanja, Rachel N.  
*An investigation into  
the factors affecting*



2009/336444

**NOVEMBER 2008**

## DECLARATION

This is my original work and has not been presented in any other University, or for any other award.

Rachel N. Karanja  
D53/6186/03


Signature:  Date: 27/11/2008

## SUPERVISOR'S APPROVAL

This research project has been submitted for consideration with my approval as a University supervisor's

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Signature:  Date: 27.11.08  
**Mr. D. K. Ngaba**  
Chairperson,  
Business Administration Department



## DEDICATION

This work is dedicated to my late parents, Mr. Hiram Ndigirigi and Joan Mumbi, for their love for me, and their contribution to girl child education. Dad, mum I loved you in life, I cherish you in death.

## ACKNOWLEDGEMENTS

I wish to express my gratitude to my Maker, God almighty, for giving me good health this far; my family for their understanding and love; all my lecturers in the School of Business for their and guidance in the entire Masters programme.

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To my daughter Jane Wanjiru, you were a source of inspiration to me.

Thank you.

## ABSTRACT

In Kenya, dominance of trade over other sectors - manufacturing, services and construction - occupy two thirds of the country's enterprises. This means that a large proportion of Micro-Small Enterprises (MSEs) is engaged in buying and selling of commodities. Women productive activities are concentrated in small-micro enterprises in such ventures as hawking, retail trade, manufacturing and periodic market trade, (Mullei, Bokea 1999). Participation of women in trade is 86 per cent, which is (20 per cent higher than men). Despite the numerical dominance of women in small-micro enterprises, there are marked gender disparities and inequalities between men and women participating in similar activities. Studies touching on problems affecting women entrepreneurs give emphasis to economic forces and fail to address adverse African traditions that inhibit women's participation in MSEs.

This study investigated the factors affecting the growth of women owned micro-small enterprises. The researcher surveyed women micro-small enterprises in view of business structure, performance and constraints hindering their participation in MSEs. The objectives of the study are: (i) to determine the demographic characteristics of women operating MSEs (ii) to establish what motivates women to participate in MSEs. (iii) to determine the role played by education, training and previous jobs in making of entrepreneurs. (iv) to investigate the factors affecting the growth of women MSEs.

Literature related to the study was reviewed. A survey method was adopted whereby purposive sampling method was used to select 60 women micro-small entrepreneurs from a target population of 600 women entrepreneurs from 3 markets in Nairobi province: Wakulima, Gikomba and Kangemi Harambee market which were selected using purposive sampling method. Structured and unstructured questionnaires were used to collect the data, which was analyzed using Statistical Package for social Sciences (SPSS). Simple regression and correlation was used to determine the relationship between variables.

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## LIST OF ABBREVIATIONS

GoK	-	Government of Kenya
GDP	-	Gross Domestic Product
ILO	-	International Labour Organization
MESP	-	Micro Enterprises Support Programme
MLHRD	-	Ministry of Labour Human Resource Development
NGO	-	Non-Governmental Organization
SPSS	-	Statistical Package for Social Sciences
BDS	-	Business Development Services
KWFT	-	Kenya Women Finance Trust
MSE	-	Micro-Small Enterprises
WEEC	-	Women Economic Empowerment Consort
WED	-	Women's Enterprise Development,

## OPERATIONAL DEFINITION OF TERMS

**Entrepreneur:** Applied to those who start-up and manage enterprises based on incubated new ideas and provide value addition to society through their initiatives.

**Entrepreneurship:** The process or art of business management through combination of land, labour and capital to achieve a finished product/service to satisfy needs and wants.

**Performance:** Refers to changes in the following indicators in an enterprise, fixed assets, number of employees, profit level, sales, debtors, creditors and stock..

**“Enterprise”** and **“Business”** refers to a set of non-farming economic activities carried out by one or more owners. These terms are used synonymously in this study.

**“Micro-Small Enterprises”** and **“Informal Sector”** are used synonymously in this study. This refers to business enterprises employing 1-2 workers including working owner. The main features of the enterprises, is smallness in scale of business activity, self-employment, high proportion of family workers and apprentices, little capital investments, low level of skills and low levels of organization. Micro-small and small-micro enterprises are used interchangeably.

**Informal Enterprise:** Are those enterprises engaged in economic activities that do not comply fully with the regulations governing such activities. Such enterprises are not registered, some or all of their employees receive less than the minimum wage, their employees may not have been registered with social security system and they could not be paying taxes.

**Constraints:** Refers to those factors that impede the smooth operation of an enterprise.

**Employment:** Refers to the total number of people working in an entity and who may or may not be paid salaries or wages. Such employment includes owner/operators and family members.

# CHAPTER ONE

## 1.0 INTRODUCTION

### 1.1 Background of the Study

A notable trend on enterprise management is the visible emergence of women as small firms' owners. Over the past few years, particularly in U.S. the number of firms started by women surpassed men-owned firms; women-owned small and medium firms created over 80% of new occupations. In 1996, 36% of all companies in the U.S. were owned by women with a workforce of 189 million for 26% of the total workforce in the U.S. Studies done in Korea, (1998 Research Report) indicates that women entrepreneurs experience additional difficulties because of gender discrimination in addition to general difficulties, which small and medium companies are confronting. Despite those difficulties, the number of successful businesswomen is growing.

However, there is little resource available on type, size, start-up, business process and outcome of women businesses; there is also lack of basic statistics on size of women entrepreneurs. Reduction of gender inequities and bringing women in the mainstream of development has been a major policy concern by United Nation bodies, Governments and many Non-Governmental Organizations (NGOs).

In African countries resource ownership patterns is gendered to the disadvantage of women, leading to gendered poverty (Mbughuni, 1994). Alleviation of women's poverty and hence social poverty in Africa will be achieved by adapting equal participation in entrepreneurship. In the past two decades, policy-making bodies of developing countries

have increasingly and explicitly recognized that small-scale enterprises have potential for contributing to economic and social development of their countries. Supportive measures have been set up but despite these efforts, women's participation in entrepreneurship remains very low. For the few women who are already in business, the problem of their survival remains a real one. The above situation suggests that there must be fundamental and practical factors that affect women's entry into, and survival in business.

In addition, before independence, foreigners dominated modern entrepreneurship with Africans playing only an insignificant role. The level of entrepreneurship in any economy is strongly determined by environmental factors. Lack of conducive policies in Africa has resulted to low levels of entrepreneurship and underdevelopment, the present crisis and high levels of unemployment.

Micro and small enterprises (MSEs) dominate the Kenyan economy. The MSE sector is the biggest employer outside Agriculture. About seventy percent live at the bottom of the economy that means living below poverty line. They engage in economically uncompetitive activities mainly for subsistence. Most of these enterprises operate within the informal sector in Kenyan context referred to as '*Jua Kali*'. The growth rate of the informal economy has considerably outpaced that of the formal sector. In pursuit of state recovery, the government has stated its commitment to "Integrating the MSE sector into economic grid". The government has taken a serious look at the potential of the informal and MSE sectors for driving employment, poverty reduction and economic growth. However, lack of coordination of the various implementing agencies, poor resource management, and lack of enthusiasm by policy makers to encourage the growth of the

informal sector in urban areas could explain the poor implementation of record in the MSE sector. Nevertheless MSEs are seen as businesses and employees that provide one of the most prolific sources of employment.

In Kenya, women's productive activities are concentrated in micro enterprises, in such ventures as hawking, retail trade, and manufacturing and periodic market trade. There has been significant growth in female self-employment, with women now starting new ventures at three times the rate of men. Women entrepreneurs have been identified as significant and a growing part of Kenyan Business Community (Dondo, 1998). From the government of Kenya *Report*, there were 2.8 million MSEs in 2002, contributing to employment of 5.1 million persons. The women MSEs are about 1.3 million generation of about 2 million jobs to Kenyans (including themselves). This shows that the women owned enterprises are likely to increase women employment more than men-owned (Masinga 1994) and with this, the potential to create viable occupation for the ever-growing women population in Kenya (Kenya Population Census Report 1999).

The social change paradigm has resulted to changes in traditional norms, beliefs, values, attitudes, family systems and division of labour. (Vag 1996; Mc Cormick and Pedersen, 1996). Prior to such changes, the male dominated indigenous cultures denied women critical economic rights in land and other property ownership. Capitalist system maintained similar structural productive relations in terms of the traditional-modern and rural-urban dichotomies (Snyder and Tadesse, 1995), leaving the women marginalized in terms of access to basic economic opportunities and security items for credit.

Until changes are realized in these structural arrangements, women will continue to face problems that are attributable to both endogenous and exogenous change processes out of which women will only have access to limited benefits. Planned efforts aimed at improving the women's welfare have not achieved very much due to the inherent biases, which tend to favour the males (Seidman and Anang, 1992).

Women assisted projects have been on welfare approach rather than promotion of women's economic independence and growth. Consideration of women interests under the umbrella of "gender and development" is another way of creating serious hurdles against women's advancement in social, economic and political areas of concern. Eigen (1994) states that little progress has however been recorded towards active integrating of Kenyan women in the mainstream of economic activities.

Generally, the informal sector encounters difficulties in licensing procedures and such constraints as inadequate resources, markets, exploitation by middlemen and manufacturers, poor business management skills and wanting government policies as reflected in lack of macro-economic discipline, poor and uneven enforcement of laws and regulations. Yet, while such constraints affect both sexes, women are often more disadvantaged than men (K-rep, 1991). The Sessional Paper No.2 of 1992 also acknowledged gender equality among entrepreneurs in the small sector as undermined by the special constraints women face. Among the constraints Sessional Paper identified are loopholes in the implementation of equitable laws, particularly in employment and inheritance as well as discriminatory and often negative attitude and social practices that



limit equal participation of men and women in all entrepreneurial activities. In spite of the policy proposal to sensitize women and to focus on their, there is still a marked difference in women-owned enterprises. Women entrepreneurs face unique socio-economic obstacles in running their businesses hence performing poorer compared to their counterparts.

## **1.2 Statement of the Problem**

Majority of small-micro enterprises are found within the informal sector. They are young firms that are generally vulnerable to harsh economic conditions. McCormick (2001) noted significant differences in the performance of women's enterprises vis-à-vis those of Kenyan men. Their businesses are smaller, less profitable, less likely to grow and begin with less capital investment than those of men. Sessional Paper 1992 highlighted the unequal situation of women versus men in MSE sector and acknowledged that: "Gender equity", among entrepreneurs was undermined by the special constraints faced by women, including loopholes in the implementation of equitable laws, particularly in employment and inheritance, as well as discriminatory and often negative attitudes and social practices that limit equal participation of men and women in all entrepreneurial activities (Kinyanjui and Munguti, 1999).

Despite difficulties faced by women in business, the number of successful businesswomen is increasing. Globally, formal jobs are on the decrease hence the need to support MSEs. Industrialized countries achieved economic development through promotion of MSEs. If Kenya is to generate employment and reduce poverty, there is

need for more attention to be paid to this sector than the case now. This study sought to investigate the factors affecting the growth of women-owned micro-small enterprises in selected markets in Nairobi Province.

### **1.3 Purpose of the Study**

The purpose of this study was to investigate the factors affecting the growth of women-owned small-micro enterprises.

### **1.4 Objectives of the Study**

#### **1.4.1 General Objectives**

To investigate the factors affecting the growth of women owned small-micro enterprises.

#### **1.4.2 Specific Objectives**

- (i) To determine the demographic characteristics of women entrepreneurs operating MSEs.
- (ii) To establish what motivates women to participate in micro- small enterprises.
- (iii) To determine the role played by education, training and previous jobs in making of entrepreneurs.
- (iv) To investigate the factors affecting the growth of women MSEs and suggest possible solution.

### **1.5 Research Questions**

1. What are the general characteristics of women operating micro-small enterprises?
2. What is the structure of small micro-entrepreneurships operated by women?

3. What are the main reasons behind joining the field of micro-small enterprises?
4. What effect does level of education and training have in their business operations?
5. What are the factors affecting the growth of women micro-small entrepreneurs?

### **1.6 Significance of the Study**

This study has brought into light the factors affecting the growth of women small micro-enterprises. It is expected that the information generated from this study will be helpful to policy-makers in designing policies meant to encourage micro-small enterprises in urban sectors; Non-governmental organizations (NGOs) that encourage establishment of micro-small enterprises at urban level will find the results of this study helpful; Women entrepreneurs and those aspiring to join micro-small enterprise sector, as it has provided information on challenges facing women entrepreneurs; and to the Academia this study will contribute to the body of knowledge regarding micro-small enterprises. It has also great potential for comparison with other related studies and future ones.

### **1.7 Scope of the Study**

This study focused on women micro-small entrepreneurs owning and running MSE enterprises in the three selected markets in Nairobi: Wakulima, Gikomba and Kangemi Harambee market, dealing with all types of businesses. Most of Kenyans MSEs are in the urban strata; Nairobi and Mombasa and other major rural towns account for 66 percent about 2/3 of Kenyan MSEs. The density of MSE is higher in urban areas, Nairobi and Mombasa accounting for 16 per cent of the total MSEs and 17 per cent of their total employment. Women are starting businesses three times as men and the

Nairobi City was selected considering the dense population mainly composed of women. The markets selected are due to their visibility, with respect to the volume of micro enterprises; easy reach from the city centres and characterized by the presence of a majority of female owned businesses. Wakulima is along Haille Selesie Avenue near county bus station. It is operated as a wholesale market being spaciouly designed with a roof supported with columns and partial walls. The market has no stalls but traders display their wares on the cement floor in specific spaces. The market produce comes from the surrounding rural areas and sold in wholesale mostly to women who control the market purchases. The products are then sold to micro-small retailers and institutions that buy direct from the market.

Kangemi Harambee market is 7 kilometers from Nairobi city situated along Nairobi-Nakuru Highway. The market was started on a harambee basis in 1975. It has semi-permanent sheds and an open-air market space where sellers spread their wares on the floor. The market is in a slum area and has attracted poor working class and the unemployed. A population with low literacy levels characterizes the area, overcrowding, poor housing, poor drainage system, small-scale business of all types, and various social and economic activities.

Gikomba market is about 2 kms from the city centre on Chiriku Lane off Pumwani Road. Gikomba market is a conglomerate of businesses: flesh foodstuffs and cereals, sale of old clothes (mitumba), hardware stalls, and furniture shops. The selection of the market is due to its diversity in the micro-small entrepreneurs in social background, level of education and residential status.

## **1.8 Limitations of the Study**

The Survey Method was applied in the study and involved physical movement, meaning it called for use of researcher's time and money. There were limitations regarding the data and information which people were able and willing to give. For example the study touched on people's worth in terms of their businesses, which many people want to hold confidential. Face-to-face interviews involved physical movement and this was time consuming and costly; which in turn affected the size of the sample selected. The study was done during an election preparation period and women were very sensitive in giving information freely especially involving payment of taxes and business licenses. They were skeptical about the genuineness of the research and felt that they may be out for cheating.

## **1.9 Basic Assumptions**

The following were basic assumptions of the study:

- (i) That the women in the sample would be co-operative and give honest responses.
- (ii) That the challenges encountered by women micro-entrepreneurs in the selected sample would be similar to those of other women entrepreneurs in the survey location.

## CHAPTER TWO

### 2.0 LITERATURE REVIEW

#### 2.1 Introduction

Kenyan social systems are known to be inherently biased against women; and thus give only a marginal attention to women's needs (Kariuki 1985; Seidmaan and Anang 1992) As such women face problems that are often qualitatively different from those encountered by men, for example access to information, training and credit (K-Rep 1985). Studies by ILO (1984), Keino and Ngau (1996), Hay and Stitcher (1984) UNECA (1990) have touched on women problems, however giving emphasis to economic forces and failing to address some adverse African traditions that inhibit women's participation in the MSEs.

#### 2.2 The Profile of Kenyan Woman Entrepreneur

Although there is limited available research on the profile of Kenyan women entrepreneurs, there is certainly anecdotal evidence that this profile is not homogeneous, perhaps falling into three segments. Women in each segment differ slightly from those in the others in terms of their demographic profile, extent of previous business experience, capacity, needs, and access to resources (credit, premises, and business development services BDS) and orientation towards growth.

According to Lois Stevenson and Anette St-Onge (2005) the first segment is that of the *Jua Kali* micro-enterpriser. The women who own these enterprises, often registered and in the informal economy, have little education (less than secondary level), and are constrained by their lack of entrepreneurial and business know-how, access to credit, and

awareness of markets and market opportunities. They are further constrained by household responsibilities and the need to obtain permission from their husbands to travel out of town for training or trade fairs. Husbands object to their wives participating in training and counselling services provided by men. Since men make up about 90 per cent of the trainers and business service providers in Kenya, this is particularly problematic. These women start very small enterprises, most likely only employ themselves or a few family members, and operate from a home base or *Jua Kali* sheds. Their enterprises have limited potentials for growth. To obtain credit for her business, a woman is likely to participate in a “merry-go-round” group of five or six women who combine their savings over a six-month period of time and then start lending, on a very short-term basis, to members from the pool. The group is referred to as the grassroots “underclass”. Many *Jua Kali* women have the potential to move into the “economic grid”, but need more support encouragement, visibility and economic empowerment.

The second segment is comprised of women with very small (6-10) employees and small enterprises (over 10) employees; who have a minimum of secondary education, previous experience as an employee in a public or private sector enterprise, and a supportive husband who may be directly or indirectly involved in the business. Their businesses are generally registered and operate from legitimate business premises. Although these women are more likely to be able to access to BDS, training and micro-finance, they are still constrained by access to financing. Once they have surpassed the lending limits of micro-finance organizations (over 500,000), they are still likely below the threshold to be of interest to commercial banks, which prefer to lend to large depositors. Furthermore,

they are unlikely to have title deeds and cannot meet collateral security requirements. Many of the firms owned by these women have growth potential; some already tapping into international markets.

The third segment is made up of women with university education, who came from entrepreneurial family backgrounds, have experience in managerial positions in the corporate world, access to financial means and supportive husbands. This group is referred to as the “elitist class”. These women are amongst the group most likely to have small, medium-sized or larger enterprises with growth potential and the group most likely to be engaged in exporting.

Kenyan women entrepreneurs at the micro, *Jua Kali* level, have great difficulties obtaining finance due to collateral constraints. Most of them are forced to cooperate with other women in small groups to mobilize savings and pool these resources for lending to individual group members. Alternatively, they form into small groups to access micro-credit, through a mutual guarantee system, from a micro-finance organization, such as the Kenya Women Finance Trust (KWFT) or the Women Economic Empowerment Consort (WEEC). Men have an easier time accessing credit because they are more likely than women to have title deeds to offer as loan collateral. This enables them to function on an “individual” basis more so than women, who must use the group to pool resources. Men stand better than women, while women still need to work in groups.

Women who make it beyond the micro-enterprise threshold of more than five employees



are seen as more able to stand on their own, but they often lack sufficient working capital to prepare for a growth in demand, unable to fulfill a large order because they do not have the working capital to finance raw materials and work-in-progress inventory. The interest rates of commercial banks range from 16 to 21 per cent, and they prefer to cater for clients who have large deposits. A scheme is needed to provide credit to those women who are trying to pursue growth objectives – lower interest loans to meet their capital investment and working capital needs.

Women with larger enterprises are more sophisticated, better educated; more experienced, more traveled, and have access to more networks, information and resources. However, they would benefit from better access to information regarding market opportunities, export procedures, and leadership development. Although this group may have greater access to collateral, they may still face some barriers to obtaining flexible financing for the further development of their enterprises.

### **2.3 Dimension of Women in Business**

Women in MSEs are concentrated in enterprises that conform to their traditional gender roles. According to (Mullei, Bokea 1999), women dominate MSEs despite the marked disparities and inequalities between men and women participating in similar activities.

Research on gender has exemplified differences in motives for starting micro-enterprises and attitudes and strategies related to their survival and growth. There are a wide range and circumstances that motivate women to start up business (Broadley 1990).

Women in the urban sector have turned to starting businesses as a direct response to

unemployment coupled with the husband's low level of earnings. There is also a general sensitization of women into a sense of enterprise culture, making women aware of enterprise as an option. Women are re-entering the economy after an absence after discovering their original or current skills are redundant. Such women are reviewing the options open to them as they go back to paid work; one option being self-employment. Carter and Cannon (1988b) identified a woman 'returner' who had been motivated to return to economic activity on favorable terms. The current demographic changes have led to a shortage of skilled labour in the economy. The girl child is being encouraged to learn and by acquiring skills, will become a source of female business owners.

Women headed families are on the increase necessitating the need for women to make a significant contribution to the family income. Part-time work on low wages with minimum security has motivated women to starting business. Holmquist and Sundin (1989) saw the main motivation into business start up and for women as a creation of something, which would allow them freedom to combine responsibilities for the family with a fair income. Goffee and Scase (1987) unidentified this group as 'Conventional' female entrepreneurs, who were motivated by a need for autonomy, to acquire their own money, but only in a way that was compatible with their domestic role.

For women who are underemployed, with little job satisfaction, self-employment becomes a means of creating stimulating work over which they have greater control. This control extends beyond the workplace, enabling women to harmonize economic activity within a valued family environment.

The frustrations of the 'glass ceiling effect' (Hymounts 1986) have also motivated women to look towards business creation. Women often reach an invisible but unyielding promotional barrier within the managerial hierarchy of larger organizations, and self-employment is seen as a vehicle through which their personal needs can be satisfied. Carter and Cannon (1988a) identified such a group of 'high achievers' who he described as older women who had successful careers and desired independence because of gender related career blocks. Such women may also desire for the flexibility to have a family, which may not be possible while in formal employment.

#### **2.4 Performance of Women's Enterprises**

Mc Cormick (2001) noted significant differences in the performance of women's enterprises vis-à-vis those of Kenyan men. Their enterprises are smaller, less likely to grow, less profitable, and begin with less capital investment than those owned by men. Not only is there a great deal of gender segregation by sector (with women dominating in food processing, beer brewing, hairdressing, dressmaking, and retail of second-hand clothing, while men dominate in metalwork, carpentry, vehicle repair, shoe making, construction and transport), but women and men operate from different locations. Men are twice likely as women to locate in trading centers, commercial districts or roadside locations; women are almost twice as likely to be operating from the home. Women are three times as likely as men to belong to some type of business association, although there are indications that women's networks have less power to assist their businesses.

Mc Cormick (2001) isolated three factors that account for these differences in enterprise performance. The first factor has to do with the level of education. On average, women entrepreneurs are less educated than their male counterparts and twice as likely as men to be illiterate. The major reasons for this difference are institutional in nature. Marriage institutions discourage investment in women's education and the division of labour assigns a greater share of household responsibility to girls. Because they have lower educational attainment, they are also less likely to benefit from management and technical training programmes. The second factor has to do with the opportunity to accumulate savings. Because women have lower levels of education and are segregated into lower paying jobs, they have lower savings with which to start a business. The third factor is to do with how women spend less time in their businesses than men because they are expected to carry out their domestic responsibilities, including housework, food preparation and childcare. This also explains why women are more likely to operate their business from the home. Mc Cormick concludes that gendered patterns of business operations are supported by five institutions – the incorporation of the wife into the husband's family, the division of labour within the household, the division of asset ownership (the tradition that vests ownership of land in males remains strong, even though women can purchase and inherit land), the sharing of household expenditures, and the allocation of educational opportunities. The larger the group of enterprises, the fewer women entrepreneurs one will find. Over 85 per cent of the enterprises owned by women do not have any employees except the owner. Of the 9,041 small enterprises (1999) with 11-50 employees, it is estimated that women own fewer than 20 per cent; this amounts to less than 0.3 per cent of all women-owned MSEs.

Throughout the developing world, low income women micro entrepreneurs tend to work in same types of businesses – vegetable/commodity trading, food kiosks, catering, beauty salons and tailoring. This is because these enterprises are familiar to them, are relatively easy to start, with low capital and minimal skill. Women often get their business ideas when they see other women make money by selling a particular good or service. However, when too many women start similar businesses, the market becomes saturated and everyone's income suffers. A high percentage of low-income women lack the skills, ideas, or ability for innovation needed to respond to threats in the market place. When one business closes, they often begin another one that requires similar inputs, but is in a different sector. The poor in all circumstances will be ill placed to take advantage of economic growth unless deliberate interventions are put in place to increase their opportunities and access to the resources, skills, and services required for them to rise out of the poverty trap. As female-headed households constitute significant proportion of the urban poor, any intervention must be gender sensitive, (GOK, Interim Poverty Reduction Strategy for 2000-2003). Women entrepreneurs are expected to make a significant contribution to economic development and industrialization of the country by the year 2020 (GOK, 1986).

Dondo (1990), noted that most projects providing assistance to women have taken a welfare approach, without much success in promoting women's economic independence and growth. The projects are often incorporated in programmes that are usually very broad, encompassing such other components as family planning, maternal and childcare,

and home based appropriate technologies. Some structural and gender focused efforts, such as those manifest in Women and Development programmes have, for instance supported participation of women in basic income generation activities through informal sector programmes which are largely welfare oriented, operating at subsistence level of production and designed to cater more for enhanced confidence and awareness, than to create sustainable profit centers (McCormick, 1998).

The performance of small businesses, determined in terms of their economic contribution to job and wealth creation through business start up and growth, has become an important area of policy and academic debate. However, little rigorous and in-depth research has been undertaken on the issue of gender and business performance. Although many studies have made some mention of it, many have shied away from direct examination of quantitative performance measures, preferring instead to engage in discursive debate concerning gender differences in quality assessment of success.

These studies show that women perform less well on qualitative measures, such as job creation, sales turnover, and profitability. (Cliff, 1998). This, its often argued, is usually because women are faced with structural disadvantages, and their consequent lack of human, social and financial resources constrains their business performance from the outset (Marlow and Strange, 1994). Carter et al (1977)s analysis, based on the US retail sector found that women were more likely to exit business, and related this to the low level of initial start up resources and the founding strategies of the owner. The importance of the initial business strategy was reinforced in a recent study of Gundry and

Welsch (2001). Kamunge (1990) asserts to this when he highlights poor project identification, selection, planning and implementation as difficulties encountered by women in business.

## **2.5 Constraints Facing Entrepreneurship**

A review of literature on a study done in Tanzania entrepreneurs reveals two types of hypotheses that attempt to explain entrepreneurial development and constraints. The first hypothesis focuses on entrepreneurship as an environmentally determined phenomenon. That is, entrepreneurship is influenced by social, legal, economic and political factors. The second hypothesis focuses on the individual personality and therefore emphasizes the importance of individual traits to the formation of the business.

Morris and Lewis (1991) model provides the best insight to the understanding of environmental factors of entrepreneurship. They look at entrepreneurship traits as strongly influenced by political and economic systems (the infrastructure), rapid and threatening change (environmental school and work environmental turbulence) and one's family, school and work environmental (life experience). At national level, policy makers can have an effect by redesigning the infrastructure and facilitating innovation and change. At company level, management can create organizational environments, which tolerate and support creativeness, autonomous and risk taking behaviors while at the level of individual the educational system has great potential for helping develop characteristics associated with entrepreneurship. Education shall encourage individual initiative, conceptual thinking, conflicting ideas and unstructured problems solving.

Morris and Lewis saw these factors as determining the level of entrepreneurship in different countries. Thus, a country with conducive policies, organizational environments and educational systems is expected to have a high level of entrepreneurship. Other studies by Papanek (1971), Gasse (1990); Harris (1971); and House et al. (1993) emphasize the importance of a conducive economic and legal environment for entrepreneurship development. Supporters of trait theory of entrepreneurship see attitudinal and behavioral factor differentiating entrepreneurs from non-entrepreneurs and successful entrepreneurs from unsuccessful ones. This approach emphasizes the importance of the individual entrepreneur to the formation of business. In agreeing with this view, Palmer (1971) considers that areas, which possess capital and resources while suffering from a scarcity of entrepreneurs, a lag in economic development is expected.

A lot of the literature on trait approach has been developed from McClelland's work. The literature views a successful entrepreneur as the one who sees an opportunity by understanding the marketing environment – the current and future needs, wants and varying habits of the consumer – and takes advantage of this opportunity by executing a business activity. Supporters of trait theory, agree that the entrepreneur is not necessarily motivated by the money but rather by high needs to achievement. This type of motivation makes a better entrepreneur (McClelland, 1969). Other entrepreneurial characteristics include: innovation, risk taking, self-confidence, proactiveness, people and future orientation (EL Namaki, 1985; Gibb 1990; Kao 1990; Knight, 1921; Mancuso,



1974; McCaelland, 1961,1962,1969,1971; Miller, 1983; Palmer,1971; Patel, 1986; Hornaday and Aboud,1971) Hornaday and Aoud revealed other personality traits such as support, independence and leadership.

The two schools of thought have come to one conclusion that: entrepreneurship is not a biological trait. More so, entrepreneurs can be developed, and that even the much-advocated entrepreneurial traits can be learnt. For example trait approach accepts that characteristics of the entrepreneurs are related to certain sociological factors in the entrepreneur's childhood, and then molded by personal experiences in adult life. Entrepreneurial competencies may therefore be developed by training and education (Gibb, 1990; Romijn, 1989).

Literature review of earlier studies of less developed countries (where Kenya belongs) distinguished three approaches: -

- The psychological and sociological theories of entrepreneurship supply (McClell and Hagen 1962), consider individual personality to influence entrepreneurship. Entrepreneurial behaviour is seen as resulting from attitudes, which in turn are affected by the social environment (parental guidance, religion belonging to marginal groups etc).
- The economic approach exemplified by Papanek (1971) and Harris (1971) emphasizes the importance of the economic importance of the economic environment which is either conducive or repressive to entrepreneurial activity. According this view, entrepreneurial activity responds to a

change in “demand” for entrepreneurs.

- Finally, is the functional approach supported by Kilby (1971). Kilby maintains that “it is the quality of entrepreneurship that is vital” rather than the supply and demand issues that are the concern of the first two approaches mentioned above. His analysis of empirical studies on this subject concludes that it is “managerial skills that are in short supply in developing countries.

From the view, the importance of quality and quantity entrepreneurship is evident. The studies stress the importance of a conducive environment and the quality of management to entrepreneurship development. The paper on urban self-employment in Kenya, House et al. (1993) identified resources, market and legal variables as factors that hinder entry into self-employment. Other studies have cited management as the main obstacle to entrepreneurship in Africa.

## **2.6 Factors Affecting The Growth Of Women-Owned Mses**

In general operators of MSEs encounters difficulties in licensing procedures and other such constraints as inadequate resources, lack of markets, management skills and defective government policies as reflected in the lack of macro-economic discipline and poor and uneven enforcement of laws and regulations. While such constraints affect both sexes, women are often more disadvantaged than men (K-Rep, 1991).

The difficulties encountered by women micro- small entrepreneurs include inadequate working capital, small unviable, duplicated projects, poor technical and management skills few marketing opportunities, poor marketing opportunities, poor marketing skills a lack of work-site security and basic infrastructure, limited access to resources (especially land and credit), hostile business environments, poor reading and writing skills. The latest draft sessional paper on development of MSEs acknowledges need to be addressed if the MSE sector is to realize its full potential. These constraints can be classified into internal and external constraints though in some cases the constraints may not be distinct.

Few female entrepreneurs manage to enlarge their scale of their operations. There are a number of factors that could explain this behaviour:

Firstly, the familial responsibilities and family ties, which are taken to be a woman's first duty, to bear many children and to rear them. This puts women in a disadvantaged position in entrepreneurial venture reflected in their multiple responsibilities (e.g. care of children and household etc). To release some of their time from familial responsibilities, women have to rely for support on the members of their extended family. The stronger a woman entrepreneur is embedded in a wider kin network the less time she has to spend on her domestic duties, which enables her to spend more time on directly productive activities. The extended family and the need for strong traditional co-operation and reciprocity place enormous pressure on anyone with case at hand to aid a needy kinsman or co-ethnic (Lewis 1976:140). Shortage of capital and lack of appropriate and unsecured credit represents one of the major obstacles to the expansion of female enterprises, women lack the three most common forms of collateral required for credit: land title,

cattle or co-operative membership.

A study (Food and Agriculture organization undated: 5) shows that 30 per cent of household heads only 7 per cent of women receive credit. Low levels of education of technological know how are other factors affecting female entrepreneurship out of the estimated 700 million people in the world people are illiterate, two thirds are female – lack of time, fatigue, husbands disapproval, child care and domestic chores, and lack of transportation severely limit women's opportunities to participate in non-formal and life-long education programmes (Mand 1980:30). Female entrepreneurs are restricted in traditionally operated activities, such as food production, nutrition, health and child care, little technological changes have taken place in these areas. Generally women lack access to technical skills training as well as marketing or business training, which limits their business activities.

Women are faced with a narrow market horizon and hence are unlikely to diversify their entrepreneurial activities due to their unawareness of demand patterns prevailing in the wider society. This narrow market horizon is a function of their low education levels as well as their multiple responsibilities, which restrain their partial mobility.

## **2.7 Critical Review**

Participation of women entrepreneurs would benefit greatly from a supportive environment that encourages women to "go for it". From the literature review it is explicit that women lack social and cultural support for the role of women as

entrepreneurs; women are subject to stereotypes and have a few visible role models for them at any level. Gender barriers need to be addressed at all levels, from legal system to the domestic system. Women entrepreneurs need more access to a full range of financial and non-financial support services. Participation of women micro-small entrepreneurs is restricted by a lack of collateral and flexible finance options. Women micro-small entrepreneurs experience inadequate access to training and are faced with limited opportunities to avail themselves for external, formal managerial capacity-building support. In addition they have difficulties in finding land premises for operation and acquiring up-to-date technology. Women micro-small entrepreneurs would benefit from the strength of numbers that would be gained through representation by women entrepreneurs' association that would provide a collective "voice" for the needs and concerns of women entrepreneurship in the country.

Internationally MSEs have played an important role in economic development and in Kenya, they are seen as the step to industrialization by the year 2020. The government considers the sector as a source of future generation of employment as reflected in the increased policy focus on MSE development. This is exemplified by its commitment to foster the growth of MSEs as one of the key strategies in the Paper No. 1 of 1986 on Economic Management for Renewed Growth.

The paper applauds the important role of small -micro enterprise sector, and the strategies to be put into place for its development. The 1989 Report, 'The Strategy for Small Enterprises Development' towards the year 2000, set out the mechanisms for removing constraints to growth of the MSE sector. The policy was reviewed in 2002 providing for a balanced focus to MSE, in line with national goals of creating 500,000 jobs annually in

the next four (4) years. However the latest draft Session Paper on Development of MSE acknowledges that a number of constraints need to be addressed if the MSE sector is to realize its full potential. Government support is therefore a necessary condition to foster micro-small enterprise development. Economic development will not come to us we have to struggle from where Japanese started until we make a 'break through'.

A Paper on review of government policies for the promotion of MSE in Kenya noted, that the support framework pursued since 1986 had been characterized by unsustainable subsidies and stop-go policies. Such policies emanate from an inadequate understanding of the sector and its relationship with the rest of the economy. The result being a mismatch between policy pronouncement and resource allocation - capital financial and human – bringing about poor implementation of policies. No wonder then the persistence of problems that inhibit growth of MSE sector three decades after they were recognized. In the paper of Winnie V. Mitullah MSEs are seen as a major source of livelihood for a large Kenyan majority, especially those living below the poverty line. The government has not managed to implement major policy provisions geared for the development of the sector. During the last three decades, the emphasis has been on private formal sector as opposed to the private informal sector. The Economic Strategy Paper considers the two sectors to be basically the same. The current government objective is to promote the growth and competitiveness of employment in MSEs by reducing the cost of doing business and generally creating an enabling environment for economic activity.

A Special Report by Mrs Lindiwe Hendrics states that South Africa embarks on a process that structurally transforms South African economy by enabling the citizens to participate in the mainstream of the economy. She affirms that a stable social, political and economic policies and a consensus approach to democracy create an environment and framework for business – including those of women – to flourish and grow. This has contributed to a growth of the economy of South Africa by approximately 3% per year over the past eight years. She comments that in spite of the remarkable growth, the need for development programmes targeting women to overcome business - specific constraints still exists.

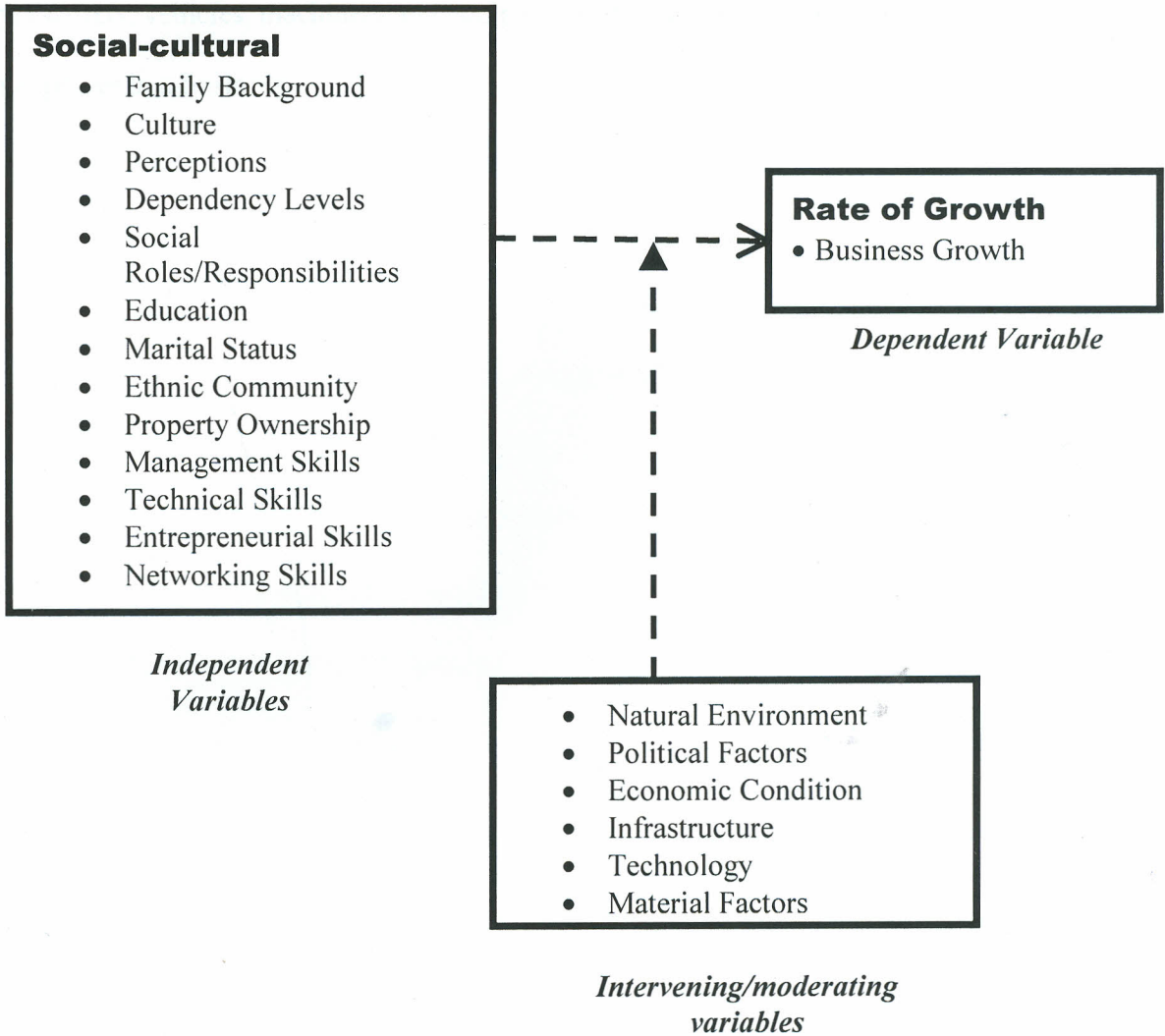
Among the enterprise owned by women, the literature review indicates that the enterprises are not performing well, resulting in almost no growth. There is frequent birth and death of businesses. Women are faced with the general constraints that are faced by all entrepreneurs. However, there are constraints that are specific to women such as, credit and collateral facilities, social cultural constraints, education and technical skills, legal regulations are but a few of the constraints to women micro and small entrepreneurs.

Findings also indicate that most programmes for women have a welfare approach, aimed at enhancing confidence and awareness, than to create sustainable profits (McCormick, 1998, Dondo 1990).

## 2.8 Conceptual Framework

The variables of the study are social-cultural, as presented below affecting the business growth.

### 2.8.1 Conceptual Framework



Source: Author (2008)



Business growth is influenced by the independent variables as given above. There are also intervening variables, which affect business growth indirectly. Indicators of business growth would include profits, assets and employees. Profits refer to excess of sales over all expenses. Assets are the things a business owns, such as working capital, buildings, typewriters, vehicles, machinery and equipments. Employees are the number of salaried manpower in a business.

## **CHAPTER THREE**

### **3.0 RESEARCH METHODOLOGY**

The research was an explorative one, which sort to investigate the factors affecting the growth of micro-small enterprises owned by women.

#### **3.1 Research Design**

This study utilized the descriptive and exploratory research design. It was analytical in nature and the researcher used archival search and analysis, coupled with survey methods. The archival search and analysis was useful in providing background information on the performance of the women owned enterprises. According to Jankowicz (1995), one carries out a survey in order to establish what people think, believe, value or feel, in order to discover their views for their own sake, or to support an argument that you are presenting, sampling a population of potential respondents in order to generalize conclusions more widely. More over it explores status of two or more variables at a given point in time. The descriptive research was used because it sought accurate profile of personal factors, events and situations. This phenomenon was applicable to the causal of factors affecting the growth of women micro-small entrepreneurs. The researcher collected data from 60 members out of a population of 600 women, and described the outcome. It explored the status of the variables and drew some observations on their trends.

### 3.2 Target Population

The target population, which the researcher covered, consisted of women owned micro-small enterprises in Nairobi. The study targeted women in three selected markets, Wakulima, Gikomba and Kangemi Harambee Market. Samples of sixty (60) women were selected to represent the women MSEs.

### 3.3 The Sample and Sampling Technique

Purposive sampling was used to select three markets within Nairobi. This is because the women entrepreneurs exhibited relatively homogeneous characteristics in form of types of business, investment decisions, and reasons for entering into business and their lifestyles. A random sample of 60 women was studied, representing a ten percent of accessible population. According to Gay L. R. (1981), a ten percent sample size of the accessible population is adequate in descriptive studies. The choice of this technique was to facilitate assessment of data collected in terms of business turnover. In turn, it also helped in making generalization that is more sensitive to the type of businesses.

**Table 3.1: Distribution of the Target Group**

Market	Population	Sample Size (%)
Gikomba	200	20
Kangemi	200	20
Wakulima	200	20
<b>Total</b>	<b>600</b>	<b>60</b>

*Source: Author 2008*

### **3.4 Data Collection Procedures**

The study relied primarily on survey method.

#### **3.4.1 Questionnaires**

In the survey, a simple questionnaire with structured and open-ended questions was personally administered to the chosen sample of women entrepreneurs. This aided in capturing both quantitative and qualitative information on business performance

The open-ended questions ensured that in-depth qualitative data that is descriptive of the variables under study were obtained. It also took care of the human nature of the respondents, of wanting to express their personal views, and feeling important as participants of the research. The closed and multiple system questions aided in gathering quantitative information that were easy to interpret.

The questionnaire, besides capturing background information provided details on enterprise, the volume of their business vis a vis sales, profit and capital, as well as constraints inhibiting their performance. The choice of the structured questionnaire is due to its ease of administration, analysis and time saving. It was important to make field visits to the respondent's business sites, for impact in enhancing confidence in collecting the data. The interview provided an opportunity to observe certain variables that may not necessarily be captured through questionnaire, such as size of stock, physical size of the premises and location of enterprises.

### **3.5 Data Analysis and Presentation**

After all the primary data was collected, it was classified in accordance with the variables. The data was analyzed using descriptive statistics. Measures of central tendency and dispersion were compiled. The data was also presented using frequency distribution tables, pie charts and graphs. Simple regression and correlation analysis was used to determine the relationship between the various variables. A computer package SPSS was used.

### **3.6 Anticipated Output**

A report on the findings of the study, and recommendations emanating from the study, indicated the factors affecting the growth of women owned MSCs. This report will be availed to the Policy Makers, NGOs, Academia, Women Entrepreneurs and other interested persons.

## CHAPTER FOUR

### 4.0 DATA ANALYSIS, INTERPRETATION AND SUMMARY

#### 4.1.0 Introduction

The purpose of this chapter is to present the analysis, interpretation and discussion of the data collected from the respondents. In pursuit of the stated objectives, the data was analyzed from the questionnaires from the sample of 60 micro-small businesswomen who participated in the study with 100% response. Findings are presented in graphs, tables and pie charts.

#### 4.1.1 Demographic Characteristics of Women Micro-Small Entrepreneurs

##### 4.1.2 Age

The results showed that the respondents were in the ages between 24 to 55 years. Majority of the women were in the young age bracket, which is explained by the generally young population of Nairobi and other urban areas, given high birth rates and selective urban-ward migration involving mainly the young and middle-aged.

##### 4.1.3 Marital Status

**Table 4.1: Marital Status**

Women Status	Frequency n = 60	Percentage Respondents
Married	48	80
Single	9	15
Widowed	2	3.3
Divorced	1	1.7

*Source: Author 2008*

The findings in table 4.1 shows that 80.0% (n = 48) of the respondents were married, 15.0% (n = 9) single, 3.3% (n = 2) widowed while one woman (1.7%) was divorced.

The dominance of the business by married women can be explained by support from their spouses.

#### 4.1.4 Level of Education

**Table 4.2: Education**

Women Status	Frequency n = 60	Percentage Respondents
Primary	27	45
Secondary	30	50
Others	3	5

*Source: Author 2008*

In reference to their education background most of the respondents 50.0% (n = 30) had secondary education while 45.0% (n = 27) had primary education. Social rates of return to lower levels of education in developing countries are quite high as supported by United Nations (1995). The level of education is found to be important to the entrepreneurs as it provided them with basic skills of communication and numeracy both in English and Kiswahili that are important in business operations. Education also helped them in socialization and predicting the business environment.

#### 4.1.5 Number of Children

**Table 4.3: Number of Children**

Women Status	Frequency n = 60	% Respondents
One	9	15.8
Two	27	47.4
Three	13	22.8
Five	2	3.5
Six	1	1.7
Missing systems	7	8.8

*Source: Author 2008*

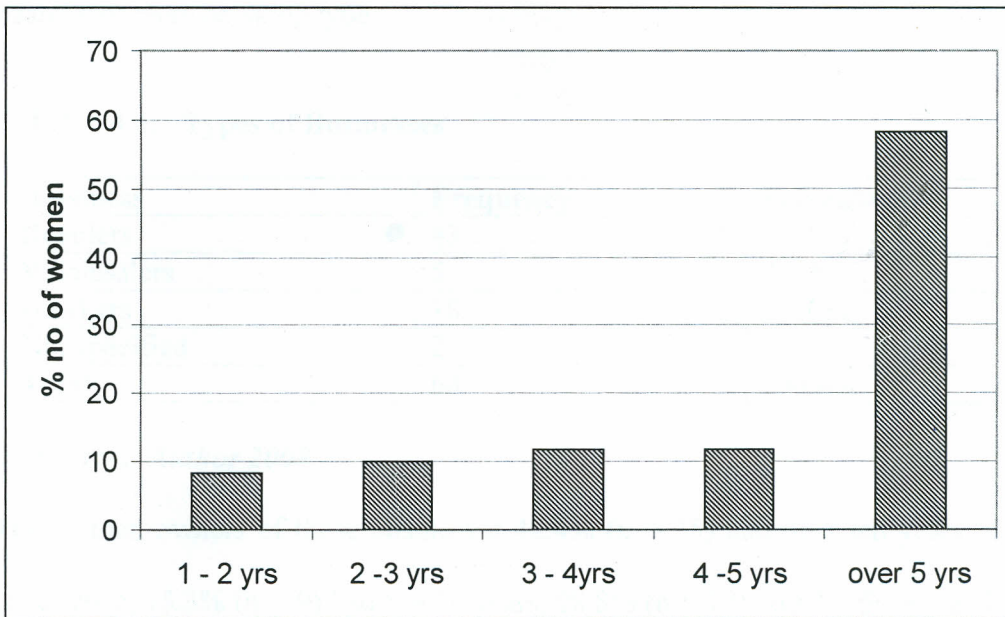
The findings in table 4.3 shows that 47.4% (n=27) of the women respondents had two children, 22.8% (n = 13) had three, 15.8% (n = 9) had one child, 3.5% (n = 2) had five children while one respondent had up to six children. There is an inverse relationship with the number of children and the level of education. This could be explained by the fact that they have a better understanding and access to modern family planning methods.

#### 4.2.0 Business Information

##### 4.2.1 Work Experience

The findings showed that most respondents had done business for over five years, 58.3% (n = 35). The respondents with experience of 1 year to 5 years, ranged from 9% to 12%.

*Source: Author 2008*



**Figure 4.1: Duration of Being in Business**

A correlation analysis established a significant moderate positive relationship, ( $r = 0.437$ ,  $P < 0.05$ ) between the ages of the respondents and the experience in business.



Older women had been in the MSE business for a longer time than their younger counterparts (**Appendix VI**).

The study also established that larger number of women with secondary level of education were from Wakulima market, 90% (n = 18), 50% (n = 10) of the respondents from Gikomba market and 75% (n = 15) from Kangemi market had primary level of education. Those women entrepreneurs with secondary level of education had relatively fewer children than those with primary education,  $r = -0.187$ . There is an inverse relationship between the number of children and level of education (**Appendix VII**).

The information gathered on MSEs, showed that, majority of the businesses sampled, 71.7% (n = 43) were retail, 8.3% (n = 5) wholesale whereas 16.7 % (n = 10) of the businesses were hawking type.

**Table 4.4: Types of Businesses**

<b>Business</b>	<b>Frequency</b>	<b>Percentage</b>
Retailers	43	71.7 %
Wholesalers	5	8.3 %
Hawkers	10	16.7 %
Not specified	2	3.3
<b>Total</b>	<b>60</b>	<b>100.0%</b>

*Source: Author 2008*

The women owners of these businesses 42.4% (n = 25) had over ten years of business experience, 15.3% (n = 9) had 5 – 10 years, 28.8% (n = 17) had 2 – 5years and 11.9% (n = 7) of the women had 1 – 2 years while only one respondent had less than one year experience in the business.

Source: Author 2008

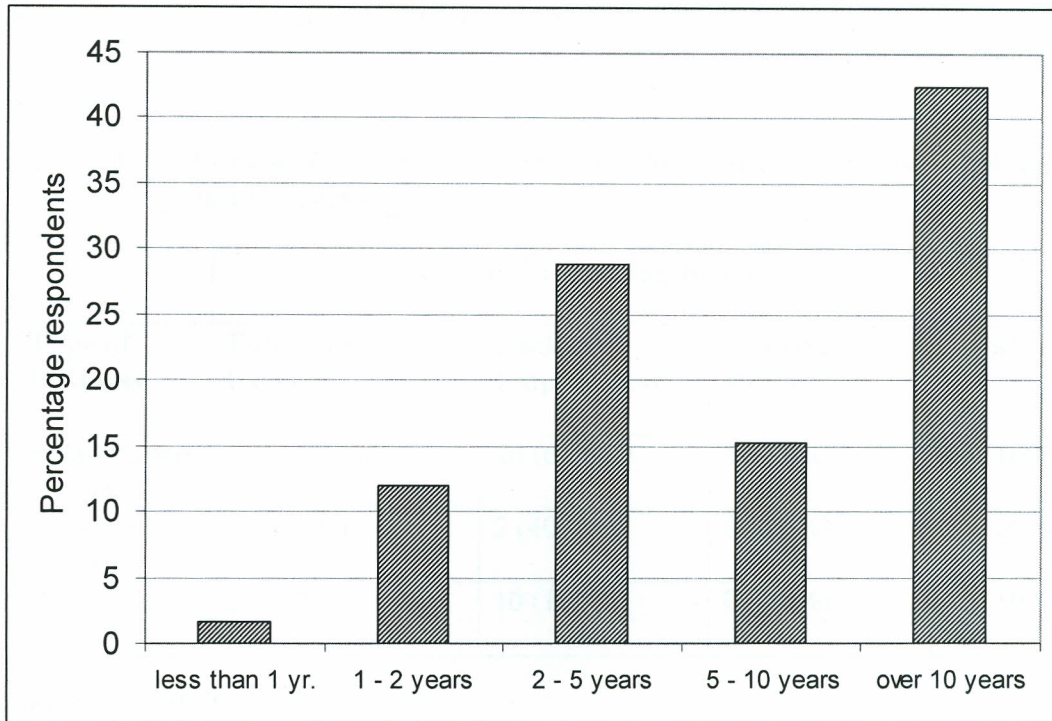


Figure 4.2: Duration of Operation of the Current Business

Details of how long the women had operated their current businesses showed that 38.6% (n = 22) had operated the current business for a period of over ten years, 8.8% (n = 5) for 5 – 10 years, 28.1% (n = 16) for 2 – 5 years, 21.1% (n = 12) for 1 – 2 years and 3.5 (n = 2) for only less than 1 year.

#### 4.2.2 Reasons for Venturing Into Business

Women ventured into business mainly because of lack of employment. 63.8% (n = 37) of the women started businesses because they were not employed, 27.6% (n = 16) to supplement their income while 8.6% (n = 5) ventured into business as a hobby. All respondents operating hawking business and the retailers venturing into business 60.5%

(n = 26) started because of lack of employment. Some entrepreneurs started wholesale businesses mainly to supplement their income.

**Table 4.5: Reasons for Starting Business by the Women Retailers, Wholesalers and Hawkers**

Type of Business	Reasons for Starting Business			Total
	To supplement Income	Lack of Employment	Joined as a Hobby	
Retail traders N = 43	13 (30.2%)	26 (60.5%)	4 (9.3%)	43 (100%)
Wholesalers N = 5	3 (60.0%)	2 (40.0%)	0 (0.0%)	5 (100%)
Hawkers N = 10	0 (0.0%)	10 (100%)	0 (0.0%)	10 (100%)

*Source: Author 2008*

#### 4.2.3 Mode of Selling

The findings showed that the purchases bought were paid for in cash and on short-term credit. All wholesalers and hawkers sold their goods in cash, however most retail traders sold their wares in cash 95.2% (n = 40) and 4.8% (n = 2) in short-term credit.

#### 4.2.4 Problems Encountered While Carrying out Business

When carrying out their business, 98.1% (n = 53) of the women experienced various problems, which were peculiar to the businesses operated. The problems were highlighted as lack of adequate capital to run their businesses, failure to collect payments from debtors and in some cases realization of bad debts, inadequate stock, lack of

steady customers, poor quality goods, scarcity and high prices for supplies and scarcity of goods, difficulties of paying business loans in time, competition from other businesses and perishability of goods. In the literature review, social, cultural and household responsibilities were cited as factors disadvantaging women in business. Property ownership denied them credit facilities due to lack of collateral security.

#### **4.2.5 Business Start Up**

It was established that 55.9% (n = 33) of the businesses were started with capital ranging between Ksh.5001 – 10,000, and 8.5% (n = 5) started with over 10,000 Ksh, 6.8% (n = 4) started with Ksh.2000 – 5000 while other businesses 28.8% (n = 17) were started with less than Ksh.2000. The study established that to start a hawking business, one requires as little as less than Ksh.2000 only. However, starting a retail business requires between Ksh.5001 and 10,000 as was experienced by 69.0% (n = 29) of the retail traders. To start a wholesale business 60% (n = 3) indicated responded that one needed well above Ksh.10, 000.

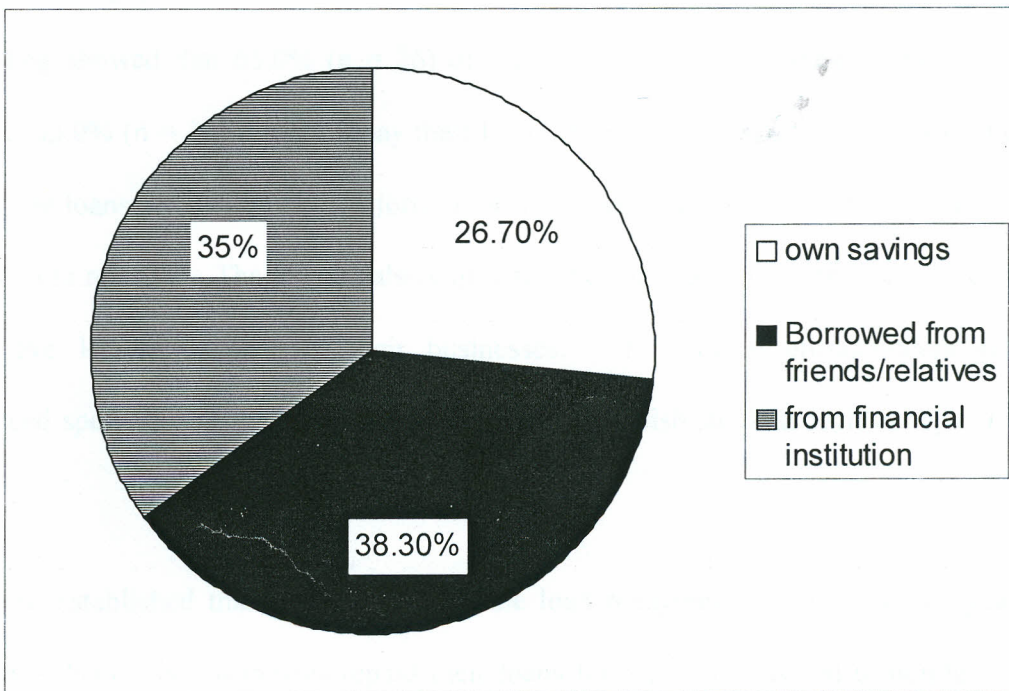
**Table 4.6: Amount of Capital Used to Start the Business.**

Capital Used to Start Business	Frequency	Percentage
Less than Ksh. 2000	17	28.3
Ksh. 2000 – 5000	4	6.7
Ksh. 5001 – 10000	33	55.0
Ksh. Over 10,000	5	8.3
Missing system	1	1.7
<b>Total respondents</b>	<b>60</b>	<b>100%</b>

*Source: Author 2008*

The money used to start a business was mainly borrowed from relatives and friends.

*Source: Author 2008*



**Figure 4.3: Sources of Finance Used to Start Business**

56.5% (n = 26) of the respondents had borrowed between Ksh. 5001 – 10000, 15.2% (n = 7), borrowed Ksh. 2000 – 5000, 21.7% (n = 10) had borrowed less than Ksh. 2000 while merely 6.5% (n = 3) of the women had borrowed as much as Ksh. 10000. It was noted that the amount borrowed by the individuals determined the amount used to start their business ( $r = 0.596$ ,  $P < 0.05$ ). 70.6% (n = 24) of the retail business borrowed between Ksh. 5001 – 10000, while those doing hawking business started by borrowing Ksh.2000 – 5000. For wholesale businesses, 50% borrowed as much as over Ksh. 10000. The amount used in starting a business was significantly related to the women experience in business,  $r = 0.343$ ,  $P < 0.05$ . Those with more years of operation started their business with more money. There is moderate positive relationship between the amount borrowed and the type of business (*Appendix VIII*) and (*Appendix IX*).

#### **4.2.6 Loan Repayment**

The finding showed that 65.0% (n = 26) of the respondents repaid their loans in full. However, 35.0% (n = 14) did not repay their loans. The women gave the reasons for not repaying the loans as, lack of fund in form of profits to service the loan and delay of loan payment from relatives. The women also expressed the fact that, paying the loans at once would have led to collapse of their businesses. The women entrepreneurs also experienced spoilage and therefore lacked money to replenish stock as well as repay the loan.

It was also established that grace period for the loan repayment was mainly one year. 77.4% (n = 24) of the businesses repaid their loans for a period between 6 months – 1

year. 22.6% (n = 7) of the businesses repaid their loans for a longer period of up to 2 years. Those who borrowed more money repaid the loans in full,  $\chi^2 = 58.974$ ,  $P < 0.05$ .

**Table 4.7: Loan Repayment Against the Amount Borrowed**

Loan repayment	Amount borrowed			
	Less than Ksh. 2000	Ksh. 2000 - 5000	Ksh. 5001 - 10000	Total
Repaid the loan in full	1 (50%)	0%	21 (95.5%)	22 (88%)
Did not repay the loan in full	1 (50%)	1 (100%)	1 (4.5%)	3 (12%)
<b>Total</b>	<b>2 (100%)</b>	<b>1(100%)</b>	<b>22 (100%)</b>	<b>25 (100%)</b>

*Source: Author 2008*

The data also showed that after their first loans 68.8% (n = 33) of the respondents took other loans, while 31.3% (n = 15) of the respondents did not take any other loan. For the respondents who took a second loan, the loan taken was bigger, (93.8%) than the first one. The ability to pay the first loan gave the entrepreneurs confidence in taking a bigger loan in order to expand their business.

#### **4.2.7 Skills Required to Run a Business**

The skills the respondents preferred to acquire were 46.6% required record keeping, 27.6% marketing, 24.1% planning and 1.7% technical skills.

**Table 4.8: Skills Required by the Respondents to Run a Business**

<b>Skills Required</b>	<b>No. Respondents (n = 58)</b>	<b>% Age Respondents</b>	<b>Rank (1-“Most Required”)</b>
Record keeping	27	46.6	1
Planning	14	24.1	3
Marketing	16	27.6	2
Technical skills	1	1.7	4

*Source: Author 2008*

The findings showed that some skills had been acquired in the course of running their businesses. The skill gained through experience possessed by most of the women was marketing. 28.3% (n = 15) have marketing skills, 18.9% (n = 10) had gained record keeping skills, 18.9% (n = 10) possess technical skills and 7.5% could plan their businesses. 26.4% of the respondents had other skills which enabled them run their businesses. These skills had been gained over a lengthy period and were inherited by specific individuals. The women who had acquired skills through experience, their survival depended on this experience and good customer relations.



Source: Author 2008

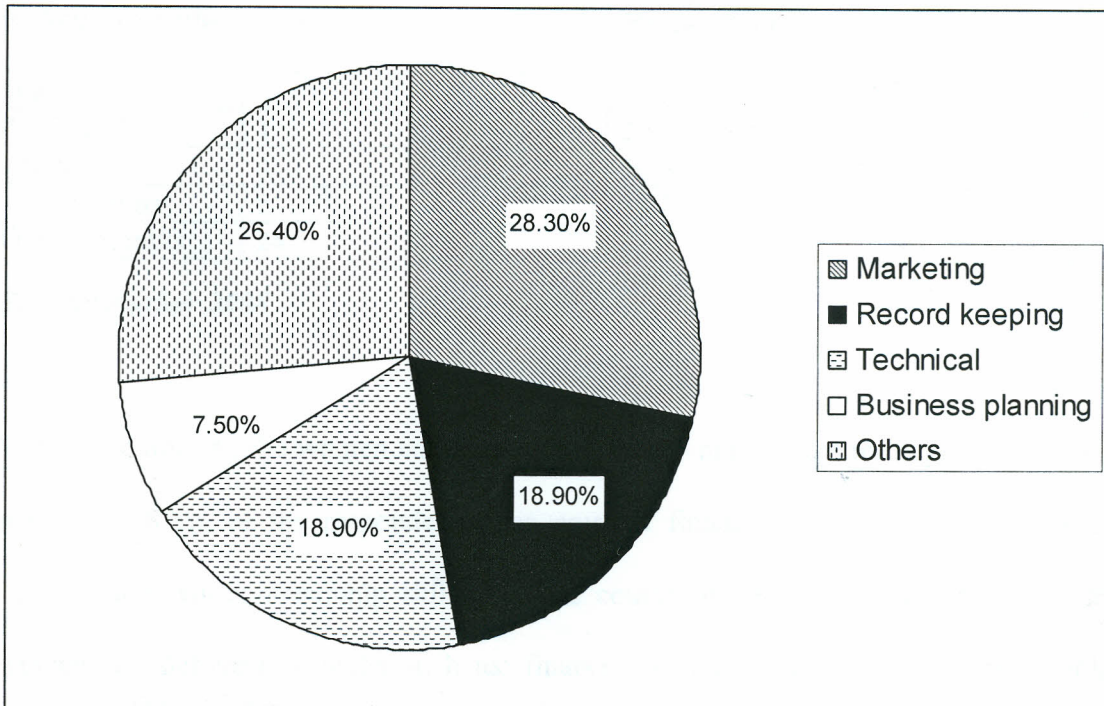


Figure 4.4: Skills Acquired by the Women in the Course of Running Their Business

#### 4.3.1 Courses Attended

When asked if they had taken some professional courses, the response was; 56.9% (n = 33) of these women entrepreneurs had attended other professional courses. The women who felt that the skills acquired from these courses were satisfying was indicated by 65.2% (n = 30) of the respondents. To acquire these skills, majority of the women 63.2% (n = 24) took over two months period.

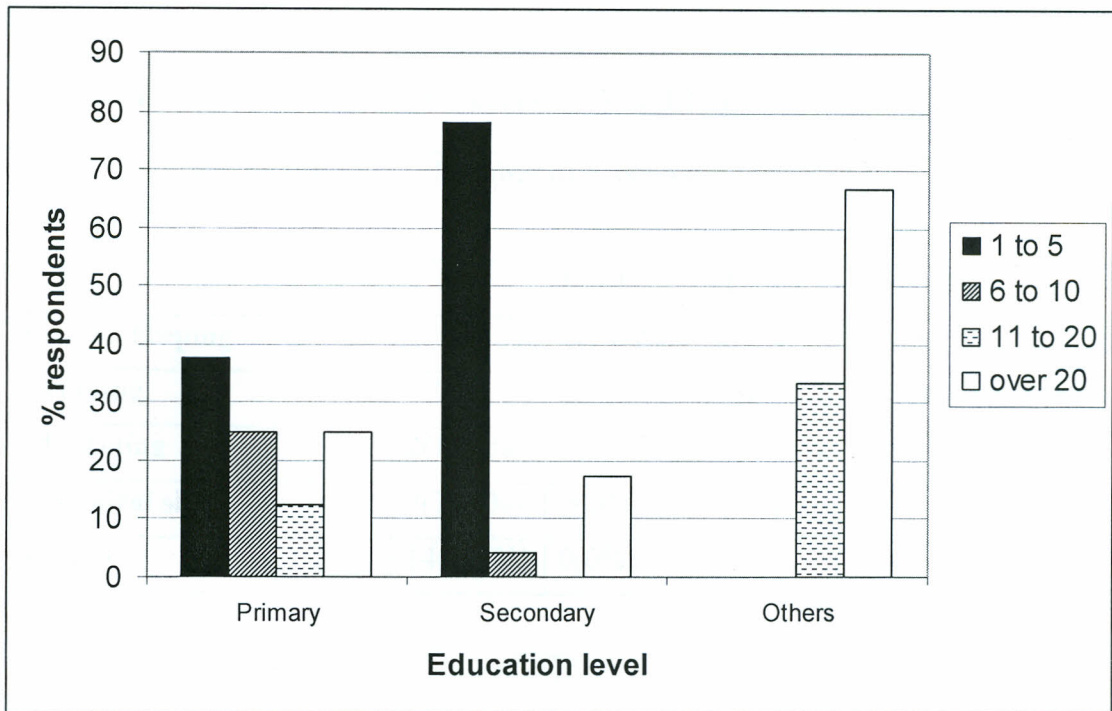
**Table 4.9: Duration Taken to Acquire Business Skills**

<b>Duration Taken to Acquire Skills</b>	<b>Number of Respondents (n = 38)</b>	<b>% Age Respondents</b>	<b>Rank (1 – Highest No.)</b>
One week	4	10.5	3
2 – 3 weeks	1	2.6	4
1 month	4	10.5	3
1 – 2 months	5	13.2	2
Over 2 months	24	63.2	1

*Source: Author 2008*

During the training the women entrepreneurs said they mainly covered topics in business planning, 18.8% of the respondents also covered finance and record keeping, while 12.5% learnt entrepreneurship skills. In the course of performing their business, the women felt deficient in skills such as: finance and record keeping, entrepreneurship, business planning, sales and marketing, financial management and public relations.

*Source: Author 2008*



**Figure 4.4: Number of Customers Received Per Day**

The results further showed a significant relationship in the education levels with the way they maintained their customers,  $r = 0.357$ ,  $P < 0.05$ . Majority of the respondents maintained their customers by offering fair prices and in some cases discounts.

The results indicated a strong relationship in skills possessed by the women entrepreneurs and the number of customers received per day,  $r = 0.774$ ,  $P < 0.05$ . Women traders with record keeping skills received more customers per day than those with the other skills.

This shows that training in the relevant field enabled the women entrepreneurs to offer quality and efficient services. However, the findings that some entrepreneurs did not have any type of training support McClelland's theory (1961) that they are born entrepreneurs who do not need any form of business training to become entrepreneurs.

\*Table 4.10: The Number of Customers the Skilled Traders Received per Day

Skills Possessed by the Traders	Number of Customers Received Per Day				Total
	1 -5	6 -10	11 – 20	Over 20	
Record keeping	0(0%)	1(10.0%)	3(30.0%)	6(60.0%)	10(100%)
Planning	0(0%)	2(50.0%)	2(50.0%)	0(0%)	4(100%)
Marketing	2(15.4%)	2(15.4%)	39(23.1%)	6(46.2%)	13(100%)
Technical skills	7(70.0%)	2(20.0%)	0(0%)	1(10.0%)	10(100%)
Others	14(100%)	0(0%)	0(0%)	0(0%)	14(100%)

*Source: Author 2008*

#### 4.3.2 Performance

The findings on business performance showed that women entrepreneurs' years of experience in business were positively related to the number of customers they received in per day,  $r = 0.621$ ,  $P < 0.05$ . Those with more years of business experience tended to get more customers per day as compared to the women with fewer years. This study further revealed that, the most experienced traders tended to retain their customers through good customer relations.

**Table 4.11: The Number of Customers Attended by the Women with Various Experiences**

		Number of Customers				
		1 – 5 Customers	6 -10 Customers	11 – 20 Customers	Over 20 Customers	Total Respondents
Years of experience	Less than 1yrs	0	0	0	1	1
	1 – 2 yrs	0	1	0	0	1
	2 – 5yrs	2	1	0	4	7
	5 - 10yrs	0	1	1	2	4
	Over 10 years	19	0	0	1	20
<b>Total respondents</b>		<b>21</b>	<b>3</b>	<b>1</b>	<b>8</b>	<b>33</b>

*Source: Author 2008*

#### 4.12: Mode of Getting Customers

		Mode			Total respondents
		Wait for passersby	Taking goods round	Other	
Years of experience	Less than 1 year	1	0	0	1
	1 – 2 yrs	0	0	1	1
	2 – 5yrs	6	1	0	7
	5 -10yrs	3	1	0	4
	Over 10 years	1	0	18	19
<b>Total Respondents</b>		<b>11</b>	<b>2</b>	<b>19</b>	<b>32</b>

*Source: Author 2008*

#### \*4.4.0 Marketing

Business performance is measured by the number of regular customers received per day and the average amount they spend in the business. In each day, 43.1% (n = 26) of the business got 1 – 5 customers, 15.5% (n = 9) get 6 – 10 customers, 17.2% (n = 10) got 11 – 20 customers while 24.1% (n = 15) have more than 20 customers. On average 50.0% of the customers spent between Ksh. 30 – 50 each. 28.3% of the customers, however, spend over Ksh. 100 per day.

To get their customers, 52.6% (n = 30) of the businesses mainly waited for passersby, 8.8% (n = 5) take their goods round and only one business (1.8%), relied on the neighbors. The study established that, to maintain their customers, 36.0% (n = 18) of the respondents sold slightly cheaper than the others, 12.0% (n = 6) gave discounts, 52.0% (n = 26) and sold quality goods to maintain their customers. The women also sold fresh and good quality commodities at fair prices. In the last two weeks, the number of customers in a day had been 3 to 5 for 69.0% of the businesses, 6 to 10 customers per day for 5.2% of the respondents, less than two people in 13.8% of the businesses and above 10 customers for 12.1% of the businesses. The undercutting of prices created competition and resulted in less successful businesses closing down. In the literature review, it came out clearly that the SMEs hardly grew to maturity.

**Table 4.13: Number of Customers per Day**

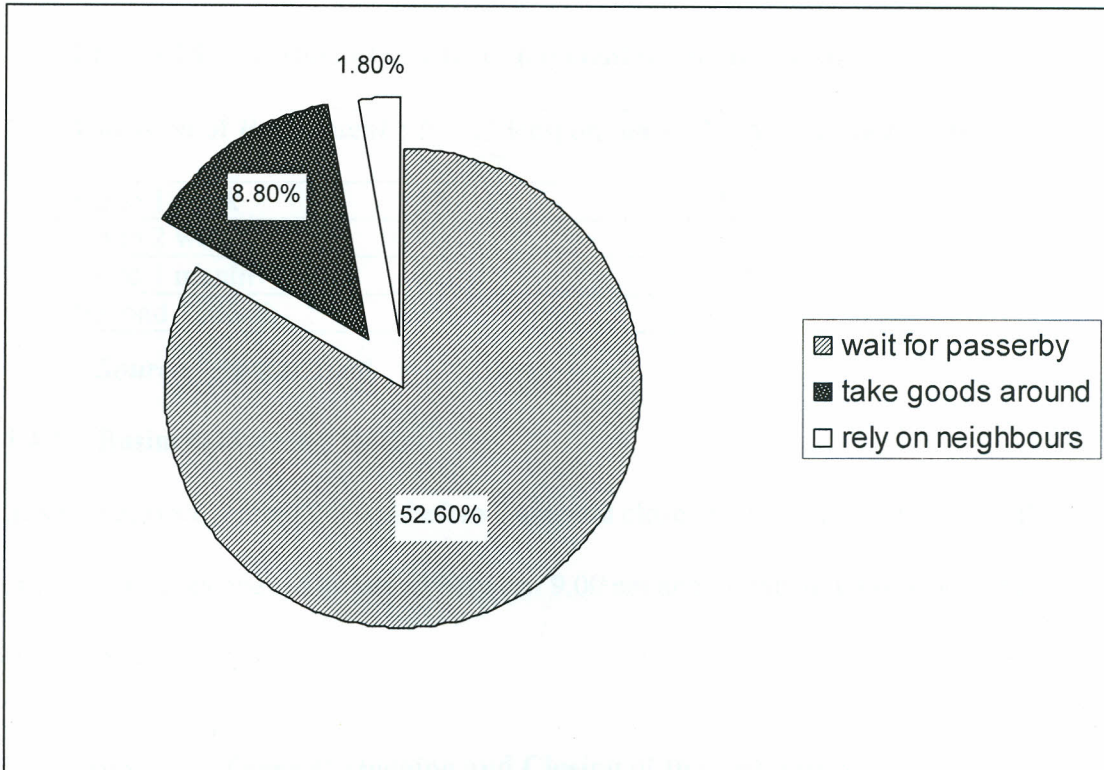
<b>Number</b>	<b>Frequency n = 60</b>	<b>Percentage respondents</b>
1-5	26	43.1
6 – 10	9	15.5
11 – 20	10	17.5
More than 20	15	24.1

*Source: Author 2008*

**Table 4.14: Customers Average Expenditure**

<b>Expenditure (Ksh)</b>	<b>Frequency n = 60</b>	<b>Percentage respondents</b>
30 – 50	30	50
100	17	28.3
Missing numbers	13	21.7

*Source: Author 2008*



**Figure 4.5: Operational Techniques Used by Businesses to Get Customers**

#### 4.4.1 Business Organization

Most respondents indicated that they purchased goods mainly from wholesalers 87.3% (n = 48), 10.9% (n = 6) from other retailers and one respondent (1.8%) got goods from other traders in their networks. To purchase their stock, 77.8% (n = 42) paid cash while 22.2% (n = 12) purchased goods on credit. Those who bought goods on credit had up to 1 week to repay.



**Table 4.15: Duration of Credit Repayment by the Respondents**

<b>Duration of Repayment</b>	<b>No. of Respondents N = 17</b>	<b>% Age Respondents</b>
Up to 1 week	10	58.8
Up to 2 weeks	1	5.9
Up to 1 month	3	17.6
Beyond 1 month	3	17.6

*Source: Author 2008*

#### 4.4.2 Business Opening Hours

Businesses were mainly opened before 7 am. and closed before 7 pm. However, 12.5% of the businesses opened as late as between 9.00 am and 10.00am. Only 1 business, closed after 10.00 pm.

**Table 4.16: Times of Opening and Closing of the Businesses.**

	<b>Time</b>	<b>No. of Respondents</b>	<b>(%)</b>
<b>Opening time</b>	Before 7 am	31 (n = 56)	55.4
	Between 7 and 8 am	18 (n = 56)	32.1
	Between 9 am and 10.00am	7 (n = 56)	12.5
<b>Closing times</b>	Before 7 pm	26 (n = 57)	45.6
	Between 7 pm and 8 pm.	25 (n = 57)	43.9
	Between 9 pm. and 10.00pm.	5 (n = 57)	8.8
	After 10.00pm.	1 (n = 57)	1.8
<b>Total</b>		<b>60</b>	<b>100</b>

*Source: Author 2008*

It was established that, even though some of the businesses closed as late as 10.00pm, 41.8% (n = 23) of the businesses sold most in the morning and 36.4% (n = 20) sold most in the afternoon. Only 10.9% sold most of their items during lunchtime and in the evening.

The time of opening the business had a significant relation with the number of customers received in a day,  $\chi^2 = 32.418$ ,  $P < 0.05$ . 67.7% (n = 21) of the businesses opening before 7.00 am got between 1 – 5 customers, 44.4% (n =8) of those opening between 7.00 and 8.00am received over 20 while 71.4% (n = 5) of the businesses opening between 9.00 and 10.00am only got between 11 – 20 customers. This showed that the best opening time for most businesses to get more customers was between 7.00am and 8.00am.

**Table 4.17: Number of Customers Received per Day**

		Customers Received per Day				Total
		1 -5	6 -10	11 – 20	over 20 customers	
Time of opening business	Before 7 am	20	2	0	4	26
		76.9%	7.7%	.0%	15.4%	100.0%
	Between 7 and 8 am	1	0	2	4	7
		14.3%	.0%	28.6%	57.1%	100.0%
Total		21	2	2	8	33
		63.6%	6.1%	6.1%	24.2%	100.0%

*Source: Author 2008*

**Table 4.18: Number of Customers Received in Various Opening Hours**

Time of Opening	Number of Customers Received				Total
	1 - 5	6 - 10	11 - 20	Over 20	
Before 7.00 am	67.7% (n = 21)				31
Between 7.00 and 8.00am				44.4% (n = 25)	56
9.00 and 10.00 am			71.4% (n = 40)		56

*Source: Author 2008*

### 4.4.3 Profit from Business

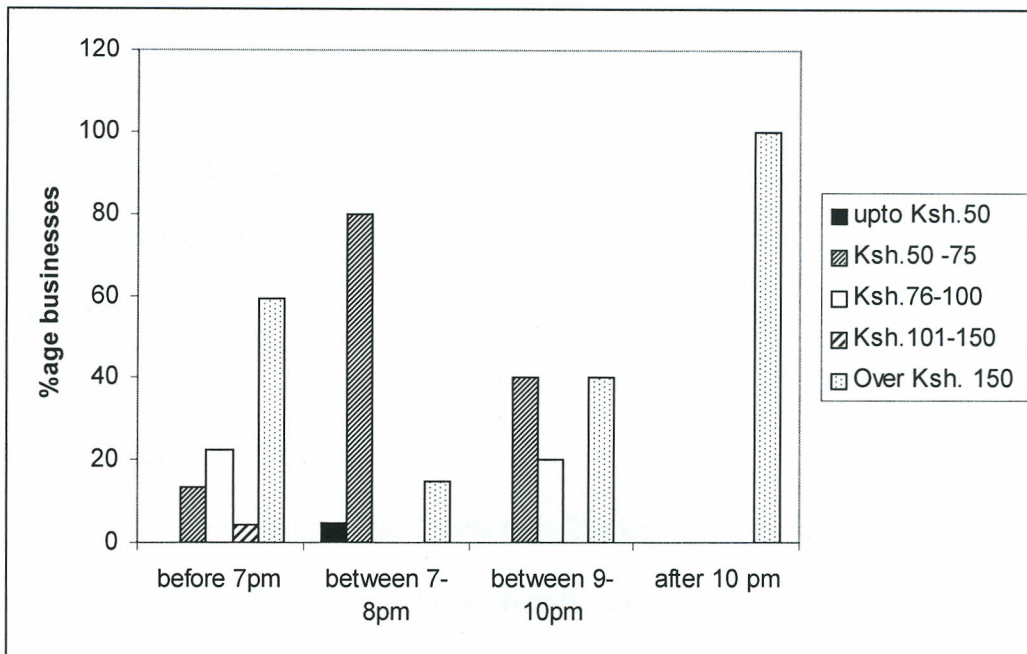
Profits received by the business exemplify how well the business was doing. Results from this study established a significant effect of skills possessed by the women on the profit made from the businesses,  $\chi^2 = 38.262$ ,  $P < 0.05$ . 66.7% (n = 6) of the women keeping records, 50% (n = 1) those with planning skills, 76.9% (n = 10) with marketing skills and 22.2% (n = 2) having technical skills made an average of Ksh.150 profits per day.

**Table 4.19: Profits Made Against Skills Possessed**

	Skills possessed				Total
	Record keeping	Marketing	Technical skills	Others	
Profit made per day upto ksh.50	0 .0%	0 .0%	2 100.0%	0 .0%	2 100.0%
Ksh.50 - 75	0 .0%	0 .0%	6 21.4%	22 78.6%	28 100.0%
Over ksh.150	12 66.7%	6 33.3%	0 .0%	0 .0%	18 100.0%
Total	12 25.0%	6 12.5%	8 16.7%	22 45.8%	48 100.0%

*Source: Author 2008*

Source: Author 2008



**Figure 4.6: The Profits Got by the Businesses Closing at Different Times**

Major constraints faced by the businesses were insufficient finances and lack of marketing skills, 48.9% (n = 22) and 13.3% (n = 6) respectively. Keeping records was noted to be important factor in business. 50.0% (n = 13) Of the businesses where records are properly kept made profits of over Ksh.150 each day were realized.

#### 4.4.4 Savings From the Businesses

The findings showed that women maintained some savings, 81.8% (n = 45) of these businesses saved and had personal savings accounts. Those without savings account saved by keeping their money at home or through merry-go-round with the other businesswomen. Most of these accounts 79.5% (n = 35) were opened long after the

business developed. However, 9.1%(n = 4) and 11.4% (n = 5) were opened before and at the time of opening the business respectively.

71.9% (n = 41) of the businesses had operating license and 28.1% had no licenses. They did not have the licenses because they operated using association name. In most cases (68.2%), of the entrepreneurs did not pay taxes, while only 31.8% of these businesses paid taxes.

#### **4.4.5 Record Keeping**

During their normal operations, 71.8% (n = 28) kept records, while 28.2% (n = 11) did not keep records. The need to keep records was seen immediately the business was opened and after employment of an extra one person. Keeping records enabled the women to know when they made profit or loss and to know when to replenish the stock. It was noted that the women would like to acquire skills of keeping records. 56.8% (n = 21) of the businesses had not received any support service where as 43.2% had been supported mainly by their market associations, 'Faulu Kenya' Ltd., K – Rep. Bank and 'Tujijenge Women Group'.

#### **4.4.6 Business Assets**

Most businesses started with mainly furniture and fittings as their fixed assets. 16.7% (n = 7) had buildings and 4.3% (n = 2) had machinery and equipments at the start. 52.0% (n = 13) of them started with fixed assets of about Ksh.5000. Today, 56.7% (n = 17) of the businesses had furniture and fittings and 23.3% (n = 7) had buildings.

**Table 4.20: Number of Businesses with Fixed Assets at the Start and Today**

<b>Fixed Assets</b>	<b>No. of Business With the Asset at the Start</b>	<b>No. of Business With the Asset at Current Period</b>
Land	0	3
Machinery and equipments	2	3
Buildings	7	7
Furniture and fittings	16	17

*Source: Author 2008*

There were no businesses indicating to have had land at the start of businesses whereas at the current state businesses had land. This showed an improvement in the business performance. The estimated value of the fixed assets at the beginning and at present showed that, there was a strong positive relationship in the number of businesses assets at the start with current state  $r = 0.577$ ,  $P < 0.05$ . Businesses showed an improvement in their fixed assets.

**Table 4.21: Number of Businesses with Fixed Assets Valued at the Start and Current State**

<b>Estimated Value of Fixed Assets</b>	<b>No. of Business With the Value of Assets at the Start</b>	<b>No. of Business With the Value of Assets Currently</b>
Up to Ksh. 5,000	13	9
Ksh. 6,000 – 10,000	4	6
Ksh. 11000 – 20,000	7	9
Over Ksh. 20,000	1	1

*Source: Author 2008*

The number of businesses with stock of up to Ksh.5, 000 reduced from 11 to 3 businesses while those who started with Ksh.20, 000 increased from 4 at the start to 14 businesses currently.

**Table 4.22: Number of Businesses with Stock Valued at the Start and Current State**

<b>Estimated Value of Fixed Assets</b>	<b>No. of Business With the Value of Stock at the Start</b>	<b>No. of Business With the Value of Stock Today</b>
Up to Ksh. 5,000	11	3
Ksh. 6,000 – 10,000	3	7
Ksh. 11000 – 20,000	7	5
Over Ksh. 20,000	4	14

*Source: Author 2008*

Some of the businesses had up to between 3 –5 employees. 61.5% (n = 32) had up to 2 employees, 23.1% (n = 12) had no employee and 15.4% (n = 8) had 3 – 5 employees. Those businesses without employees had families as volunteers and were run as a family business. Even though they had fewer employees, 80.6% (n = 29) did not need more staff.

On average, most businesses, 53.8% (n = 28), made sales of Ksh.200 – 300, 40.4% (n = 21) sell Ksh.100 – 200 and 5.8% (n = 3) up to Ksh.100 per day. From the sales made, 42.9% (n = 21) of the businesses made profit of Ksh.50 – 75 each day.

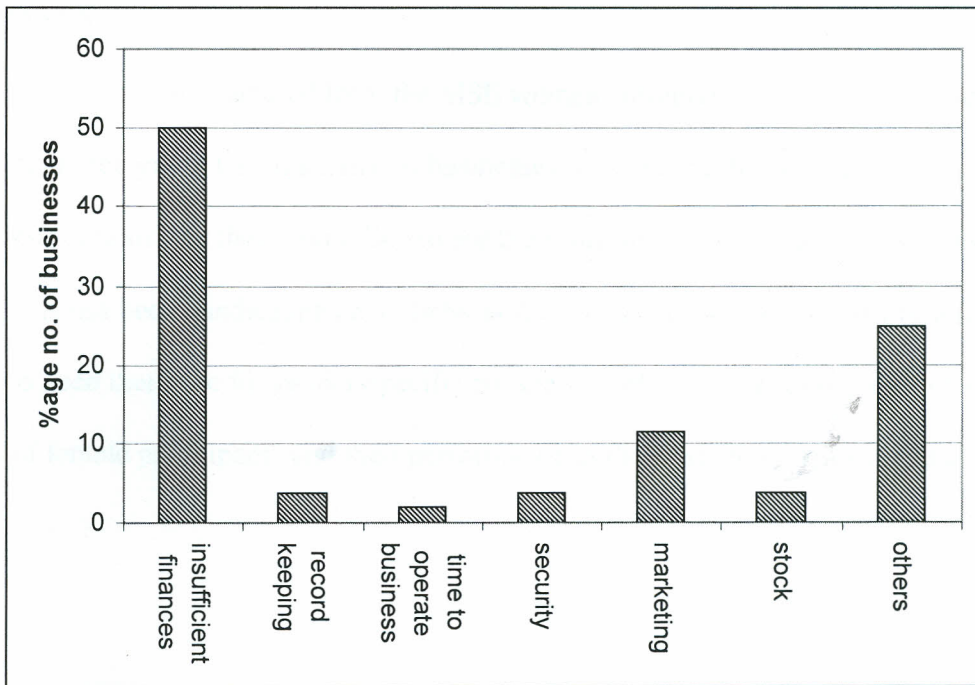
**Table 4.23: Profit Made From the Businesses per Day**

<b>Profit in Ksh. Per day</b>	<b>Number of businesses n = 49</b>	<b>Frequency of respondents 100%</b>
Up to Ksh.50	1	2
Ksh.50 – 75	21	42.9
Ksh.75 – 100	6	12.2
Ksh.101 – 150	1	2
Over Ksh.150	20	40.8

*Source: Author 2008*

In 55.4% of these businesses, the owners did not draw any salaries from the businesses. Majority of the businesses, 27.3%, drew salaries of up to Ksh.50 per day. 36.4% allocated themselves salaries of Ksh.50 – 100 per day. This study established that 74.5% (n = 38) of the businesses had not made any investment from their returns. Merely 25.5% of these businesses sampled had invested from their returns. The major challenge faced by the businesses was mainly “insufficient finances”.

*Source: Author 2008*



**Figure 4.7: Number of Businesses Facing the Constraints in their Operations**

#### 4.4.7 Entrepreneurs Long Term Objectives

When asked what the entrepreneurs long-term objectives for the businesses were, they responded: to expand the business and make it commercial, to become a wholesaler,



change the business, manage and maintain the business in order to make profit, save and open up a bigger shop, open other branches and save and buy a piece of land.

#### **4.4.8 Respondents' Recommendations**

When operating a business, the women entrepreneurs recommended that, one should not give up and loose hope even during times of losses, there is a need to train on how to run a business, it is necessary to keep records and that to succeed, it is important to work harder to achieve the objectives

#### **SUMMARY**

From the information gathered from the MSE women entrepreneurs on the challenges facing them regarding the small size of businesses, it is evident from their recommendations that they would like to see their business grow to maturity, and even in size. This has been handicapped mainly by lack of funds and supportive institutions. There is need therefore for gender-specific policies to help provide sensitivity to the needs of female participants and their performance in the MSE enterprises in the urban areas.

## **CHAPTER FIVE**

### **5.0 SUMMARY, CONCLUSIONS AND RECOMMENDATIONS**

#### **5.1 Introduction**

The purpose of this study was to investigate the factors that affect the growth of micro-small women enterprises in three selected markets in Nairobi. The markets were purposively selected in view of their vicinity to Nairobi city. The 60 women micro-small entrepreneurs were randomly sampled amongst the women associations. The women entrepreneurs exhibited similar characteristics and the findings from sample represented the larger population of women entrepreneurs. The research was carried out through physical visits to the entrepreneurs premises, face to face interviews and filling of questionnaires.

#### **5.2 Summary**

##### **5.2.1 Demographic Characteristics of Women SME Entrepreneurs**

Most women who carried out the MSE businesses as a sole source of income and only few did business to supplement their incomes. The women ages were mainly in the 24 to 55 years. Most of them were in steady marriages. Half of the sampled women had secondary education. The number of children ranged from two to three with a very small number having more than three children. The level of education showed an inverse relationship of the number of children a woman had. Higher educated women had fewer children. The research showed that the senior women in age had done business for a long time being more than five years.

### **5.2.2 Women Participation in Business: Motivating Factors**

Generally the economic crisis has led to many household difficulties in the families, especially in the urban areas. The declining real wages and inflation coupled with structural adjustment policies reflect a difficult position in Kenya. The rising costs of consumer items in the country and subsequent widening gap between incomes and expenditure has necessitated the need to close the gap through sideline incomes. This crisis has been greater on women who are the main breadwinners, making it an eye opener for women to take up income generating activities. The SMEs have an easy entry and exit characteristic, hence the reason for majority of the women venturing in them. The start-up capital is small and there are minimum legal formalities. A number of the entrepreneurs were able to start their businesses with their own savings. Majority of the women operate business along their familial responsibilities and the fact that they could operate within their homestead is an advantage to them. Inevitably, their investment has been on horizontally growing sectors rather than on those activities with vertical growth potential. Women have therefore not exploited the advantages of specialization. Enabling the women entrepreneurs will go a long way in alleviating poverty in the country by generating meaningful employment for them, considering that they are the majority in the Kenyan population.

### **5.2.3 Factors Affecting Growth of Women MSEs**

The findings showed that limited finances were the main hindrance to business growth. Most respondents said that financing limited the growth of their businesses. The MSE financing was by a variety of “merry-go-rounds” and rotating saving credit associations.

The financing of women in MSE should be encouraged through elimination of collateral, lowering of bank interest rates to manageable levels, prolonging/ varying the repayment period and redemption of the loan where a client is unable to pay from business proceeds. For example, the financing can be based on the business information. The problems cited as affecting the business are lack of market problems which include not having enough customers. They are also faced with competition and lack of knowledge about what customers want.

The entrepreneurs also lack operating funds and collateral for credit. Other problems include lack of produce coupled with high cost of the materials. Poor roads conditions and high transport costs affect their ability to acquire stocks throughout the business period. Some entrepreneurs close their businesses to travel upcountry to look for stock. Worksites are in some cases temporary sites and they experience harassment by local authority officials. This is exemplified by the influx of traders in the street of Nairobi central business area after working hours. There is also low demand for the products due to market saturation. Perishability and theft of some commodities is also a limiting factor.

#### **5.2.4 Education, Training and Previous Jobs**

Training and education are important characteristics of an individual performance in any given field. However, training in specific fields help an entrepreneur to fit into specific fields. The women who had had training for example in record keeping and marketing appeared to perform better in business. They were able to offer quality and efficient

services. However, some entrepreneurs performed well from experience in the business. This is supported by McClelland's theory (1961) that there are born entrepreneurs who do not need any form of business training to become entrepreneurs. The previous jobs did not have any significant relationship in carrying out business; probably due to lack of skills, which would be relevant in the current business. This means the entrepreneurs should therefore be equipped with necessary skills, to be able to develop business information schedule. The research showed that women with some type of training are better entrepreneurs and training programmes should be developed and facilitated at all levels and in specific fields.

### **5.3 Conclusions**

After the study and analysis of data collected, the researcher arrived at the conclusions that women owned small micro enterprises are faced with challenges which inhibit their growth. Most women were ignorant of credit sources and procedures of accessing credit. Many credit organizations require references and collateral security to facilitate credit, which the women entrepreneurs lacked. The women entrepreneurs hardly kept reliable records to support their possibility of growth from start up. Coupled with lack of minimal training in business skills, the women could not attract capital accessibility in their present status. On the other hand some credit organizations normally are reluctant to give credit to women entrepreneurs, due to negative and institutionalized attitudes that discriminate against women. The women then supported one another through merry-go-rounds.

The poor social and economic backgrounds of the women entrepreneurs also handicapped their business growth. The women were satisfied with feeding the family and the cyclical routine of survival continued where they hardly re-invested back to expand their businesses. Training and education in business related fields could make women better entrepreneurs since the women with some training were doing better than their counterparts. Social cultural outlook and share of household workload, limited the ability of women entrepreneurs to fully participate in business. Their divided attention therefore inhibited their business growth.

The other challenges affecting the growth of women entrepreneurship included: poor communication network, lack of supportive services, legal policies, poor business sites, high transport costs, etc. However, women are a source of economic development whose efforts if tapped can make a remarkable difference in the economic growth and offer employment opportunities.

#### **5.4 Recommendations**

Most of the respondents in the MSE sector started their business out of necessity – there were no employment alternatives – rather than because of the opportunity they perceived in doing so. Promotion of women entrepreneurship is daunting and when one talks about a woman entrepreneur, the image goes to the woman selling vegetables in the market. The women entrepreneur has experienced stigmatization in Kenyan society. Women are viewed negatively by society and are not expected to succeed on their own without male assistance. Challenging these stereotypes is an important starting point for creating a

more favorable environment for women entrepreneurs. A strategy of promoting women's entrepreneurship should adopt objectives such as: -

- To increase the level of visibility of women as entrepreneurs and the role their collective and individual enterprises play in the economy.
- To promote credible role models as a way of inspiring other women to pursue entrepreneurship as an employment/career option, as well as the growth potential of their existing enterprises, and to recognize the contributions of individual women entrepreneurs; and
- To create awareness of the barriers faced by women entrepreneurs in the process of starting and growing enterprises and the strategies required in overcoming them.

The strategy to promote entrepreneurship among, and in favor of women, should be done within the context of fostering a stronger entrepreneurial culture in the country as a whole.

The government should put in place a mechanism of delivering the policies in support of women MSEs, for example the establishment of department of Women Affairs as a focal point/office to handle Women's Enterprise Development, (WED). The works undertaken within the Ministry of Labour Human Resource Development (MLHRD) and other Ministries may not do it effectively in the absence of a focal point. The government should put in place an integrated framework for support of women in MSE 'vis a vis' policy/programme co-ordination and leadership, promotion, access to credit, entrepreneurship training, business support and information, associations and networks

and research. This will necessitate the need for conducting location – specific resource and market surveys. The surveys will assist in identification of specific needs.

The government should also set up programmes that will inspire women to pursue entrepreneurship as a viable and feasible include option. This would include production of multi-media success profiles of women at various stages of enterprise development, a high profile of “women entrepreneur of the year awards” and recognition programmes, video documentaries on the nature of women’s entrepreneurship, and organization of regional and national conferences on and for women entrepreneurs.

Financing women owned MSEs is a major challenge. Financial institutions operate inadequate funding as well as funding capacity. There is need for new mechanisms to release more capital to women entrepreneurs and to respond better to their growth needs. The government should establish a Women Entrepreneurs Fund Programme with a view to having a Kenya Women’s Bank. A mechanism to work with existing financial institutions through loan guarantee facility should be established targeting women with growth firms.

The women associations should also be encouraged to grow to National membership and register with other networks for a wider market niche. Merry-go-round level is limiting in finances, business experiences and know-how. Unification of MSEs facilitates an institutional framework for a government - Private sector partnership. The women’s entrepreneur associations will also form a channel for provision of business support and



information to women entrepreneurs. To obtain continuous information on business performance, there is need to engage in comprehensive research in MSE sector, as a source of information for policy action, to create awareness of this segment.

### **5.5 Recommendations for Further Study**

There are a number of serious gaps in the state of knowledge about women entrepreneurial ability in Kenya. The available data is limited on the number, make-up, size and economic/social contributions of women in MSE. The data is lacking in information on business entry, survival and growth rates. There is also no comprehensive demographic profiling on women who own enterprises or on the enterprises they own. Lack of such data made it difficult to get started and made it expensive where physical visits to markets had to be made to sample some respondents.

The study dealt with factors affecting the growth of women-owned small-micro enterprises in selected markets in Nairobi. A comparative study in a rural set up would give overall effect index. This would shed light as to whether factors affecting growth of MSE in the urban sector are the same as those in the rural sector. A comparative study of factors affecting the growth of women and men MSEs in the two sectors could also indicate the level of participation of women MSEs in the economy. Further research is necessary on the women MSEs both to inform policy actions and create awareness of this segment among donor groups, service providers and the public at large.

There were limitations to the study where respondents failed to turn up on an agreed day, due to other commitments. Caution had to be exercised not to push for more information than they were willing to give. The women also felt the knowledge was not beneficial to them. There is need for mutual understanding between the researcher and the respondents for better results. In this research, the monetary figures are within tens, hundreds and thousands; in some cases they could have been more than this, but due to the sensitivity of personal earnings the researcher and respondents had to agree on minimal working figures, as actual earnings are held secret.

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## APPENDICES

### APPENDIX I: LETTER OF INTRODUCTION

Rachel Njeri Karanja  
Kenyatta University  
Department of Business Administration  
P.O. Box 43844  
NAIROBI.

Dear Respondent,

**RE: A QUESTIONNAIRE ON INVESTIGATION INTO THE FACTORS AFFECTING THE GROWTH OF WOMEN-OWNED MICRO AND SMALL ENTERPRISES IN KENYA**

I am a postgraduate student in the department of Business Administration at Kenyatta University. I am carrying out a study on the “**Factors Affecting the Growth of Women-Owned Micro and Small Enterprises in Kenya**”.

The purpose of the research is to gather information that will be important for the promotion of women entrepreneurs in Kenya. I will be grateful if you answer the questionnaire and also share your experiences with me. Your responses will be kept in confidence, and will be used only for the purpose of the study.

Kindly complete all sections of the questionnaire. Please do not indicate your name on the questionnaire.

Thank you.

Yours faithfully

Rachel N. Karanja

## APPENDIX II: QUESTIONNAIRE

This questionnaire seeks to survey the responses of women who are micro and small enterprises in Nairobi (Wakulima, Gikomba and Kangemi) markets. The women trading in the above markets will be interviewed. This information in this questionnaire will be treated confidentially and will be used only for academic purposes..

Date of Interview \_\_\_\_\_

Name of Enumerator \_\_\_\_\_

Area of Enumeration \_\_\_\_\_

Location: \_\_\_\_\_

### SECTION A: BACKGROUND INFORMATION ON THE INTERVIEWEE

Name (optional).....

Age: ..... Marital Status [Married, Single, Divorced, Widowed] .....

Level of education attained: Primary ..... Secondary ..... Others .....

No. of children ..... Other dependants .....

Where do you carry out your business? Gikomba [ ] Kangemi [ ] Wakulima [ ]

How long have you done business?

0-1 [ ] 1-2 [ ] 2-3 [ ] 3-4 [ ] 4-5 [ ] Over 5 years [ ]

Others specify .....

**SECTION B: BUSINESS INFORMATION**

1. What type of business do you operate?

Retail [ ] Wholesale [ ] Hawking [ ]

2. How many years of business experience do you have?

Less than one year [ ] 1-2 years [ ] 2 yrs – 5 yrs [ ] 5 yrs – 10 yrs [ ]  
Over 10 years [ ]

3. For how long have you operated this current business?

Less than one year [ ] 1-2 years [ ] 2 yrs – 5 yrs [ ] 5 yrs – 10 yrs [ ]  
Over 10 years [ ]

4. Why did you venture into this business?

To supplement income [ ] was not employed [ ] As a hobby [ ]

5. What is the mode of payment of the products you sell in your groceries?

Cash [ ] Credit [ ] Others [ ]

6. Do you experience problems in carrying out your business? Yes [ ] No [ ]

If the answer above is yes, please specify .....

7(a) How much capital did you start this business with?

Ksh less than 2000 [ ] Ksh.2000-5000 [ ], Ksh.5001-10,000 [ ] over 10000.

(b) Where did you get the money to start?

Own savings [ ] Borrowed from friend/relatives [ ]

Borrowed from a financial institute [ ] Others (please specify) .....

- (c) How much did you borrow? Ksh less than 2000 [ ] Ksh.2000-5000 [ ]  
 Ksh.5001 – 10000 [ ] over 10000.
- (d) Did you repay the loan in full? Yes [ ] No [ ]  
 If No, Why .....  
 If yes, what was the grace period ..... what was the interest rate..... How  
 long did you repay the loan? 6months – 1 year [ ] 1 year [ ] 2 years [ ]  
 3 years [ ] Any other please specify .....
- (e) Have you taken any other loan since then ? Yes [ ] No [ ]  
 If yes, was it a bigger loan than the previous one? Yes [ ] No [ ]

### SECTION C: SKILLS

- 8 (a) What kind of skills do you require to run your business?  
 Record keeping [ ] Planning [ ] Marketing [ ]  
 Technical skills (e.g. tailoring, hairdressing) [ ]  
 Others [ ]
- (b) Which one of the above skills do you possess?  
 Record keeping [ ] Planning [ ] Marketing [ ]  
 Technical skills (e.g. tailoring, hairdressing) [ ]  
 Others [ ]
9. Have you attended any other professional course? Yes [ ] No [ ]
- 10 (a) Are you satisfied with the skills you acquired? Yes [ ] No [ ]



(b) How long did you take to acquire the above skills

1 week [ ] 2-3 weeks [ ] 1 month [ ] 1-2 months [ ]

Over 2 months [ ] Any other -----

(c) What areas did you cover?

The Entrepreneur and Entrepreneurship [ ]

Business Planning [ ] Finance and Record Keeping [ ]

Organization [ ]

11. What other skills do you feel deficient in? .....

## SECTION D: BUSINESS PERFORMANCE

### Marketing

12. How many customers do you get per day?

1-5 customers [ ] 6-10 customers [ ] 11-20 customers [ ]

Over 20 customers [ ]

13. On average, how much does one customer spend?

Upto Ksh. 10 [ ] Ksh.11-30 [ ] Ksh.30-50 [ ]

Kshs. 51-100 [ ] over Kshs.100 [ ]

14 (a) How do you get your customers?

Rely on neighbour's [ ] Wait for passerby's [ ]

Taking my goods round [ ] Any other .....

(b) How do you maintain your customers?

Give them discounts [ ] Sell slightly cheaper than the others [ ]

Other gifts [ ]                      Others .....

15. In the last two weeks, how many new regular customers have you had in a day?

Below 2 [ ]    3-5 [ ]            6-10 [ ]            Above 10 [ ]

### **Business Organization**

16. Where do you obtain your goods?

From wholesalers [ ]                      From other retailers/hawkers [ ]

Others [ ]                      Please (specify) .....

17. How do you buy your stock? In cash [ ] On credit [ ]

If on credit, what is the duration of repayment?

Upto one week [ ]    Upto two weeks [ ]

Upto one month [ ]    Beyond one month [ ]

18(a) What time do you open your business?

Before 7 am [ ]            Between 7 am and 8 am [ ]

Between 9 am and 10.00 a.m. [ ]    After 10 am [ ]    In the evening [ ]

(b) What time do you close?

Before 7.00 p.m. [ ]                      Between 7p.m. and 8 p.m. [ ]

Between 9 p.m. and 10.00 p.m. [ ]    After 10.00 p.m.

(c) When do you sell most?

Morning [ ]    Lunch time [ ]                      Afternoon [ ]    Evening [ ]

19(a) Do you have a Personal/ business savings account? Yes [ ] No [ ]

If no, how do you save? .....

(b) At what stage did you open your account?

Before starting the business [ ] Shortly after opening the business [ ]

Long after the business developed [ ]

When I needed to source for funds [ ]

20. Do you have operating licenses? Yes [ ] No [ ]

If yes, which ones .....

When did you obtain them .....

If No, Why? .....

21. Do you pay any taxes? Yes [ ] No [ ]

### Record Keeping

22(a) Do you keep business records? Yes [ ] No [ ]

If yes, when did you start keeping records? .....

What effect has keeping of records brought in your business? .....

.....

If not, would you like to acquire skills of keeping records? Yes [ ] No [ ]

(b) Have you received any support service? Yes [ ] No [ ]

If yes, give the name of the organization .....

### Business Assets

23(a) Which fixed asset, did your business start with?

Machinery and equipment [ ] Buildings [ ] Furniture and fittings [ ] None [ ]

What was the estimated value of these assets? .....

Upto Ksh.5,000 [ ] 6000 to 10000 [ ] 11,000 to 20,000 [ ] over 20,000 [ ]

What was the value of stock then? .....

Upto Ksh.5,000 [ ] 6000 to 10000 [ ] 11,000 to 20,000 [ ] over 20,000 [ ]

(b) Which fixed asset does your business have now?

Land [ ] Machinery and Equipment [ ] Buildings [ ]

Furniture and fittings [ ]

What is the estimated value of these assets now?

Upto Ksh.5,000 [ ] 6000 to 10,000 [ ] 11,000 to 20000 [ ] over 20,000

What is the value of your current stock?

Upto Ksh.5,000 [ ] 6000 to 10,000 [ ] 11,000 to 20,000 [ ] over 20,000 [ ]

24(a) How many employees do you have?

None [ ] Upto 2 [ ] 3-5 [ ] 6-10 [ ] Above 10 [ ]

If none, why? .....

If you have some employees, would you need more? Yes [ ] No [ ]

(b) On average how much sales do you make per day?

Upto Kshs. 100 [ ] Kshs. 100-200 [ ] Kshs. 200-300 [ ]

On average how much profit do you make per day?

Upto Kshs. 50 [ ] Kshs. 50-75 [ ] Kshs. 75-100 [ ]

Ksh.101-150 [ ] Over Ksh.150 [ ]

(c) Do you draw any salary from your business? No [ ] Yes [ ]

If your answer is yes, how much per day?

Upto Kshs. 50 [ ] Kshs. 50-75 [ ] Kshs. 75-100 [ ]

Ksh.101-150 [ ] Over Ksh.150 [ ]

(d) Have you made some investments from your business returns? Yes [ ] No [ ]

If your answer is yes, please specify .....

.....

25. What constraints/challenges do you face in your business operations

Insufficient finances [ ] Record keeping [ ] Time to operate business [ ]

Security [ ] Marketing [ ] Stock [ ] Others (specify).....

26.(a) What are your long-term objectives for yourself?

.....  
.....

(b) What are your long-term objectives for your business?

.....  
.....

27. What recommendations do you have on business operations in future?

.....  
.....

**APPENDIX III: WORKPLAN/TIME SCHEDULE**

**Calendar 2008**

Activity /Time	August	September	October	November
Pilot study				
Field data collection				
Data coding and editing				
Data analysis				
Report writing				
Submission of effort				

**APPENDIX IV: BUDGET**

**PROPOSAL**

ITEM	UNIT COST	QUANTITIES	TOTAL COST
Reams of Paper	300	2	600
Typing & Printing	30	60	1,800
Photocopying	3.00	360	1,080
Binding	60	6	360
<b>SUB-TOTAL</b>			<b>3,840</b>

**PROJECT**

Transport			13,000
Editing /printing/Photocopying			10,000
Report binding	600	10	6,000
Meals and entertainment			7,000
Miscellaneous			3,000
<b>SUB-TOTAL</b>			<b>39,000</b>
<b>GRAND TOTAL</b>			<b>42,840</b>

## APPENDIX V

### A LIST OF MICRO-SMALL WOMEN ENTREPRENEURS WHO BELONG TO WOMEN ASSOCIATIONS FROM THREE SELECTED MARKETS IN NAIROBI.

#### KANGEMI HARAMBEE MARKET

	NAME	ITEMS SOLD
1.	Lucy Wambui Kiiri	Clothes
2.	Lucy Wanjiru Wachira	Clothes
3.	Jane Muthoni Wachira	Clothes
4.	Salome Wanjiru Ngaruya	Tomatoes
5.	Trigger Kali Julius	Clothes
6.	Hannah Njeri Nganga	Clothes
7.	Lucy Waithira Kamau	Green Vegetables
8.	Esther Nyaguthii	Potatoes
9.	Mary B. Machani	Potatoes
10.	Rose Amagome Juma	Vegetables
11.	Hannah Wanjiru Muthara	Cereals
12.	Eddah Wanjiru Karanja	Clothes
13.	Alice Waringa Mathara	Clothes
14.	Sabina Njambi Chege	Tomatoes
15.	Consolata Nduta Mwangi	Tomatoes
16.	Sarah Nyambura	Tomatoes
17.	Nancy Wanjiru Mwaura	Tomatoes
18.	Selina Atieno Amano	tomatoes
19.	Esther Jeptoo	Onions
20.	Christine N. Kithuku	Totatoes
21.	Salome Wanjiru	Clothes
22.	Eunice Jumba Malongo	Bananas
23.	Elizabeth Muthoni Njuguna	Bananas
24.	Hannah Wambui Wainaina	Bananas
25.	Jedidah Mugure	Clothes
26.	Monicah Wanjiku	Clothes
27.	Serah Waithiru John	Clothes
28.	Joyce Wambui Nderi	Clothes
29.	Lucy Nyambura	Clothes



30.	Jane Wambui	Clothes
31.	Joyce Waitherero	Clothes
32.	Alice Muthoni	Clothes
33.	Anne Wamahiga	Cereals
34.	Jane Njeri	Tomatoes
35.	Margaret Wangari	Vegetables
36.	Lucy Wangui Mwaniki	Potatoes
37.	Mary Wangari Mburu	Potatoes
38.	Sarah Kimuto	Potatoes
39.	Ruth Lulia	Potatoes
40.	Beth Wanjiru	Clothes
41.	Mary Gichuru	Clothes
42.	Monicah Waithira	Tomatoes
43.	Mary Wayiea	Cereals
44.	Alice Njeri Maina	Cereals
45.	Rachel Wambui Komu	Cereals
46.	Jane Njeri Nganga	Cereals
47.	Martha Wangari Kamau	Cereals
48.	Janet Wamaitha Kungu	Tomatoes
49.	Mary Muthoni	Tomatoes
50.	Nancy Wanjiku Ngaruya	Tomatoes
51.	Margaret Waigoko Maina	Household Utensils
52.	Joyce Muthoni Njenga	Tomatoes
53.	Jane Wangeci Komu	Tomatoes
54.	Jane Wanjiru Kamau	Tomatoes
55.	Margaret WanjikuMbatia	Potatoes
56.	Irene Wanjiku Kariuki	Cereals
57.	Serah Wanjiru Njenga	Clothes
58.	Lydia Wamburi Githuhi	Clothes
59.	Mary Nyokabi Migwi	Clothes
60.	Anastacia Waiyua	Clothes
61.	Faith Wanjiku	Tailoring Clothes
62.	Jane Nyakio Ndungu	Clothes
63.	Mary Nyamburu Erick	Clothes
64.	Belita Peter Muya	Clothes
65.	Lucy Njeri Kaigua	Clothes
66.	Rachael Wambui Kamau	Clothes
67.	Salome Wanjiru Kungu	Tomatoes
68.	Lucy Njeri Kaigura	Tomatoes
69.	Jane Nyambura Kariri	Tomatoes
70.	Lucy Waithira Kamau	Tomatoes
71.	Peris Wanjiku George	Tomatoes
72.	Jancinta Wangechi	Tomatoes
73.	Agnes Kimuto Ongote	Tomatoes
74.	Beatrice Njoki Maina	Tomatoes

75.	Janet M. Muhonja	Salon
76.	Susan Njeri Chege	Salon
77.	Julia Waithira Kihenya	Salon
78.	Esther Nyaguthii	Green Vegetables
79.	Nancy W. Mwaura	Green Vegetables
80.	Hannah Njeri Ndungu	Tomatoes
81.	Margaret Wambui Kimani	Clothes
82.	Secundah W. Muongi	Tomatoes
83.	Lucy Wanjiku Wachira	Clothes
84.	Christine Nduku Kithuku	Clothes
85.	Nkaabu M. Muriuki	Tomatoes
86.	Selina Atieno Odhiambo	Tomatoes
87.	Consolata Nduta Migwi	Clothes
88.	Jane Wanjiku Migwi	Clothes
89.	Serah Nyambura	Clothes
90.	Alice Warigia Kungu	Clothes
91.	Eddah Wambui Kienja	Clothes
92.	Monicah Wanjiku David	Salon
93.	Elizabeth Muthoni Njau	Salon
94.	Rachel Wambui Kariuki	Cereals
95.	Anne Merisa	Clothes
96.	Elizabeth Muthoni Kungu	Clothes
97.	Margaret Wangu	Salon
98.	Joy Njambi	Grocery
99.	Dorcas Wangari	Vegetables
100.	Lucy Kanana	Dry Cereals

## GIKOMBA MARKET

S/NO	NAME	TYPE OF BUSINESS
1.	Florence Kagotho	Grocery
2.	Esther Ngethe	Service
3.	Charity Mathenge	Potatoes
4.	Esther Githua	Upholstery
5.	Ann Karanja	Potatoes
6.	Regina Kimita	Hardware
7.	Jane Thuku	Paints
8.	Millania Wanjira	Upholstery
9.	Catherine Kahure	Greens/vegetables
10.	Hannah Kimani	Upholstery
11.	Muringi Mwai	Hardware
12.	Ann Muringe	Upholstery
13.	Violet Njoroge	Vegetables
14.	Salome Waithira	Vegetables
15.	Salome Wangui	Vegetables
16.	Florence Ngang'a	Tomatoes
17.	Gladys Gathoni	Vegetables
18.	Winfred Gitau	Upholstery
19.	Jane Mwangi	Materials
20.	Wandia Gachugi	Maize
21.	Jane Gachambi	Bananas
22.	Teresa Ngigi	Chicken
23.	Elizabeth Wachira	Oranges
24.	Lydia Mwai	Mangoes
25.	Esther Muhito	Maize
26.	Alice Miring'o	Hardware
27.	Jane Muigai	Grocery
28.	Wangui Gichuki	Oranges
29.	Mary Wairimu	Cabbages
30.	Wairimu Gitumbi	Upholstery
31.	Naccisir Wanjiru	Furniture
32.	Wanjiru Muchiri	Maize
33.	Murugi Muturi	Hardware
34.	Wahito Gacheru	Bananas
35.	Monicah Njoroge	Maize
36.	Esther Wakarima	Upholstery
37.	Rose Wairimu	Tomatoes
38.	Zipporah Nduta	Maize
39.	Roseline Njeri	Maize
40.	Agnes Njeri	Maize

41.	Margaret Wanjiru	Maize
42.	Mary Wairimu	Maize
43.	Margaret Njoki	Maize
44.	Hottenesin Waithira	Maize
45.	Mary Nduta	Beans
46.	Elizabeth Wamaitha	Beans
47.	Nancy Nyambura	Hotel Service
48.	Esther Mwihaki	Maize
49.	Joyce Wambui	Salon
50.	Grace Njeri	Tailor
51.	Tabithah Njoroge	Cabbages
52.	Julian Njeri	Oranges
53.	Joyce Njoroge	Bananas
54.	Esther Kioi	Potatoes
55.	Jane Nduti	Maize
56.	Esther Wangui	Maize
57.	Mary Kabecha	Vegetables
58.	Juliah Wanjiru	Vegetables
59.	Rose Muthoni	Hardware
60.	Muthoni Kingori	Upholstery
61.	Purity Kabare	Tomatoes
62.	Mumbi Maina	Bananas
63.	Pauline Muchiri	Hawking
64.	Pauline Mumbi	Hotel Service
65.	Wangui Gachecha	Maize
66.	Kaiganaine Edith	Upholstery
67.	Lucy Gaita	Upholstery
68.	Gladys Kariuki	Hardware
69.	Patricia Maingi	Paints
70.	Monicah Njoroge	Upholstery
71.	Jane Wangui	Hardware
72.	Mary Wanjiku	Service
73.	Gladys Karinge	Upholstery
74.	Jane Wangeci	Upholstery
75.	Eva Wamunyu	Salon
76.	Milka Njeri	Maize
77.	Pamela Atieno	Fish
78.	Mary Anyango	Butchery
79.	Njeri Ngugi	Tailor
80.	Esther Wangui	Mattresses
81.	Irene Mumbi	Upholstery
82.	Anne Mwai	Hardware
83.	Njeri Ndava	Maize
84.	Hannah Mbugua	Vegetables
85.	Jane Macharia	Clothes

86.	Eunice Muthwii	Clothes
87.	Eunice Kamocho	Upholstery
88.	Jane Wanjiku	Hawker
89.	Mary Waruguru	Hawker
90.	Mary Kamau	Material
91.	Elizabeth Wangeci	Vegetables
92.	Perris Maitha Kariuki	Cosmetics
93.	Mary Magondi	Boutique
94.	Nancy Wambui	Clothes
95.	Mary Mueni	Fish
96.	Elizabeth Wayua	Button Maker
97.	Mary Nderitu	Clothes
98.	Mary Karondi	Wakaba Shoes
99.	Rachel Njambi	Groceries
100.	Regina Ngima	Maize

## WAKULIMA MARKET

S/NO	NAME	ITEM SOLD
1.	Margaret Wangari Mwangi	Services
2.	Cecilia Njeri Njuruga	Potatoes
3.	Jane Njeri	Potatoes
4.	Aisha Suleiman	Potatoes
5.	Irene Mumbi Kamau	Potatoes
6.	Mercy Wanjiru	Chicken
7.	Jane Muthoni	Chicken
8.	Freshia Nyambura	Chicken
9.	Belta Wanja Kibe	Chicken
10.	Teresia Wairimu Wangiri	Gunny Bags
11.	Mary Wambui Ndungu	Transport
12.	Jacinta Wangari Mbugua	Vegetables
13.	Jacinta Nyawira Gatumbu	Hawking
14.	Loise Wahome	Services
15.	Anastasia Thuku	Services
16.	Monicah Wambui Ndigirigi	Gunny Bags
17.	Cicilia Wangui Muthee	Hawking
18.	Catherine Chege	Clothes
19.	Margaret Wangari Mwangi	Services
20.	Benson Kmani Gitau	Potatoes
21.	Timothy Waweru	Potatoes
22.	Stephen Njoroge	Potatoes
23.	Fanciscah Gaiti	Services

24.	Cicilia Njeri Njuguna	Potatoes
25.	Belta Wanja Kibe	Chicken
26.	Mary Njeri Muritu	Services
27.	Mary Wambui Ndungu	Transport
28.	Cecilia Wangui Muthee	Hawking
29.	Monicah Wambui Ndiringi	Gunny Bags
30.	Margaret Wangari Mwangi	Services
31.	Anastasia Wambui Thuku	Services
32.	Asha Suleiman	Potatoes
33.	Jacinta Nyawira Gatumbu	Hawking
34.	Belta Wanja Kibe	Chicken
35.	Mary Wanjiku Kimani	Grains
36.	Rebecca Wanjiru Kamau	Services
37.	Frasia Wambui Chege	Clothes
38.	Lydia Njeri Kigo	Groceries
39.	Cecila Njeri	Potatoes
40.	Jane Njeri Githuci	Oranges
41.	Mary Muthigo	Tomatoes
42.	Alice Wang'ang'a	Tomatoes
43.	Jacinta Wangari Mbugua	Vegetables
44.	Jane Wanjohi	Groceries
45.	Margaret Wamundi	Vegetables
46.	Esther Njoki	Groceries
47.	Alice Njambi	Tomatoes
48.	Monica Mutuku	Fruits
49.	Wamuyu Njeru	Greens
50.	Beatrice Nyumbu	Groceries
51.	Hannah Osale	Fish
52.	Kanini Muya	Dry Grains
53.	Zipporah Mumbi	Tomatoes
54.	Philomena Wamalwa	Tomatoes
55.	Lily Naboto	Vegetables
56.	Linda Ochieng	Groceries
57.	Pamela Mueni	Vegetables
58.	Fridah Muthomi	Groceries
59.	Lilian Makokha	Tomatoes
60.	Debra Aruya	Fruits
61.	Lisa Wanjiru	Greens
62.	Nancy Kanana	Gunny Bags
63.	Maurine Moibei	Transport
64.	Phanice Wamukota	Vegetables
65.	Rose Wanjiku	Hawking
66.	Hannah Wairimu	Services
67.	Nancy Waithera	Services
68.	Betty Ahenda	Gunny Bags

69.	Debbie Amunga	Hawking
70.	Angela Tamiru	Clothes
71.	Buzunesi Amollo	Services
72.	Moraa Teresiah	Potatoes
73.	Mwende Mutua	Potatoes
74.	Beatice Kawira	Maize
75.	Dorcas Kaari	Peas
76.	Jackie Kageni	Onions
77.	Eva Njeri	Peas
78.	Mercy Naipei	Clothing
79.	Flora Kipchumba	Potatoes
80.	Jane Nyakiana	Oranges
81.	Berinda Karimi	Potatoes
82.	Edah Odiek	Services
83.	Ann Wahu	Hawking
84.	Angela Nasike	Paper bags
85.	Elizabeth Wafula	Vegetables
86.	Christine Wanjau	Potatoes
87.	Lucy Wanja	Carrots
88.	Betty Karegi	Hawking
89.	Beth Nduta	Clothing
90.	Rosalind Kamau	Vegetables
91.	Lydia Kamene	Tomatoes
92.	Lilah Mutisya	Eggs
93.	Prisca Muya	Services
94.	Esther Njoki	Honey
95.	Janet Mutiso	Cereals
96.	Amina Salim	Hawking
97.	Maryanne Mbeyu	Chicken
98.	Dorothy Mwihaki	Oranges
99.	Valentine Odhiambo	Fish
100.	Horida Khamati	Vegetables

**APPENDIX VI: RELATIONSHIP BETWEEN THE RESPONDENTS AGES WITH THEIR STAY IN BUSINESS**

		Age	How long have you done business
Age	Pearson Correlation	1	.437(**)
	Sig. (2-tailed)	.	.004
	N	41	41
How long have you done business	Pearson Correlation	.437(**)	1
	Sig. (2-tailed)	.004	.
	N	41	60

\*\* Correlation is significant at the 0.01 level (2-tailed).

**APPENDIX VII: RELATIONSHIP BETWEEN THE RESPONDENTS LEVEL OF EDUCATION WITH THEIR NUMBER OF CHILDREN**

		No. of Children	Level of Education
No. of children	Pearson Correlation	1	-.184
	Sig. (2-tailed)	.	.170
	N	57	57
Level of education	Pearson Correlation	-.184	1
	Sig. (2-tailed)	.170	.
	N	57	60

**APPENDIX VIII: RELATIONSHIP OF AMOUNT OF MONEY USED TO START BUSINESS AGAINST MONEY BORROWED.**

			How much capital did you start this business	How much did you borrow?
Spearman's rho	How much capital did you start this business	Correlation Coefficient	1.000	.596(**)
		Sig. (2-tailed)		.000
		N	59	45
	How much did you borrow?	Correlation Coefficient	.596(**)	1.000
		Sig. (2-tailed)	.000	
		N	45	46

\*\* Correlation is significant at the 0.01 level (2-tailed).



**APPENDIX IX: THE AMOUNT OF MONEY BORROWED BY THE BUSINESSES AGAINST THE AMOUNT INVESTED IN THE BUSINESS**

		How much did you borrow?				Total	
		less than ksh 2000	ksh2000 - 5000	ksh 5001 - 10000	over ksh 10000		
How much capital did you have to start this business	less than Ksh 2000	Count	8	0	0	0	8
	% within How much capital did you start this business	Count	100.0%	.0%	.0%	.0%	100.0%
	Ksh 2000 - 5000	Count	0	3	0	0	3
	% within How much capital did you start this business	Count	.0%	100.0%	.0%	.0%	100.0%
	Ksh 5001 - 10000	Count	0	4	24	2	30
	% within How much capital did you start this business	Count	.0%	13.3%	80.0%	6.7%	100.0%
	over Ksh 10000	Count	2	0	1	1	4
	% within How much capital did you start this business	Count	50.0%	.0%	25.0%	25.0%	100.0%
Total		Count	10	7	25	3	45
	% within How much capital did you start this business		22.2%	15.6%	55.6%	6.7%	100.0%