

**PARTICIPATION OF MEN AND WOMEN IN FISHERIES
VALUE CHAIN IN NAIROBI CITY COUNTY**

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DECLARATION

This thesis is my original work and has not been presented in any other university/institution for certification. The thesis has been complemented by referenced works duly acknowledged. Where text, data, graphics, pictures or tables have been borrowed from other works including the internet; such sources have been accurately referred in accordance with anti-plagiarism regulations.

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DEDICATION

To men and women entrepreneurs in small scale enterprises

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OPERATIONAL DEFINITION OF TERMS

Entrepreneur:	Entrepreneurs are men and women who undertake an enterprise, organize and operate a business taking on financial risks.
Cathexis:	Refers to the irrational attachment to social norms, culture, traditions, values, attitudes and biases
Fisheries:	Fishing is an engagement of raising and harvesting fish. It also involves the capture of wild fish.
Fisheries value chain:	Value chain comprises the strategic stages from the harvesting and production, processing, distribution, marketing of fisheries products. In this case, the fisheries value chain will entail the way men and women participate in the process of delivery of fisheries product to the consumer based on the gender and power relations.
Gender division of labour:	The concept refers to the socially determined ideas and practices based on the culture, which define what roles and activities, as deemed appropriate for men and women.
Sexual division of labour:	Allocation of men and women roles, duties and responsibilities based on biological differences as males and females.
Sexual division of power:	The unequal capacity to influence the actions of others based on sex differences is referred to as sex division of power.
Participation:	This concept refers to the roles, initiatives that men and women engage in, and the decisive influence they exert on the value chain operations. Fisheries value chain as a diverse and dynamic process; men and women undertake different roles based on the culture, value, attitude and norms concerning access and control. Women are more engaged in the lower levels while men on the higher levels of the value chain.

Patriarchy:

In this study, the systematic societal structure that institutionalizes male physical, social and economic power over women refers to patriarchy.

ABBREVIATIONS AND ACRONYMS

AFIPEK	Association of Fish Processors and Exporters of Kenya
ASCA	Accumulating Savings and Credit Association
BDS	Business Development Services
DoF	Department of Fisheries
GoK	Government of Kenya
IFP	Industrial Fish Processors
ILO	International Labour Organization
IDB	International Data Base
KARF	Kenya Access to Rural Finance Program
KBDS	Kenya Business Development Services Program
KMFRI	Kenya Marine and Fisheries Research Institute
LVFO	Lake Victoria Fisheries Organization
MFI	Micro-Finance Institutions
MSY	Maximum Sustainable Yield
MT	Metric Tons
OECD	Organization for Economic Co-operation and Development
ROSCA	Rotating Savings and Credit Association
SACCOS	Savings and Credit Cooperative Society
SHG	Self Help Group
SPSS	Statistical Package for Social Sciences
TGAs	Traditional Guarantors Associations
UNDP	United Nations Development Program
UNIFEM	United Nations Development fund for Women
USAID	United States Agency for International Development
WEEF	Women Economic Empowerment Framework

ABSTRACT

This study sought to establish the status of men and women in the entrepreneurial fisheries activities in Kenya. The study focused specifically in Nairobi City County, and was guided by the following objectives, namely; to map out specific areas within fisheries value chain that men and women participate in; to identify socio-economic factors that influence participation of men and women, to assess the socio-cultural factors that determine participation of men and women in those specific ventures within fisheries value chains; to identify institutional factors that influence participation of men and women entrepreneurs; and to establish the strategies to enhance equal and effective participation of men and women entrepreneurs in fisheries value chain. The social structural theory developed by Connell (1987) guided the study; the women economic empowerment framework advanced by Longwe (1995) provided bench marks for enhancing women empowerment on the basis of which the impact of participation on the entrepreneurial value chain was assessed. The descriptive survey design used was considered suitable for this study given the ability to examine information on the experiences of men and women in the fisheries value chain. The study focused on three zones and purposively selected market areas based on the socio-economic characteristics, namely; affluent class, middle class and lower class; where the respectively sampled markets were City, South C-Mugoya and Kariobangi markets. Eight men and eight women involved in fisheries value chain from each of the sampled markets were selected for the focus group discussion. Other respondents were 204 men and 174 women comprising 20% entrepreneurs in fisheries value chain; and personnel from the ministry and county government sampled for questionnaire and interview schedule respectively. The focus group discussions, questionnaires, interview and observation schedules were used to collect data. The qualitative data were categorized into patterns, categories and themes based on the study objectives. The SPSS version 16 was used to analyze quantitative data; where cross-tabulations, chi-square and *post hoc* tests were carried out to demonstrate the relationship between variables. The study findings showed that men were prominent in economically high end City market and South C market while women were more in the marginal Kariobangi market. The findings revealed that men had controlled the competitive value chains namely; aquaculture/fish harvesting, transportation, distribution, middle trade, and large scale while women were more on the lower end value chain namely; grading/sorting/gleaning and market sellers. Gender, age, formal education, marital status and income per month were established as the socio-economic factors affecting the participation of men and women in the fisheries value chain. The chi-square test result showed a significant association between gender and large scale (p-value=0.001); age and aquaculture/fish harvesting (p-value=0.001); marital status and aquaculture/fish harvesting (p-value 0.036); education and transport (0.036); and income per month and distributor (p-value=0.006); and large scale (p-value=0,004). The study revealed that men compared to women had control over factors of production, capital and credit, hence; invest in high end value chain. The study recommended county government's facilitation to men and women to have equal access to formal education, capital and credit. The study also recommended that stakeholders to facilitate access to strategic information on entrepreneurship, adequate distribution of labour resource and representation in leadership and decisions.

CHAPTER ONE

INTRODUCTION

1.1 Background to the Study

According to the World Bank (2015) and OECD (2013), women as compared to men are a leading portion of the population in many parts of the world including Kenya where they constitute 51% of the entire population (GoK, 2010). It is, therefore, important to recognize their contribution to development through competitive fortitude for resources. Apparently, there is increasing awareness in the society on the important roles that women play especially in the value chains and economic activities.

According to World Bank (2013), various development policies, programmes and donor agencies have commended support for women economic activities and value chains. Fisheries value chains have become viable economic activities for livelihoods, poverty alleviation and economic growth. However, participation by men and women in the sector's diverse roles is based on culture, values, attitudes, traditions and norms concerning fisheries resource access and control.

The fisheries value chain describes the range of economic activities, which are essential to bringing fish from harvesting and production through different phases of processing, delivery and finally to the consumer. The activities involved in the physical transformation of fisheries commodities and value

chain are determined by the level of participation, autonomy, capacity and decisions of the actors.

The fisheries value chain framework entails the following economic utilities as form, place, time and possession. Form utility is the process of transforming the product to increase its attractiveness to a wider group of customers by altering its physical appearance. In the contexts of fisheries value chain, the form utility entails making fisheries products ready for consumption by transforming their form. This process shapes the product to fit within the customers' expectations.

Place utility is the process of availing the products to a group of customers by altering its physical location. This entails distribution of fish products to locations acceptable by the consumers. Time utility refers to an environment where the sellers use every opportunity available to streamline the supply chain and distribution channels to allow timely possession of products once the buyers have made the final decision to purchase a product.

Possession utility is the final stage of the value chain and often occurs at the market areas, where there is transfer of the product from the seller to the buyer. Successful entrepreneurship entails making it easy for the buyer to pay and achieve the possession utility of the products. Hence, having variety of easy payment methods facilitates possession utility of products.

On the contrast, the value addition describes the enhancement a company gives its product or service before offering the product to customers. Value addition

applies to instances where a firm takes a product that may be considered a homogeneous product, with few differences from that of a competitor, and provides potential customers with a feature or add-on that gives it a greater sense of value.

Studies on the marketing and value chain of agricultural and fisheries products have shown that the process attracts several players (Kohls et al., 2002). This is because the value chain procedures involve entire process of production from input to consumption; as characterized by multiple forward and backward roles and linkages (Smile, 2008; Crawford, 1997). Although men and women participate in the value chains of fisheries products at various levels as livelihoods and economic activity (Alan et al., 2010), their level of participation is determined by gender perception in terms of socio-cultural, attitudes, values, traditions, economic and access to productive resources (Williams, 1996; Cinner, 2010). In the fisheries value chain, women are over represented in form utility; while men control place, time possession, and information utilities (Medardet et al., 2000).

Fisheries sector has a potential to contribute to the global, regional and national socio-economic development, economic revitalization and reduction of poverty (Wangila et al., 2007). Over 80% of the global population depends on fisheries as a livelihood and source for animal protein, hence, a need to improve on gender dynamics within the sector's production and distribution through research to effectively harness this potential (Wangila et al., 2007).

The development changes in most African nations have impacted a shift on the socio-cultural and economic roles of women from the traditional environment to the public economic environment. This expansion of women's role to the public domain has led to the conflict of responsibilities that arise due to the public economic and traditional family demands (Silberschmidt, 2001a and b). The long-term impact of this phenomenon has influenced the performance of men and women in the value chain. In addition to this new sphere of public economic environment, women are expected to perform roles pertaining to their traditional family structures, which have considerably changed, making them heads of households (Silberschmidt, 2001a and 2001b). This circumstance has made women to compete with men for access and control over resources and participation in the value chains.

Globally, women constitute about half of the estimated 180 million people working in the fisheries value chain where they participate in form utility, which encompasses the post-harvest activities (Ochiewo, 2004). Studies have further noted that women tend to concentrate on least competitive form utility on the value chain that underscores post-harvest gleaning, processing and subsistence marketing of fisheries products (Hoorweget al., 2009b; Williams, 2006).

According to FAO (2013), this restriction of women to form utility determines their level of access and control of fisheries resource, which subsequently depends on socio-economic factors, gender roles, culture, values, attitudes and norms. Consequently, determines gender differential participation in fisheries

value chain; where, men are predisposed to control fisheries resources while women only access as this study intended to ascertain. Men compared to women have strategically placed themselves at viable levels of the economic utilities within the value chains, (Williams, 2002; FAO, 2013). The viable levels earn men higher commercial and economic potentials while women at lower levels operate with restricted economic margins.

Williams (2006); Mayoux and Mackie, (2007) concur that in the European Union, despite the cultural and economic diversity, the perception of women in the fisheries sector holds common opinions; where they control 39% of the fish resources. They further noted that women are over represented in form utility, which entails gleaning and processing; hence, cultural values have placed them at lower and unskilled opportunities subordinate to men. At any rate, men control the management segment, which earns better rewards and a more positive public perception. In terms of rewards, women in EU experience economic discrimination where they earn 12% less than men for the same task (Mayoux & Mackie,2007). The subordination of women in the Western world is reckoned to have originated from the Greek and Roman civilization where women were relegated to roles within the household; while, men took over the public responsibilities (Atsede & Adebimpe, 2004).

To illustrate the competitiveness of men in place, time, possession and information utilities in contrast to women's form utility; studies in Asia (Ani2009; 2004; De Silva,2011) a joint observation in Cambodia; reported that fundamental activities related to form utility within fisheries sector are

undertaken by women who play critical roles in fish processing; trading, maintaining fishing gear, equipment and repairs. In case women participate in competitive economic utilities such as production in the sector; their outcomes remain subsistence. Although women are recognized by men as partners in the sector; culture, values, attitudes and norms determine their viability as equal competitors in commercial production and in potential value chain. Men have, therefore, associated themselves with more noticeable commercial, large-scale capture and economic utilities; as women engage in subsistence (Atsede & Adebimpe, 2004).

These trends were reported in Peru; where, (Rosario et al., 2012) noted women's involvement in fishing operations as nil. This economic activity was handled by men in small, medium size artisanal boats and in large industrial boats for commercial purpose. According to Kelka,(2001); IFAD, (1999), women participate in the sector's value chain primarily as traders and marketers as compared to men who entirely engage in production; which holds higher returns as compared to processing and marketing.

A similar state of affairs has been reported in Bangladesh, where a study on rural women in fisheries resources found that domestic role of women in improving household livelihood through nutrition has encouraged more women to be involved in fisheries value chain. According to Gupta (1990), rural women engage in subsistent fishing, to improve the quality of their household livelihoods. This scenario illustrates that as far as levels of participation and

economic utilities are concerned in Bangladesh fisheries value chain, there is more emphasis on the roles of men than women.

In Africa; (Shalesha & Stanley 2000; Emerhiet al.,2001; Mafimisebi,2007), affirm that, the control of land, capital, labour and competitive economic utilities exhibits patterns similar to the agrarian communities, where patriarchal structure takes precedence; hence, women are excluded from the profitable segments and competitive economic utilities of the value chain. Although women's roles are noticeable in fisheries sector as marketers and processors; their limited economic potential to viable economic utilities, has subordinated them in the value chain. The women's offshore fisheries production trends have been reported in regions of developing countries such as East, South and West Africa, their place in control of viable economic utilities in the fisheries value chain has remained subordinate (Mafimisebi et al., 2009).

In Kenya, women occupy a central place in the fishing sector representing 70% to 87% of fish-workers involved in artisanal fish trade (Ogotu, 1988; &, 1992; Sandauno, 1999). Although fisheries market chain is characterized by a high participation of women; often single, divorced and widowed, their participation in the value chain exhibits lower economic potentials (Ogotu, 1992; Medard & Wilson 1996; Geheb1997; Lwenya&Abila2000).According to (Mbenga1999), control of fisheries resource in the value chain is a task allocated to men, while women are usually engaged more in the post-harvest activities such as smoking, drying, and marketing for subsistence. This level of participation earns women a narrow profit margin as compared to that earned by the men

who control the resource. The level of education, culture, values, attitudes and norms are fundamental factors that may have influenced the women's lower end fisheries value chain and further served as informal regulatory mechanism, which influence access and control of the resource (Geheb1997).

According to Lyn (1999), even in the alternative aquaculture, the land upon which fishing activity takes place has played a critical role in determining the level of access and control of the resource in the market chain. In Kenya, land is inherited, owned and controlled by men who determine the level of access, utilization and control as culture and traditional customs holds. In aquaculture therefore, while men own the ponds, women and children manage the ponds (Ogutu, 1992).

This scenario has a crucial influence in promoting disparities between men and women in the fisheries sector. In their post-harvest roles, women come to the limelight during landings for a minimal pay. Nayak (2000) observes that women engage in the preservative roles, which are less competitive; as such earn lower income. Failure of economic structures to provide viable and alternative credit facility for women has lowered their competitive entrepreneurship. As a result, they rely on their own initiatives to engage in value chain

Women in fisheries value chain in Nairobi County comprise a significant majority yet least in ranking as far as access and control of economic utilities are concerned. The rationale for this circumstance is based on the systemic prejudice and discriminatory policies, financial constraints, socio-cultural and educational factors that limit women's access to entrepreneurial resources

(Ogutu, 1992). The implications of this are the evidence of the discrepancies between men and women at the level of performance in the fisheries value chain based on control of productive resources by men; hence, women continue to operate under difficult socio-cultural and economic environment (Ogutu 1992; Nayak 2000).

Amidst this scenario, the government of Kenya in collaboration with the fisheries stakeholders has incorporated gender issues into the national instruments, policies and legislations. Support has focused on the improvement of women's access to credit facility; strengthening administrative action by ensuring that male and female fisheries extension officers are recruited and given gender awareness training. In addition, capacity building for men and women in entrepreneurial value chain on appropriate ways of fish processing (McCormick, 2001). It is against this background that the proposed study on participation of men and women in fisheries value chain in Nairobi City County, Kenya is fundamental.

1.2 Problem Statement

The participation of men and women in fisheries value chain is an aspect of national concern for its contributions to income growth, livelihoods and as a poverty reduction strategy at the household level. In this regard, the government of Kenya and stakeholders in the fisheries value chain has provided an integrated package of service to reduce gender inequalities with a synergistic effect through technical assistance, improvement of credit

facilitation, capacity building and skills development. The government has further provided both men and women in the sector a gender sensitive training in business skills, enterprise development, with focus on correcting gender disparities in economic activities and fosters innovation in modern information and communications technology (ICT) for gender equitable fisheries value chain development and improved women's access to market through increased sales and income.

Amidst these efforts in place, Kamau and Ngigi (2013) found that women's involvement has been limited to lower nodes of the chain; hence, have been under-represented in harvesting and distribution as 0.16%, 0.8% compared to men's 32% and 28% respectively. This indicates that despite the efforts in place, there are factors that affect men and women, though differently in the fisheries value chain. Thus, resulted in unequal participation, access and control of processes and accrued benefits in this sector. This inequality affects distribution of household income and undermines the efforts in poverty reduction, a concern that informed the problem of this study. The study focused on participation of men and women in fisheries value chain in Nairobi City County.

1.3 Study Objectives

The main objective of the study was to investigate the entrepreneurial participation of men and women in fisheries value chain in Nairobi City County. The following were the specific objectives of the study:

- i. To map out the ventures within the fisheries value chain that women and men participate in Nairobi City County.
- ii. To identify socio-economic factors that influence men and women, participation in the fisheries value chain in identified ventures.
- iii. To examine the socio-cultural factors that influence men and women, participation in fisheries value chain.
- iv. To identify the institutional factors that influence men and women's participation in the fisheries value chain in Nairobi City County.
- v. To suggest the strategies to enhance equal and effective participation in the fisheries value added chain.

1.4 Study Questions

- i. What are the ventures within the fisheries value chain that women and men participate?
- ii. What are socio-economic factors, which influence men and women, participation within ventures of the fisheries value chain?
- iii. What are the socio-cultural factors, which influence the participation of men and women in fisheries value chain?

- iv. What are the institutional factors, which influence men and women, participation in the fisheries value chain?
- v. What are strategies to enhance equal and effective participation in the fisheries value chain?

1.5 Study Assumptions

- i. There are ventures within the fisheries value chain that men and women participate in.
- ii. The socio-economic factors influence men and women participation within ventures of fisheries value chain.
- iii. The socio-cultural factors influence the participation of men and women in fisheries value chain.
- iv. The institutional factors influence the participation of men and women in fisheries value chain.
- v. There are strategies that enhance equal and effective participation in the fisheries value chain.

1.6 Justifications and Significance of the Study

The socio-economic and demographic characteristics of Nairobi City County uniquely impacts on the household economy especially where equal and effective participation by men and women will be enhanced in value chain. The improved performance of small-micro enterprises promotes sustainable livelihood, socio-economic development, economic revitalization and poverty reduction.

The findings may, therefore, furnish policy-makers to understand some of the causes of women problems in entrepreneurial development and appropriate strategies to better tackle them. The improved entrepreneurial policies may support the existing structural frameworks; hence, promote equitable and effective participation by men and women in economic activities as a poverty reduction strategy. This study has generated a relatively new body of knowledge as it relates gender, economic activities and fisheries value chain. This association may generate equitable and effective participation of men and women in entrepreneurship, which is fundamental for economic development, poverty reduction and improvement of livelihoods.

The findings, conclusions and recommendations of the study contribute to the new knowledge on the participation of men and women in the fisheries value chain. The study findings and conclusions will contribute to the ongoing efforts of scholarship and open new grounds for further research in various types of value chain analysis. Further, the study will contribute to the current efforts and engagement by the government and inter-governmental agencies through policy formulation to improve the performance of small micro-enterprises and economic activities with respect to the participation of men and women.

1.6 Scope and Limitation of the Study

This study was carried out in Nairobi city and its environs targeting men and women entrepreneurs in fisheries value chain in sampled markets. Each of the sampled market area exhibited fundamental aspects of the value chain

(production, distribution, processing and marketing) where the sampled population in each segment participated in the study. The Nairobi City County exhibits unique socio-economic characteristics; hence, the findings of this study were not a representative of other counties in Kenya. It is acknowledged that whereas post-harvest procedures entail a much more complex and broader process; this study limited itself to the participation of men and women in entrepreneurial fisheries value chain in Nairobi City County.

CHAPTER TWO

REVIEWED LITERATURE THEORETICAL AND CONCEPTUAL FRAMEWORKS

2.1 Introduction

This chapter presents reviewed literature related to participation of men and women in fisheries value chain. The review was presented along various themes, namely; ventures that men and women participation in fisheries value chain; factors that influence participation of men and women in specific ventures within the fisheries value chain; strategies for equal and effective participation of men and women in the fisheries value chain and theoretical and conceptual frameworks.

2.2 Ventures of Participation by Men and Women in Fisheries Value Chain

Studies on ventures within fisheries value chain that men and women participate in; have focused mostly on fish harvesting, gender roles in fisheries sector and post-harvesting processing (De Silver, 2011; FAO, 2008; Kohl et al., 2002). There are limited studies on specific ventures in fisheries value chain that men and women participate. This study intends to fill this gap.

Fish Harvesting

Studies have shown that men and women participate in complementary activities in fish harvesting (Bailleux 2003; D. Scott et al., 2004). According to Lyn (1999), the idea of fishing was a common practice, which involved men

going out in boats offshore to the deeper seas to harvest the fisheries resources. This perception defines fishing activity as a leading work for man. Globally, participation in fish harvesting by men and women is determined by norms pertaining to the resource control, type of technology involved and extent of commercialization. Although women are involved in the fisheries related economic activities, their representation in the control of resources related to the sector and competitive entrepreneurial value chain is negligible. For this reason, socio-economic and cultural factors, which determine participation of men and women in fish harvesting are rooted in gender stereotypes.

According to Jensen (2002), women are involved in fish harvesting for subsistence while men for commercial purposes. As Medard et al., (2000) further reported that while men harvest fish in more distant water, their women counterparts use small boats nearer to the shoreline. Thus, men are culturally associated with commercial and large-scale activities while women with small scale, subsistence and non-commercial fish harvesting. Kimkong (2006) revealed that culturally, women are strictly not allowed to work at the commercial fishing due to the belief that their presence leads to decline in fish yield. Also, it is believed that fish harvesting is hard work which is inappropriate for women. However, women are allowed to collect fish from cages and to participate in fish processing and distribution and marketing.

According to Kronen et al. (2009), the harvesting of fisheries resource *per se* in Canadian society was associated to patriarchy, where the regulations and decisions concerning the harvesting of resource were determined by men;

hence, harvesting was an exclusive role for men. Although women were a significant resource in the process of fish harvesting; they were excluded from management and control over the resource and harvesting process.

In Norway, (FAO, World Bank, IFAD, 2009) indicated common pattern of associating patriarchy and male manifestation of hegemony to the control of fish harvesting; hence, men had control and were involved in the process of fish harvesting. According to Williams et al., (2002) in Asia, Pacific regions and European Union, the control, management and decisions of fish harvesting were within men's domain; however, women participation in fish harvesting was reported as the post-harvest process.

In Tanzania, Medard, (2000a, 2000b) in a study on gender issues in fisheries sector, report that women are minimally involved in fish harvesting. Although (Medard 2000a) revealed that women were the major actors in the post-harvest activities, their male counterparts dominate the harvesting. In Kenya, (Williams et al., 2001) reported that, status of women in fisheries sector has not been adequately studied, an inspection on representation by men and women in fish harvesting revealed a disparity; where harvesting and control of fisheries resources were known as a predominant occupation of men; based on the image, presented by boat ownership and going out to the water mass for fish (Ogutu, 1988).

According to LVFRP/SEDAWOG (2000), several cultural factors were put in place to keep women away from the fish harvesting. Such cultural laws included prohibiting menstruating women from going to the water mass as this

would affect productivity; hence, women were excluded from fish harvesting. As Lyn (1999) suggested that the nature of fishing area played a critical role in promoting gender disparities in fish harvesting as traditionally men harvested in deep waters for higher returns. As a predominantly man's work, it was risky, and required a lot of energy and time.

The Post-Harvest Fish Processing

According to Kim-Kong (2006) in fishing communities, women mainly participate in post-harvest and processing activities. These activities include the processing of fish catch by sun drying, salting, and smoking; where, women play dominant roles in fish processing activities. Medard et al., (2000) argued that such activities include smoking; drying and marketing earn women a narrow profit margin in the value chain compared to that earned by men.

Studies have indicated that post-harvest activities inclusive of preservative processes are critical as antecedents in facilitation of transportation to distant and more competitive markets (MRC, 2006; Blomley et al., 2010; Williams, 2010). Amidst a wide range of post-harvest activities in the value chain that women engage in, they are excluded from the decision-making machinery.

In both developed and developing countries, studies have acknowledged representation of women in post-harvesting processing of fisheries products. Kronen et al., (2009); FAO, World Bank, IFAD (2009) found that women's role in East Coast Canadian fisheries value chain was traditionally important, where they were involved in post-harvesting activities as processors in the salt cod industry; while in the North, they were responsible for splitting, salting and

drying. Thus, the study illustrated that women are limited to processing as their fundamental economic activity.

In Asia and Pacific regions, as in other EU member states, the fisheries value chain employs (25-27) million people with an additional 70 million people deployed in post-harvest activities where women comprise more than half of the workforce (FAO, World fish Centre, World Bank, 2008).

According to FAO, (2005); Raquize,(2005), in the Philippines, women form a large part of the agricultural workforce and are involved in the preparation, processing and marketing of fisheries and aquaculture resources. In line with patriarchy, the production of the fisheries resource is the men's domain; while the 50-70 % of the substantial pre and post-harvesting activities are often undertaken by women. These include processing, marketing, mending nets and washing fishing equipment. In an assessment, (Raquize, 2005) observes that although women constitute a substantial economic resource, their status is often lower in the value chain. In Asian society, women are not only underrepresented in the control, planning and management in the fisheries value chain but are almost non-existent in visible entrepreneurial participation.

In Africa, (Olufayo, 2012) in a study on gender roles in the aquaculture production reported that in Nigeria, women form the core of the industrial fisheries labour force through their involvement in the post-harvesting or processing. However, some socio-cultural factors and taboos have reinforced involvement of women in the lower end value chain as processors within the context ascribed to the traditional division of labour. Hence, women dominate

the subsistence level of the value chain where they dominate in the processing, preserving and marketing within the local value chain. The culture and traditional value system have separated roles and responsibilities for men and women with respect to the access, control, planning and management; where women are barred from sharing equal rights, opportunities and privileges.

Transportation and Distribution of Fish to Market

Fresh fish distribution is largely a male domain. Women are generally excluded from involvement in transportation due to the belief that women have difficulties in adapting to the night-time hours worked in fish distribution. The women are considered to lack physical strength needed for the work and would not be able to work as hard as men. Distribution and transportation are usually done at night, which makes women involvement difficult. The culture and customs did not allow women to work at night due to their household duties.

Medard et al., (2000) observed that transportation and credit facility were identified as major factors, which disadvantaged women by denying them an opportunity to access markets with higher economic returns. This renders them incapable of competing with their male counterparts in marketing fish products. On contrast, men own tracks, which enable them to sell fish products directly to the competitive markets for higher costs (Medard et al., 2000). Majority of men and women entrepreneurs prefer to deal with fresh fish for higher economic returns; but due to transport problem. Women are compelled to handle fewer quantities of fresh fish with more of dried fish, which are less

competitive. In conclusion; it requires good business arrangement with boat owners and a good capital base for women to withstand the stiff competition by financially empowered male middle-men.

Marketing of Fish

Weeratunge et al., (2009) noted that norms with reference to access, control and commercialization of the fisheries resource have influenced the level of participation by women and men. It has, therefore, been recognized that underrepresentation of women in control and decisions with a view to fisheries resources is an issue, which involves social, cultural, economic and organizational factors, whose impact varies at different entrepreneurial phases (Dirasse, 1991).

Fish marketing is a highly profitable enterprise dependent on the scale of investment. Studies have reported that men have dominated large-scale operations, which have higher returns but require capital intensity with subsequent need for viable transport. Hence, men directly deal with the agents who have higher bargains and turn-over of commodities; while on the contrast, women are mainly involved in the post-harvest processing with limited operating capital (Williams et al., 2008).

Further studies (Williams et al., 2008; ILO 2008) report that women combine fish trade with other trading activities, which affirm the magnitude of their small-scale operations and the demand for diversification in addition to their prescribed traditional roles. Although 80% of traders in the fish marketing are

women, their scale of operation is lower; hence, are compelled to trade the left-over, less profitable, juvenile fish and factory rejects (McCormick,2002; Fauzi et al., 2010). The top decision-making bodies, which control and determine the market operations, have no representation of women, despite their significant time input and energy into the fish markets.

2.3 Factors for Men and Women's Participation in Specific Ventures of Fisheries Value Chain

According to Enomuoh (1995), the status of women compared to that of men within the society and based on culture has been considered subordinate to men. The supremacy of men and subordination of women has determined the control of the productive resources especially those critical in fisheries entrepreneurial value chain. Balk (1997) noted that in patriarchal systems, men hold the sovereign power, control household and the society as a whole; while women are ascribed to a lower hierarchy. Structurally, men have authority and power over the competitive levels of entrepreneurial value chain; such as production, distribution and control.

On contrast, women remain subordinate in processing, sorting, grading, preserving and marketing. This was concurred with (Ahmad 2001) that historical deprivations of women socially, legally, politically and technologically aggravate their subordinate position. These factors have determined the participation of men and women in entrepreneurial fisheries value chain as follows:

Socio-Cultural Factors

Socially accepted code of behaviours have intense effects on the type of economic activities in which women can be involved, the technologies available to them, the people and agencies with whom they can interact, the places they can visit and the control they can employ over their own capital. This has made it worse for women to participate fully in entrepreneurship due to their desire to act within the accepted code of behaviour. In settings where socio-cultural norms restrict women's mobility, their ability to attend trainings or receive formal education, access to information, institutions and markets is compromised. As a result of these constraints, women tend to consider informal networks as sources of information, reinforcing the gender gap in access to information and other factors of production.

McCormick (1988) in a comparative analysis of men and women in small-scale micro-enterprises distinguished unequal levels of success amongst men and women; due to their limited entrepreneurial choices. McCormick, (1992) further established that women prefer to venture into enterprises associated with their reproductive roles or enable them to earn subsistence goals as men engage in those that compel the use of skills, and those, which hold higher profit margins. In a study on gender participation in small-scale manufacturing sector, McCormick, (1992) noted the following higher concentration of women 80% in trade (hotel and restaurants); 13.2% personal and community services; 5.7% in financial business sector and 1.9% in manufacturing.

In fisheries value chain, women prefer to engage in levels, which require minimal capital and education with lower remuneration, as men engage in commercial enterprises with competitive profit margins; and subsequently higher capital requirement. The society, therefore, perceives women entrepreneurs as primarily confined to their corresponding social roles being a determinant of their status in entrepreneurial value chain. The following are socio-economic and cultural factors that influence participation of men and women in entrepreneurial value chain:

Networking

To flourish in competitive entrepreneurial value chain, it is fundamental to develop a strong social network based on entrepreneurship. According to Staber (2001), networking plays an essential role in binding and bringing entrepreneurs together into a sound and innovative system of relations, contracting, collaborative product development and complex inter-organizational alliances.

Studies have recognized that networking is a vital source of information for entrepreneurs in small and medium enterprises (Bar Nir & Smoth, 2002; Grave & Salaff, 2003). The information acquired through networking is a major resource for both men and women in entrepreneurial value chains for market opportunities and suppliers (Frazier & Neihm, 2004). According to Dodd et al., (2002) through networking scarce resources and commodities for entrepreneurial value chain are gathered.

In a study (Surmon et al., 2007) observed that networks in entrepreneurial value chain comprised members from diverse educational and professional background, members generate diverse resources such as financial capital, labour, suppliers, customers and new technology. The aspects of the culture have been used by men continually to perpetrate and encourage their persistent privileged status.

According to Kings and Mucratch (2002), socially accepted norms of behavior have profound effects on the type of activities which women engage in the technologies available to them, the people and agencies with whom they can interact, and the control they can exert over their own capital. Culturally, women were not expected to engage in networking due to their reproductive roles.

Consequently, the dominion and hegemony of men have been safeguarded and perpetrated by culture. Negwekhulo (1995) affirms that historically culture has acted as an instrument of male dominion and a justification for unmerited actions against women. OECD (2002) argued that access to information is a critical issue for women entrepreneurs who often operate at subsistence level and often non-members to any professional organization or part of other technical networks; they often find it difficult to access critical information on credit facilitation for growth. This study sought to explore the impact of access to strategic information on viable fisheries value chain in Nairobi City County.

Accessibility of Finance

According to Lyles (2004), accessibility to finance is the provision of financial services to low income entrepreneurial value chain or small and medium enterprises. Access to micro-finance therefore involves the provision of financial services such as loans, credit for improving the living standards of potential clients who are unable to obtain such services through formal financial institutions (Kotey & Floker, 2007).

According to Hisrich and Drnorsek, (2012), while access to finance is a challenge to all micro and small enterprises; this challenge for women entrepreneurs especially those in urban areas is compounded by the multi-faceted gender related problems that inhibit their ability to access, which even within MSE sector is one of the major factors accounting for hindering the emergency and growth of the new enterprises.

Atieno (2006) on female participation in the labour market in the informal sector in Kenya, reports that structurally, access to finance is a critical issue for women's growth from subsistence to commercial levels and engagement in the competitive levels in the value chain. According to Wole (2009), availability of finance determines the capacity of an enterprise, especially in the choice of technology, access to market and essential resources, which greatly influence the viability and success of an enterprise. Wole (2009), further states that securing capital for business startup and business operation is one of the major obstacles every entrepreneur particularly those in small and medium

enterprises face. As a result, small-scale and medium enterprise often operated by women experience additional constraints of access to financial resources.

The women in small and medium enterprises especially in fisheries value chain face challenges to maintain business enterprises due to difficulties in accessing micro-credit facilities. According to Gakure (2003), this challenge for women entrepreneurs is compounded by gender related issues that inhibit their ability to access credit. World Bank, (2010) reported that 52% of women entrepreneurial value chains in urban areas fail to access credit from financial and leading institutions. Although according to KWFT (2012), women entrepreneurs' access to credit in Kenya has to be improved as actual lending is not commensurable with the growth of women owned enterprises. In Kenya, 48% of business owners are women; yet, only 7% secure formal credit while, 1% use land as formal collateral (GoK, 2012).

According to Agarwal (2003), legal regulations and customary rules often restrict women's access to and control over assets that can be accepted as collateral such as land or livestock. At any rate women are handicapped in accessing financial services due to lack of collateral when required. Hellen (2002) further confirms that relatively few SMEs owned by women benefit from credit partly because commercial banks and microfinance institutions do not cover these areas. Risks and constraints to credit and commerce amongst women entrepreneurs in value chains include insecurity, lack of collateral or land ownership, lack of market information flow and traditional customs. Accessibility to initial capital, even when available, is also a major barrier to

women entrepreneurs. According to Stevenson and St-Onge (2005); Alila (2002), MFIs and commercial banks are particular in excluding women entrepreneurs in SMEs; it indicates that the key barrier to accessing credit is lack of innovativeness and responsiveness on the part of capital suppliers that hampers women entrepreneurship.

Property and Collateral

Globally, women face legal obstacles in starting and running a business. According to World Bank report (2012), women have fewer inheritance rights than men. The report also indicates that women only own one per-cent of the world's property and in two thirds of countries, legal rights of women decline with marriage. In Kenya although inheritance laws were raised with the succession Act of 1981 women have rarely inherited land and other property in their own rights. Legal regulations and customary rules often restrict women's access to and control over assets that can be accepted as collateral such as land or livestock. Therefore women are less likely to have land title deeds under their name, even when their families own land, and are less likely than men to have control over land, even if they formally own it.

Biased inheritance rights often grant land to male relatives, leaving both widows and daughters at a disadvantage (Agarwal, 2003). Even in countries where laws do protect women's land rights, these laws tend to be loosely regulated and implemented (USAID, 2003), in settings where men are portrayed and perceived as the main breadwinners, women's ability to offer family assets as collateral and their incentives to invest in productive activities

are influenced by family dynamics that are likely to prioritize men's investments (Ospina, 1998).

Insufficient Information on Finance

Access to information is an important factor both from the perspective of entrepreneurial value chain actors and the provider of the financial services. The actors in entrepreneurial value chain require information to identify the potential supplier of the financial services. This information is useful in evaluation of the cost of the financial services that are being offered. Lack of awareness about financial assistance in form of loans and schemes by the institution in the financial sector, hinders the sincere effort towards women entrepreneurs in value chain.

Lack of understanding of credit processes and the role of credit bureaus places women at a disadvantage. Despite the resources available, from private and public development finance institutions, few women compared to their men counterparts know about them, their products and how to access them. Even when they have access to information on the financial services and market opportunities available to them, women may be less equipped on the procedures. According to UNDP, (2007) and Ngimwa et al., (1997), this is attributed to lower levels of literacy and male dominance hampers women's ability to benefit directly from information on diverse financial products on offer (Brown, 2001). This is worsened by the low level of formal education among women entrepreneurs, which hinders their potential to lenders.

According to Namusonge, (2006), formal education and training has been noted to have a significant role in stimulating entrepreneurship. Studies have shown that women entrepreneurs are noted to be operating under lower levels of technology which is not appropriate for their entrepreneurial operations (UNIDO; 2003, GoK; 2005). As (ILO, 2008) reported that majority of women entrepreneurs in Kenya who are located in Nairobi, are socio-economically disadvantaged; hence, not well informed about business process operations hence fail to take opportunities as they come along.

2.4 Strategies for Equal and Effective Participation of Men and Women in Entrepreneurial value chain

Studies have shown that due to socio-economic and cultural factors, there is a discrepancy in entrepreneurial participation of men and women. This difference indicates subordination of women's entrepreneurial value chain compared to their male counterparts. Njeru and Njoka (1998) pointed out that due to patriarchal social structures women are subordinate in their entrepreneurial value chains due to inadequate starting and running costs.

According to Acharya (2003), lack of access to and control over productive resources is the main factor limiting women's competitive participation in economic activities and entrepreneurial value chain. Hence; adoption of the following strategies is fundamental to enhancing equal and effective participation.

Traditional Guarantee Associations

According to De Gobbi (2003), the Mutual Guarantee Associations (TGA) is a viable solution to the problem of access to credit from banks for the small-scale entrepreneurs who cannot offer sufficient collateral. The TGAs are associations that comprise entrepreneurs who associate to create an organization that establishes a dialogue with banks. TGAs play the role of an intermediary between artisans and banks; small-scale enterprises join the associations that negotiate with banks to secure loans for its members. Successful TGAs strengthen private initiatives and SMEs which are widely regarded as a key ingredient to development and poverty alleviation in most countries.

TGAs are built on social capital that is defined as the institutions, relationships and norms that shape the quality and quantity of societal interactions (Balkenhol, 1999). It is marked by the expressions of trust and reciprocity among a community network (De Gobbi, 2002). This social capital characterized by the special relationship existing between the members of the association is seen in its structure where each member is required to contribute to a common fund which is then used as a guarantee to the accessibility of credit from traditional banks thereby linking them through a notion of solidarity to become liable to each other's debt.

The TGAs build a bridge between traditional financial institutions and small-scale entrepreneurs since they help them reduce administrative costs and level of risk through its analysis of loan applications. TGAs provide capital for expansion of businesses that otherwise could not have grown. Such facility

may create environment for women in fisheries value chain to earn credit and expand their entrepreneurial participation.

Financial Sector Development

This is a government strategy undertaken to improve the modalities of external support by focusing on commercial banks as there is a limited sector of non-bank financial institutions. This is intended to reduce commercial banks holding of government securities so as to widen the monetary base upon which loans to private sector businesses are to be obtained.

A credit reference bureau is being advocated through the promotion of microfinance institutions as a way to enhance private sector investment due to reliable and fair lending terms since the clients to the micro finance institutions are low-income persons that do not have access to formal financial institutions with a relatively unstable source of income as the self-employed, often household-based entrepreneurs and small-scale entrepreneurs for instance, small farmers and others who are engaged in small income-generating activities. According to Honohan (2008), micro finances can help establish or expand small-scale enterprises by reducing household poverty and economically securing livelihoods and improvement of entrepreneurial welfare.

Diversification and Markets Expansion

Trade liberalization and the openness of borders is a regional strategy to boost economic activities. COMESA, EAC are regional integrations that have played an instrumental role in the contribution to poverty reduction, creation of employment through the entrepreneurial drive for the SMEs since they promote exports; where low tariffs have been put forward with minimal bureaucracies thus increasing their effect on the aggregate output growth. This ensures a competitive market place whose actions depend on the participants since they will be able to set the terms of trade for the commodities and services offered to the market. Participants are free to negotiate prices and conditions of exchange among themselves, broad rules defining the structure of the market and dynamics of negotiation tend to be set by a formal regulatory mechanism to ensure fair dealing among the competitors. Various products if produced will widen the small-scale participation in the labour and product markets due to the assured markets that are beyond the domestic levels.

Corporate Governance

According to Roy Crum et al., (1998), corporate governance is a multi-dimensional aspect of authority that covers the political setup of formal and informal institutions for efficiency, effectiveness and accountability so as to achieve sustainable development, personal freedom and welfare of the population through its emphasis to strengthen national planning and resource allocation for poverty eradication. Insecurity is consistently being put to halt as a way to create a more conducive climate for small-scale and private

investment. Political structures as democratization, decentralization, human rights and better judicial systems have been undertaken to make them significantly affordable for SMEs productivity and enhance performance.

2.4 Theoretical Framework

This study was guided by two theories, namely; social structural theory, (Connell, 1987) and women economic empowerment framework, (Longwe, 1995).

Social Structural Theory

The social structural theory provided appropriate guide to this study. Connell, (1987) provides social structural theory based on the concepts of sexual inequality, which explains subordination, gender and power imbalances. The theory outlines the following three major structures that describe subordinate relationship between men and women in the worldview as: sexual division of labour, which examines economic inequalities that favour men; second; sexual division of power that examines inequality and abuse of authority and control that favour men and Cathexis, which examines socio-cultural norms and effective attachments based on the informal institutions (Connell, 1987). These three structures are rooted in the society through numerous historical, economic, cultural and socio-political forces, which define power and ascribe social norms on the basis of gender and culturally determined roles (Connell, 1987).

In line with (Connell, 1987) this study postulates gender analysis; characterized by sex inequalities and disparities in entrepreneurial participation and fisheries value chain; where division of labour, power and Cathexis structure expose women to subordination in access and control of factors pertaining to

production and subsequent entrepreneurial participation. Within the fisheries value chain, women are limited to roles and responsibilities that check their economic potential and limit their career trajectories as postulated by patriarchal and men's hegemony. In relation to this study the theory argues that inequalities resulting from the sexual division of labour are manifested as structural factors that inhibit optimal performance of women in the value chain. The sexual division of labour as economic and political consequence increases the economic autonomy of men at women's expense thereby making them dependent on men.

The sexual division of power is a fundamental aspect of the theory implying that inequalities in power relations between sexes form a basis for the sexual division of power (Raj et al., 1999). Moser et al., (1995) from an empowerment perspective define power as having the ability to act, influence or change to the desired direction of thought. This ability may be articulated at the individual, interpersonal, institutional and at the community level. The sexual division of power is maintained by social mechanisms such as abuse of authority and control of productive factors. These structures tend to deny women power in production; thus women are required to depend on their male counterparts who are structurally compelled to control over factors of production (Connell, 1987).

The Cathexis also referred to as affective attachment and social norms structure in the theory tends to lay emphasis on the normative and affective components (Connell, 1987). In the light of fisheries value chain, the Cathexis structure

defines and dictates appropriate entrepreneurial behaviour of women as characterized by emotions, dependence and subordination to men in the value chain. The component according to the theory contains the societal expectations about women with respect to the entrepreneurial participation. This perspective has shaped women's perception and potentials based on the culture. In line with this study, Cathexis is sustained by social mechanisms such as biases held about participation of men and women in entrepreneurial participation in the fisheries value chain. Based on social norms and affective attachment, women are more bound to consent to the conventional social norms and beliefs; hence, exhibit subordination in access and control of productive resources and subsequent entrepreneurial participation in the fisheries value chain.

The social structural theory is based on patriarchal system and social mechanisms in place to reinforce and sustain the ideology. It provides substantive justification of women's subordination in the entrepreneurial participation and fisheries value chain. Patriarchy as a social ideology concentrates power in the hands of men and keeps women out of prominence in the visible sectors of development (Kabira et al., 1994). Patriarchy has its heredity in socialization process, gender stereotypes, sexual division of labour and power, institutional structures, policies and practices. The ideology has been internalized by the popular tradition and culture. Men and women believe this is the natural way things happen and nothing can be done to change the institutions (Kabira et al., 1994; Connell, 1987; Grambs, 1978).

The social structural theory (Connell, 1987) provides an explanation on the situation of women in pursuit of development and entrepreneurial participation. The theory indicates that men tend to dominate the public spheres because they are associated with power, prestige and economic opportunities. On the other hand women are contained in their none-remunerative reproductive roles as determined by the gender division of labour.

Based on social structural theory (Connell, 1987) and the distribution of roles in fisheries value chain, women's roles revolve around the lower segment of entrepreneurial fisheries value chain, which includes sorting, preserving, and small-scale marketing. These roles are associated with the women's reproductive chores in the households with lower economic value. Men's roles on the contrast revolve around production, control, large-scale marketing and competitive levels of the fisheries value chain with higher economic value as proposed by the gender power theory. This is the phenomenon within the fisheries value chain to which men and women have subscribed. The Social Structural Theory was relevant for this study in that it explained the reasons behind women's subordinate position in entrepreneurial fisheries value chain.

Women Economic Empowerment Framework

To identify the strategies designed to enhance equitable representation and effective participation of men and women in the fisheries value chain, this study further utilized women economic empowerment framework by (Longwe, 1995). The framework centres on the concept of five levels of equality, which indicate the extent to which women are equal with men and have achieved

empowerment. The levels of equality can be used to assess the likelihood of a particular development intervention in promotion of equality and women's empowerment; with control as the highest and welfare as the lowest level.

These levels of equality are hierarchical; hence, if a development intervention focuses on the higher levels, there is a greater likelihood that women's empowerment will be increased by the intervention than if the project focuses on the lower levels.

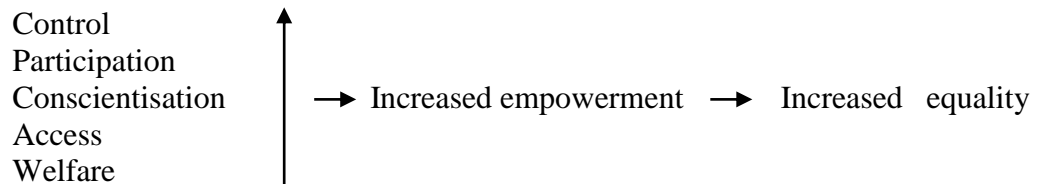


Figure 2.1: Levels of equality

Equal participation in the decision-making process about utilisation of certain resources is fundamental for achieving women empowerment. Guided by this framework; the study identified strategies and interventions in women entrepreneurial participation fisheries value chain, which would increase economic empowerment and participation. The inadequate representation of women in entrepreneurial fisheries value chain accounted for by socio-cultural and structural factors is assumed to be responsible for subordination of women. Hence, equal access, control, property rights, participation, credit and exposure to partnerships are considered as appropriate strategies to enhance equal and effective participation in the fisheries value chain. The Women Economic Empowerment Framework provides the logistics for enhancing women empowerment and at the same time WEEF serves as analytical tool for

assessment of the status of women in the fisheries value chain in Nairobi City County.

2.5 The Conceptual Framework

The conceptual framework that guides this study as shown in figure 2.1, articulates that, the fisheries value chain is characterized by unequal gender representation and participation where men have taken control of the viable sections of the value chain with opportunities of growth as compared to their women counterparts who participate in lower end value chain. This scenario is determined by sex division of labour; differential power relations and Cathexis, which have made women subordinate to men. In this regard, this state of situation determines the socio-structural policies that impact on the levels of entrepreneurial participation by men and women with impacts within the fisheries value chain.

In conclusion, women compared to men are inadequately facilitated by the state institutions and socio-economic factors that determine women's entrepreneurial participation and the subsequent economic consequences. This impact inadequately on women's representation and participation limiting them to small-scale value chain with limited opportunities of growth compared to their men counterparts. Therefore, through adequate facilitation by provision of credit and capital, access to strategic information, exposure to suitable education, training and technology will lead to equitable representation and effective participation by men and women within fisheries value chain.

2.6 Participation of Men and Women in Entrepreneurial Fisheries Value Chain

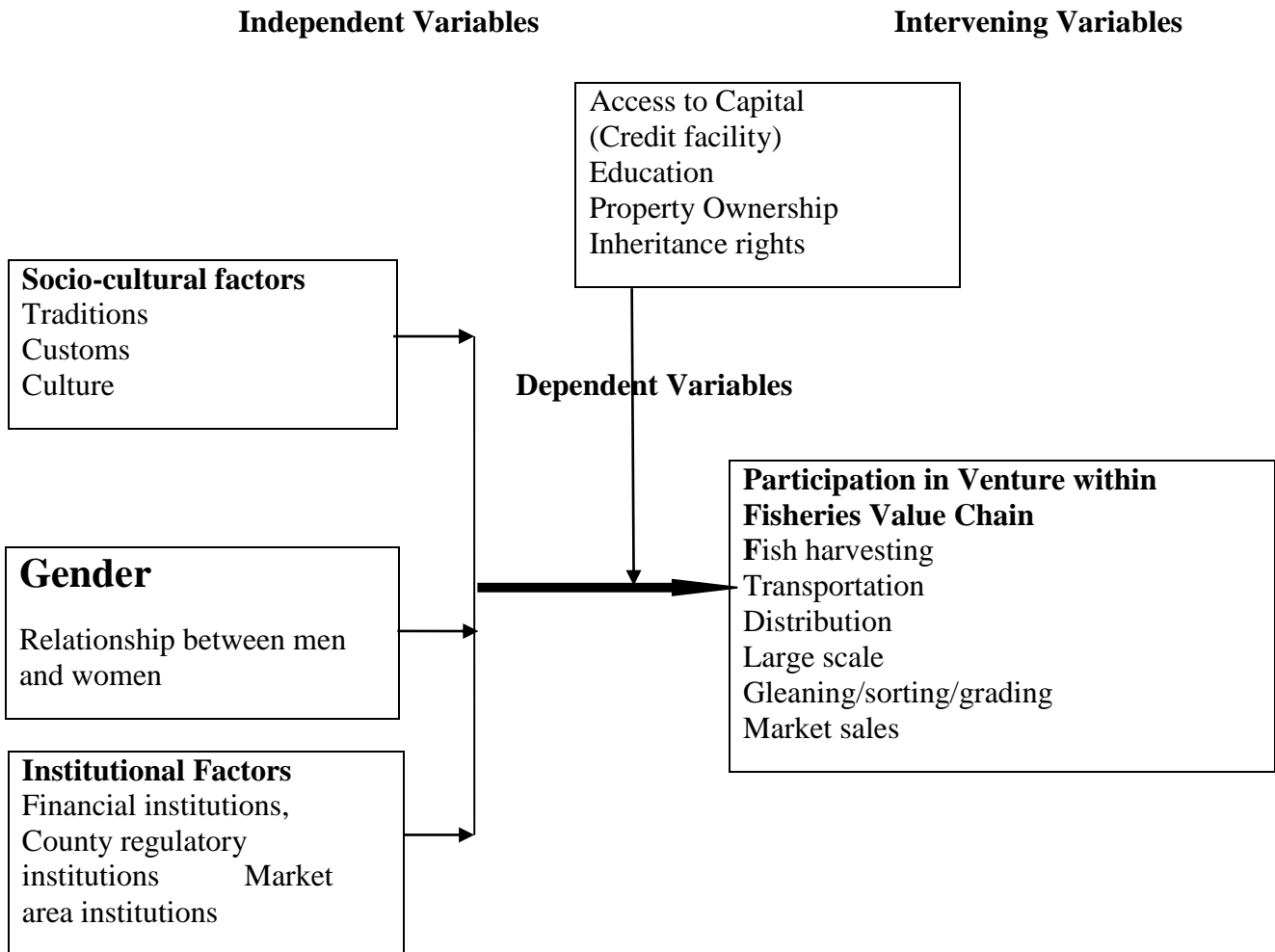


Figure 2.2: Antecedents for equal and effective participation by Men and Women in entrepreneurial fisheries value chain

CHAPTER THREE

METHODOLOGY

3.0 Introduction

This chapter presents study methodology on the basis of research design, study locale, target population, sampling techniques and sample size, data collection instruments, validity and reliability, data collection procedures, data analysis and ethical considerations.

3.1 Research Design

This study employed the descriptive survey design. The design was considered suitable for the study because it was intended to examine information on the experiences of men and women in the fisheries value chain with a goal of describing the meaning of such experiences and their implications on levels of participation. The design also allowed the use of questionnaire, interview schedules, as well as an examination of the existing records.

Further, a notable advantage that determined the choice of this design was that it did not only lead to the fact finding process; but as a means to generate both qualitative and quantitative data. Qualitatively, the study measured variables by analyzing information through description in a systematic way in order to come up with useful conclusions and recommendations. Quantitatively the researcher measured variables by analyzing the use of numerical data to explore the traits and situations. Another advantage was that this design was not only used as a fact finding process; but as a means of formulating important

principles of knowledge and solutions to significant problems in relation to the participation of men and women in the entrepreneurial fisheries value chain in Nairobi city and its environs. The design therefore involved measurements, classifications, analysis, comparisons and interpretation of data.

3.2 Study Locale

As figure 3.1 indicates, the study was carried out in Nairobi City County. Nairobi is the most populous city in East Africa, with a current estimated population of about 3 million. According to the 2009 Census, in the administrative area of Nairobi, 3,138,295 inhabitants lived within 696 sq. km. Nairobi is currently the 12th largest city in Africa, and one of the most prominent cities both politically and economically. Nairobi city hosts thousands of Kenyan businesses and over 100 major international companies and organizations.

The study selected Nairobi city and its environs since it was the capital city of Kenya and a destination of fisheries products from western, rift valley and coast regions for processing, to serve local, regional and international markets. The city and its environs provide higher opportunities for the fisheries livelihoods where men and women from varied socio-economic status participated in value chain at different levels. The diverse socio-cultural and economic characteristics typical of the city and its environs determine the level of participation by gender in the fisheries value chain; as such, harnessing equal and effective participation.

Although Nairobi City County does not produce fish *per se*; the city has a long history of fisheries value chain; where it comes as a final destination for local market or processing for export market. Hence, the sector plays a significant role in the City County's economy. The sector has rapidly grown within the county where the exports have generated a considerable foreign income for the country at large. Since 1990s, all fish en-route to Nairobi city and its environs was for domestic and local markets. But since the establishment of fish processing factories in the county, the sector has evolved from domestic consumption-oriented industry to an export-oriented industry with value addition processing being applied. About 92% of fish in the county comes from Lake Victoria, and the rest from Indian Ocean 4%, while 3% from lakes and rivers (Lake Nakuru, Naivasha, and smaller lakes including Jipe, Chala) with aquaculture accounting for 1%. The artisanal fish processors prepare dried and smoked fish for local market, while industrial fish processors freeze for export.

The fundamental way in which men and women generate income in the informal sector within the city and its environs, is through the entrepreneurial value chain of farm products. Mwatha (1988) noted that women in the fisheries value chain comprise the category of the informal sector as this study purports to establish. The fisheries value chain has made a positive impact on the household livelihood and economic growth. Many men and women entrepreneurs within the county consider fisheries value chain as an entrepreneurial activity of choice, given the minimal capital and value addition

requirement in market chain. The informal sector thus, significantly contributes to the City's economy and holds strong background linkages with commercial and public enterprises; hence, creation of employment opportunities in this sector is not necessarily dependent upon direct public expenditure and commitment of public investment.

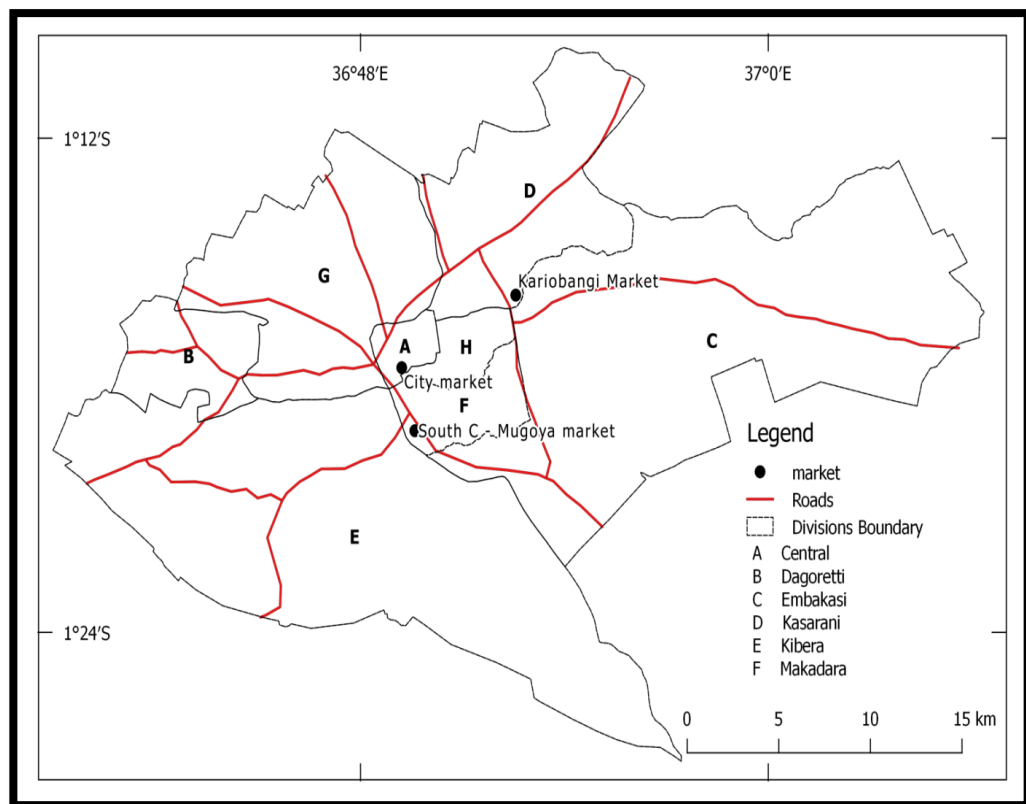


Figure 3.1 A map showing the location of Nairobi County and the study sites

3.3 The Target Population

The target populations for this study comprised all men and women entrepreneurs involved in the fisheries value chain in Nairobi City County. Three markets were purposively selected; these were City market, South C-Mugoya market and Kariobangi market. Other targets were personnel from the Ministry of Agriculture, Livestock and Fisheries; and the City Council of Nairobi assigned to the market areas purposively sampled for study within Nairobi city and its environs.

3.4 Sampling Procedures and Sample Size

Based on the principle of distributive justice and for the sample selected to exhibit a proportional representation of different economic carder, the study focused on three (3) zones within Nairobi City County based on the socio-economic characteristics as: **affluent class, middle class** and **lower class**(The World Bank: World-stat info, 2013).One market was selected from the city and two other markets from its environs as a representative of the class distinctiveness and to capture opinions from diverse socio-economic characteristics within Nairobi City County.

According to Mitullah (1997), city market represents the affluent as it is located within the central business district (CBD) surrounded by high ranking hotels in Nairobi city. The CBD is recognized as a high density populated area whose livelihoods are based on high ranking trade and entrepreneurship (GoK, 2001a). The G0K (2000) described South C as an area in transitional phase in

that several mid-income earners find it as an ideal abode. The area is characterized as a medium density populated and mostly habited by professionals and high ranking entrepreneurs.

Economic survey (1999a) described Kariobangi as a large uncontrolled urban settlement within the environs of Nairobi city characterized by the uncontrolled, spontaneous, and mushrooming of squatter settlements. It is located in the marginalized urban fringe to the east of and away from the CBD. It is a low income densely populated area with a core region of old county government housing programme. According to the Economic survey (2002), the livelihoods of the inhabitants are based on the informal economic activities since formal wage has been declining gradually. City market was selected for affluent class, South C-Mugoya market for middle class and Kariobangi market for the lower class.

In each of the three markets (City, South C-Mugoya and Kariobangi) sampled for this study, lists of men and women entrepreneurs in fisheries value chain were accessed from the county market clerks whose daily tax collections were recorded. The researcher assigned numbers to the stalls corresponding to the names on lists to facilitate order. The researcher developed two categories of sampling frame based on sex where lists of names for men and women were generated and selected separately. The names on the lists were assigned numbers to facilitate systematic sampling. The actual respondents were picked after every n^{th} interval. This selection criterion facilitated a sample that was suitable for the specific needs of the study.

Table 3.1 shows the sampling frame of the targeted population across the three markets selected for this study within various categories of ventures within value chain that men and women participate. Therefore 20 per cent of the sample frame comprised the study sample size of this study.

Table 3.1: Sample Frame

Areas of participation	Markets						Total
	City Market		South C-Mugoya		Kariobangi		
	Men	Women	Men	Women	Men	Women	
1 Aquaculture/fish harvesting	75	10	45	05	40	10	185
2 Transportation	55	05	55	15	30	15	175
3 Distributors	110	20	105	25	105	45	410
4 Large scale sales	65	15	45	00	25	10	160
5 Grading, sorting, gleaning	20	135	15	185	00	95	395
6 Sales in market areas	110	30	100	55	50	225	570
Total	435	215	365	285	200	400	1950

Table 3.2 indicates that (87) men and (43) women entrepreneurs involved in the fisheries value chain were sampled in City market; (73) men and (57) women in South C-Mugoya market and (50) men and (80) women in Kariobangi market were sampled. These were considered for the guided questionnaire being 20% proportional to the sample frame as stipulated in table 3.2.

Table 3.2: Sampling Size

Areas of participation	Markets						Total
	City Market		South C-Mugoya		Kariobangi		
	Men	Women	Men	Women	Men	Women	
1 Aquaculture/fish harvesting	15	02	09	01	08	02	37
2 Transportation	11	01	11	03	06	03	35
3 Distributors	22	04	21	05	21	09	82
4 Large scale sales	13	03	09	00	05	02	32
5 Grading, sorting, gleaning	04	27	03	37	00	19	79
6 Sales in market areas	22	06	20	11	10	45	114
Total	87	43	73	57	50	80	390

As such; (8) men and (8) women were selected in each market for the two separate focus group discussion (FGD). The researcher had focus group discussions for men and women separately. This allowed the respondents to contribute their perspectives openly and freely. The FGDs were useful for validating and confirming the data collected from the questionnaires. An additional category of personnel from the Ministry of Agriculture, Livestock and Fisheries; and City County of Nairobi attached to the market areas where the data was collected were included in the study as key informers.

3.5 Research Instruments

Three research instruments, namely; guided questionnaire, focus group discussion guide and interviews schedule were used to collect data for the study. Also used concurrently was the observation schedule as a means for validating and confirming some of the information generated from other instruments.

Questionnaire

The questionnaire method was used to obtain information from entrepreneurs within the fisheries value chain. The questionnaire enabled the researcher to collect a large amount of information from men and women entrepreneurs within stipulated time frame. The questionnaire also gave the respondents freedom to express their views, perspectives and gender experiences within enterprise development. During the study, the questionnaire was found to be an effective tool that enabled the researcher to acquire more personal information

with respect to the routines in entrepreneurial work. The respondents were assured of confidentiality of their responses and anonymity where the purpose for this study was declared as academic.

The tool targeted (81) men and (37) women in City market; (73) men and (57) women, South C Mugoya market, (50) men and (80) women in Kariobangi market being 20% of the sample frame. Administered by the researcher and the three research assistants, the tool enabled the researcher to acquire information pertaining to the specific areas of participation, the socio-economic and institutional factors affecting men and women entrepreneurs in fisheries value chain, challenges and strategies for intervention.

Focus Group Discussion Guide

The tool targeted the (8) men and (8) women entrepreneurs in the fisheries value chain who were selected in addition to (81) men and (47) women in city market, (73) men and (57) women in South C- Mugoya market, and (50) men and (80) women in Kariobangi market who did not participate in the guided questionnaire as table 3.2 indicated. The separate FGDs allowed the respondents to contribute their perspectives openly and freely. This technique of data collection prompted the researcher to probe further into issues of interest fostering adequate interaction that explored the participants' perspectives and opinions in depth.

Interview Schedule

Interview Schedule targeted the personnel of the Ministry of Agriculture, Livestock and Fisheries; and City Council of Nairobi as knowledgeable individuals with information on entrepreneurial participation in the fisheries value chain. This method of data collection was preferable as it provided an opportunity to generate in-depth information on entrepreneurial participation of men and women in fisheries value chain as well as related issues relevant to the study. The tool was also particularly appropriate in case of sensitive topics, which were discussed at a more personal level (Sieldaman, 1991). The key informant interviews provided access to information, value of preference and attitude and perceptions. The key informant interviews were therefore used to elicit information from men and women in the fisheries value chain (Mugenda and Mugenda, 2013).

Observations Schedule

The observations during data collection were to capture the non-verbal and relevant information and also to confirm and validate some of the information generated using guided questionnaires, FGDs and interviews. Specific observations were done on the involvement of men and women in the fisheries market areas and value chains, handling clientele and suppliers, nature of payments and evidence of record keeping.

3.6 Training of the Research Assistants

There were three (3) research assistants one man and two women recruited and trained to administer the guided questionnaires in the selected markets. The three (3) research assistants were master's students from Kenyatta University School of Education. All the three had a previous experience in research activities and teaching. The research assistants underwent a one day training and orientation period to familiarize with the instrument and general dynamics before engaging in a field data collection. This procedure was important to avoid variations in data collection process.

3.7 Pilot Study

The pilot study was intended to pre-test the study instruments for validity and reliability and to ensure that all items were stated clearly and had some standard meaning to all respondents; all deficiencies were reviewed and corrected accordingly. The pilot study was conducted in Kenyatta market and Githurai market. The eleven (11) men and ten (10) women were sampled in Kenyatta market, thirteen (13) men and fifteen (15) women were selected in Githurai market to participate in the pilot study comprising 10% of the sampling size. The selection was on the basis of their participation in various stages within the fisheries entrepreneurial value chain. The other instruments tested included the focus group discussion schedule, which targeted six (6) men and six (6) women in each market; and the key informant interview schedule, which targeted two (2) personnel from the ministry of agriculture,

livestock and fisheries and two (2) from the Nairobi city county government attached to Kenyatta and Githurai markets.

The two (2) markets Kenyatta and Githurai were purposively selected to target respondents having the same characteristics as those of the population targeted for this study but not listed for data collection. The results of the pilot study were not included in the actual analysis.

3.8 Validity and Reliability of the Instruments

The validity and reliability of the instruments were enhanced through a trial fieldwork carried out in the purposively selected Kenyatta and Githurai markets. The samples comprised (24) men and (25) women selected on the basis of their participation in various stages of the value chain; four (4) personnel from the Ministry of Agriculture, Livestock and Fisheries; and four (4) from the Nairobi City County Government.

Validity is the accuracy and meaningfulness of inference based on the research results. The validity of the research instrument was based on the degree to which they measure what is intended by the researcher (Mugenda & Mugenda, 2013). To enhance validity of the instruments, pre-testing on the questionnaire, focus group discussion and interview schedules was done to ensure that the questions were adequate and sufficient in content to collect data based on the research content. The measurement of the time to complete each instrument was recorded. This procedure was useful as it assisted the researcher to review the questions and adjust the content to match the variables that were being measured and time required for each instrument. These were adjusted to

achieve suitability. The instruments were reviewed and refined before the start of the actual fieldwork for data collection.

Reliability is the measure of the degree to which a research instrument yields consistent results or data upon repeated trials. This referred to the consistence of getting similar results at different times, while using same instruments under similar conditions (Mugenda & Mugenda, 2013). The data collected were corroborated through comparison with other sources of information; such as, focus group discussion and interview schedules for confirmation and validation. Any datum that did not seem consistent was followed up and confirmed with the sources. To achieve reliability for the instruments, the results obtained were compared to check if they yielded the same results. The instruments were then reviews and refined after pretest to avoid ambiguity.

3.9 Data Collection Procedures

A letter of clearance was obtained from Kenyatta University, Graduate School to carry out the study and preceded to National Council for Science, Technology and Innovation (NACOSTI) to obtain the research permit and the directors of education, Nairobi County and ministry of agriculture, livestock and fisheries. This was in line with ethical consideration that requires official permit prior to data collection procedures. Further permission was also sought from the relevant authorities in selected markets. After the sampling procedures for men and women to participate in the study, arrangements were made on the time and venue for the men and women to respond to the

questionnaire since it was guided. This was done by the principal researcher and research assistants.

For the interviews having sought permission to administer interviews the researcher made prior plans to create good rapport with the potential respondents while at the same time finding out early enough the nature of the respondents. The researcher pre-tested the interview guide before using it to check for ambiguous terms, language level and how well the questions would be understood. The researcher informed the respondents about the confidentiality of the information given. The personnel from the Ministry of Agriculture, Livestock and Fisheries and Nairobi City Council were purposively selected for interviews. The venue and time for this exercise was agreed upon after preliminary arrangements, where notes on paper were used to capture the data extracted. This was done by the principal researcher. Meanwhile, the observation matrix/checklist was operational concurrently.

The focus group discussions FGD targeted (8) men and (8) women who were sampled for this study but did not participate in the guided questionnaire. After getting permission by the market officials the researcher met with the groups separately in the three markets to discuss the time and venues for the FGD. In most cases, the FGDs were facilitated in the evenings after the daily routines; except in the city market where the FGDs were scheduled in the mornings prior to the busy schedules ahead of the day. The data extracted from the interviews were captured using notes on paper. This process was administered by the principal researcher assisted by the research assistants.

3.10 The Field Experiences and Challenges

In the process of this study; there were various technical problems that were experienced. While most of these were dealt with in appropriate manner there were some associated limitations. The first technical limitation was the bureaucratic procedures that the researcher was expected to observe. Having acquired the research permit from the National Council for Science, Technology and Innovation (NACOSTI), several letters had to be written to different officials at different areas to allow the researcher to have access to the respondents in market areas.

The second technical problem was the time for data collection. The data collection process took place during the time for active economic activities within the market areas. The data collection procedures were often disrupted by the inflow of customers, which posed a challenge. The researcher thought of adequate time for data collection with minimal destructions.

The third problem was the demand for payment by the respondents upon completion of filling in the guided questionnaire. The researcher emphasized that the exercise was voluntary and that the purpose of the study was for academic reasons. The fourth problem was that the start of this study coincided with short rains, which were quite disturbing. But since the rains are natural and environmental phenomena and beyond human control; the research team engaged in data collection exercise aware and prepared for changes in the weather patterns.

3.11 Data Coding and Entering

This work started with the data cleaning exercise. Each and every questionnaire was looked at with view to identifying conspicuous errors like visibility of the content and to ensure that all parts had been entered well. The coding exercise started with the construction of a detailed code book. The coding scheme was developed for each variable used in the research instrument. The code book was used as a guide to assist in the transferring the raw-data.

The data coding involved extracting responses from all the instruments and grouping them logically into a reasonable number of categories. These categories were then given a code and entered in the relevant section of the code book. Thus, the code book had detailed information regarding each variable. All these details were then transferred to a form, which were entered into a statistical computer programme for analysis.

3.12 Data Analysis

The study elicited both quantitative and qualitative data. The quantitative data was first cleaned (edited) and coded along the themes based on study objectives. This process involved a scrutiny of the research instruments to address any possible errors, miss-classification or information gaps that, may have been obtained from the respondents. The study data were then analyzed using the Statistical Package for Social Sciences (SPSS version 17) and presented in frequencies and percentage frequencies, for interpretations. The fundamental themes emerging in this study were guided by the theoretical and

conceptual framework. To provide interpretation and rationale of the research findings, cross-tabulations and chi-square tests were done to establish the association between variables.

The qualitative data were analyzed continuously at the onset of the field work to establish patterns, categories and themes. The data were processed and analyzed through identification of main themes from the focus group discussions and interview schedules as per the study objectives. The responses were integrated into the themes using verbatim reports.

3.13 Ethical Considerations

After the approval by Kenyatta University Graduate School Board, a research permit was sought from the National Council for Science, Technology and Innovation (NACOSTI). During fieldwork, the individual informal consent was obtained from each respondent at the start of each session. The researcher and his assistants underscored that participation was voluntary. High level of confidentiality was also maintained at all time during the fieldwork. Thus, the data collected during fieldwork were confined to the researcher and assistants. The respondents were assured of confidentiality and anonymity of their responses and identities.

CHAPTER FOUR

DATA PRESENTATION, ANALYSIS AND DISCUSSION

4.0 Introduction

This chapter presents the results, interpretations and discussions in relation to the participation of men and women in the entrepreneurial fisheries value chain in Nairobi City County. The presentation is guided by the study objectives, along the following subheadings: ventures within the fisheries value chain that men and women participate; socio-economic factors, which influence men and women's participation within fisheries value chain; socio-cultural factors that influence participation of men and women within specific ventures; institutional factors, which influence participation of men and women in the fisheries value chain; strategies to enhance equal and effective participation in the fisheries value chain

As a prerequisite to the chapter, an overview of the response rate of the study respondents is presented. Also presented are the socio-demographic characteristics of men and women entrepreneurs in the fisheries value chain selected for the study. The demographic characteristics were analyzed as they were found to influence the nature and level of participation by men and women within the value chain.

4.1 The Study Response Rate

The study sampled 390 respondents from a target population of 1950 men and women with regard to participation in entrepreneurial fisheries value chain. The focus was Nairobi City County. The study recorded a high response rate of the respondents in that a total of 390 guided questionnaires were administered to men and women in the sampled markets as explained in chapter three, out of which 378 were successfully filled for analysis. The turnout was 96.9% response rate which is considered to be an adequate representative and therefore acceptable for the analysis (Mugenda & Mugenda, 2013).

The commendable response rate can be attributed to the data collection procedure where the researcher engaged three research assistants to administer the guided questionnaires. All clarifications sought by the respondents were addressed accordingly. The questionnaire return rate was distributed by market areas as follows: City Market 118 (31.2%); South C-Mugoya Market 130 (34.4%) and Kariobangi Market 130 (34.4%).

4.2 The Demographic Characteristics of Men and Women in the Fisheries Value Chain Selected for the Study Participation

The demographic characteristics of men and women who participated in the study was analyzed on the basis of gender, age, marital status, level of formal education, and income per month. The findings of the analysis are explained below:

4.2.1 Gender

The findings from the study indicate a more male-dominated entrepreneurial participation in the fisheries value chain in Nairobi City and its environs. Out of 378 respondents, 204 (54%) were men while 174 (46%) were women. Table 4.1 indicated that City and South C-Mugoya Markets had the leading number of men respondents 81 (39.7%) and 73 (35.8%) respectively; Kariobangi had the leading number of women respondents 80 (46%). This distribution was confirmed through observations.

Table 4.1: Distribution of men and women entrepreneurs by market areas

Market Areas Sex	MEN		WOMEN	
	Frequency	Percentage	Frequency	Percentage
City Market	81	39.7	37	21.3
South C-Mugoya	73	35.8	57	32.8
Kariobangi	50	24.5	80	46.0
Total	204	100.0	174	100

The distribution was associated with economic potentials and subsequent capital investment requirements in City Market and South C-Mugoya Market as compared to Kariobangi Market, which required lower capital investment and returns; hence, attractive to women entrepreneurs as captured by the following voice in a focus group discussion in City market:

It is difficult for us women to compete with men due to lower access for higher profits. While we care much about income for a livelihood, men have controlled the trade and care much about higher returns and increase on their stock. Women mainly come to the City Market to purchase mgomgowazi (fish without fillets), which is cheaper to purchase and sell to our customers at low costs. Women mainly own stalls in estates

since at City Market, they may go for as much as Kshs. 500,000.
(A female participant in an FGD in City Market: Date 12th September 2014)

In addition to the choices of the market areas, the study indicated that the choice of the levels of participation in the value chain in market areas was determined by gender. The study findings showed men took control of fish production, transportation and distribution, which seemed to have high economic margins with opportunities of growth; while women focused mainly at the level of market sales characterized by lower economic margins as captured in the following voices of a male in a focus group discussion:

*Harvesting and distribution are roles of men; they demand high investments but also they have higher returns. However staying away from home for women, may bring problems in homes.***(Voice from a male respondent in South C-Mugoya Market: Date 28th August 2014)**

Although these findings were confirmed by Mira and Ogollah (2013) in a study on challenges facing accessibility of credit facilities among women owned enterprises in Nairobi CBD and concurred significantly that men had higher entrepreneurial intention than women, Mazzarol et al., (1999) contrasted that women entrepreneurs were likely to find new and demanding enterprises compared to men based on their commitment to livelihood demands.

4.2.2 Age of Entrepreneurs who Participated in the Study

The age of men and women entrepreneurs who participated in the study was an important variable that determined the nature of participation in entrepreneurial fisheries value chain. Table 4.2 shows that the highest number

of entrepreneurs aged between 30 and 34 years were 42(20.6%) men and 52(29.9%) women. The least were 06(2.9%) men and 7(4.0%) women aged between 55 and 59 years.

Table 4.2: Age of men and women in fisheries value chain

Age (years)		Men		Women	
		Frequency	Percentage	Frequency	Percentage
	20-25	26	12.7	10	5.7
	25-29	34	16.7	20	11.5
	30-34	42	20.6	52	29.9
	35-39	43	21.1	27	15.5
	40-44	25	12.3	26	14.9
	45-49	19	9.3	18	10.3
	50-54	09	4.0	14	8.0
	55-59	06	2.9	07	4.0
Total		204	100	174	100

The study showed that majority of those involved in the economic activities related to fisheries value chains were aged between (30-40 years). This age bracket is considered productive. There were fewer men and women aged 55 years and above in the economic activities related to fisheries value chain. This may be attributed to overstretched resources and capacity to enable participation in the value chain, namely; capital, credit facility and active participation in competitive networks.

These findings implied that although age was a determinant to rigorous participation, the patriarchal system and social mechanisms in place affected the distribution of labour and power that favour men in entrepreneurial participation compared women. These findings are similar to those of Ajagbe (2012) in a study on features of small-scale entrepreneurs and access to credit, which established that elderly entrepreneurs are known to be less competitive,

energetic and mostly depend on their past savings whose accumulation may not make adequate capital for entrepreneurial pursuits. However, Cinner et al (2010) in a study on different livelihoods, socio-economic characteristics and knowledge about the sea contrasted that efficiency with regard to the fisheries value chain comes with age.

4.1.3 Marital Status of Men and Women Respondents

As shown in table 4.3, the analysis of the data revealed that majority of men and women who participated in the entrepreneurial fisheries value chain were married. The table indicates that 69.9% men and 55.2% women were married, 18.6% men and 12.9% women were single. The least were 2.0% men and 3.7% women separated and 2.0% men and 5.7% women divorced. The 5.4% men and 23% women were widowed.

Table 4.3: Marital status of men and women entrepreneurs in the fisheries value chain

		Men		Women	
		Frequency	Percentage	Frequency	Percentage
Marital Status	Married	142	69.6	96	55.2
	Single	38	18.6	22	12.9
	Divorced	04	2.0	10	5.7
	Separated	04	2.0	06	3.7
	Widowed	11	5.4	40	23
Total		204	100	174	100

Further analysis shows the distribution of marital status by sex and market areas as illustrated in table 4.4, which indicated that most of the entrepreneurs in City and South C-Mugoya markets were married. The table shows a

different scenario in Kariobangi where most of the women entrepreneurs were widowed.

Table 4.4: Distribution of marital status by market areas

Marital Status	Market Areas						Total
	City Market		South C-Mugoya		Kariobangi Market		
	Men	Women	Men	Women	Men	Women	
Married	42	21	35	29	18	12	157
Single	16	07	16	08	07	04	58
Divorced	08	11	05	09	08	09	50
Separated	12	12	04	10	11	14	63
Widowed	10	03	07	03	03	22	48
Total	88	54	67	59	47	61	376

These results implied that entrepreneurship in fisheries value chain was a popular activity for married men and women. These findings concurred with the observation by Kamau and Ngugi (3013) that married entrepreneurs are assumed to earn support from the family to sustain the fisheries value chain based on stability. However, these observations were in conflict to the widespread belief that women who are divorced, widowed or single dominated in the fish trade due to their limited options to support their livelihoods and have independence compared to women who were married (Kamau & Ngugi, 2013).

4.1.4: Level of Formal Education

The level of formal education was another demographic characteristic that was found to affect participation of men and women in the entrepreneurial fisheries value chain. Table 4.5 shows that there were more men with formal education compared to women. The distribution by market areas indicated that entrepreneurs with formal education focused on City and South C-Mugoya markets compared to Kariobangi market.

Table 4.5: Formal educational attainment

Levels of formal Education	Market Areas						
	City Market		South C-Mugoya		Kariobangi		Total
	Men	Women	Men	Women	Men	Women	
No Formal Education	07	00	05	08	05	10	35
Primary Education	17	15	20	25	18	37	144
Secondary Education	55	28	32	18	20	12	153
Tertiary/University	12	08	10	08	04	02	44
Total	88	54	67	59	47	61	376

These findings implied that men with formal education concentrated in City and South C-Mugoya market, while women were less represented in formal education and mainly concentrated in Kariobangi market. The implication is that education was a determinant of male dominance in City and South C-Mugoya markets as the two markets had leading proportions of men entrepreneurs with formal education who seemed to be in competitive enterprise compared to their women counterparts.

The study findings revealed further that this trend was attributed to the economic uniqueness of City and South C-Mugoya markets known as

relatively higher compared to Kariobangi, which is in a lower economic status with leading women entrepreneurs. The findings concur with the observation by Ngigi (2008) who revealed that education contributes to development of entrepreneurial human capital which is the ability to discover and exploit market opportunities.

Further analysis of the data revealed that respondents in Kariobangi market were characterized by lower levels of education; most of whom were women either without formal education or with primary education. The study findings were similar to those of Adeyeye (1991) that women access to education and training influences their productivity.

To establish the impact of education on entrepreneurial performance the Chi-square test was carried out to demonstrate the association between formal education attainment and income per month accrued to the fisheries value chain. The results showed a significant association between education attainment and income per month, which determines the entrepreneurial performance as table 4.6 stipulates.

Table 4.6: Impact of education on income per month

	Value	DF	Asymp. Sig. (2-sided)
Pearson Chi-Square	51.169 ^a	12	.000
Likelihood Ratio	44.414	12	.000
Linear-by-Linear Association	16.637	1	.000
N of Valid Cases	376		

a. 2 cells (10.0%) have expected count less than 5. The minimum expected count is 3.82.

These findings were similar with Charney and Libecap (2000) that education produces self-sufficient enterprising individuals increasing the formation of new ventures, the likelihood of self-employment in entrepreneurship.

4.1.5 Income per month

Table 4.7 indicates a common pattern of income per month accrued to fisheries value chain to men and women up to Kshs 20,000, with increasing income to Kshs 40,000 and above, there is a disparity between men and women.

Table 4.7: Income of men and women entrepreneurs per month

Income per month (Kshs)		Men		Women	
		Frequency	Percentage	Frequency	Percentage
	0-10,000	38	18.6	39	22.4
	10,000-20,000	55	27.0	52	29.9
	20,000-30,000	35	17.2	31	17.8
	30,000-40,000	23	11.2	18	10.3
	40,000 and Above	53	26.0	34	19.5
Total		204	100	174	100

Table 4.8 shows the distribution of income per month accrued to the fisheries value chain by gender across the three selected markets.

Table 4.8: Distribution of income by gender and market areas

Income per month	Markets Areas						Total
	City Market		South C-Mugoya		Kariobangi		
	Men	Women	Men	Women	Men	Women	
0 to 10,000	04	15	12	22	08	26	87
10,000 to 20,000	07	05	09	12	07	22	62
20,000 to 30,000	10	08	17	11	10	10	66
30,000 to 40,000	28	06	14	08	07	12	75
40,000 and above	32	03	21	04	18	10	88
Total	81	37	73	57	50	80	378

To establish the difference in monthly in-come accrued to fisheries value chain by gender across the three selected markets, ANOVA one was used; where the

post hoc test result revealed that although the income of men was higher than that of women, the difference was not significant at the level of (0.515).

Table 4.9 shows the difference in income per month by markets where the post *hoc test* result indicated that while there was no significant difference between Kariobangi and South C-Mugoya at 0.566, there was also no significant difference between South C-Mugoya and City markets at (0.324) significant values.

Table 4.9: Difference in income by market areas

Market Areas	No. of respondents	Subset for Alfa (0.05)	
		1	2
Kariobangi	130	26923.0769	
South C-Mugoya	130	30769.2308	30769.2308
City Market	118		36186.4407
Significant Value		0.566	0.324

4.2 Ventures within Fisheries Value Chain that Men and Women Participation

This section focuses on objective one of the study, which aimed at establishing specific ventures within fisheries value chain in which men and women participate. The data analysis revealed various ventures of entrepreneurial fisheries value chain that men and women participate in. These included; aquaculture and fish harvesting, transport, distributors, large scale, grading/sorting/gleaning and market sellers as follows:

4.2.1 Aquaculture and Fish Harvesting

The study findings indicated that aquaculture/fish harvesting was the prime and most important venture of the value chain. Table 4.10 shows that there were more men than women engaged in aquaculture and fish harvesting; in the mostly concentrated City market compared to South C-Mugoya and Kariobangi market areas. That more men than women participated in aquaculture and fish harvesting as high end entrepreneurial value chain in selected markets.

Table 4.10: Aquaculture/fish harvesting by men and women

Sex	Markets						Total
	City Market		South C-Mugoya		Kariobangi		
	Men	Women	Men	Women	Men	Women	
Frequencies	14	01	09	01	08	02	35
Percentage frequencies	40	2.8	25.7	2.8	22.8	5.7	100

Connell, (1987) had argued that sex division of labour, inequality and authority that favour men were rooted in the society through numerous historical, economic, cultural and socio-economic forces, which define power and ascribe socio-norms on the basis of gender and culturally determined roles. This was inherent in determinism. Thus, the findings revealed that fish harvesting occurs at night, while the activities involved include ownership and control of boats, nets, going out at night into the seas, rivers, dams and lakes in search of fish resource, casting of the nets into the water and hauling fish into the boat and later at the beach. The findings informed by men and women in entrepreneurial fisheries value chain who were sampled to participate in the study indicated that these activities entail control of multiple physical labour and financial input to own boats, nets and human resource.

These findings indicated that fish harvesting was predominantly men's work, and the reason given was that it required a lot of time, energy and that it was a risky activity. The extensive financial requirement was found to have made fish harvesting an expensive activity being a reserve for men; while, cultural forces regarding ownership of property and freedom to engage into the masculine activities overnight have also kept women away from the aquaculture and fish harvesting. These findings implied that aquaculture and fish harvesting were socio-culturally and structurally deliberate for men due to high economic potentials based on labour and capital requirements as shown in the focus group discussion:

The successful fish harvesting requires capital, labour for hauling, and control of the entire tasks involved in fish harvesting; ownership of boats, working overnight and often without clothes (Man, fish harvester and entrepreneur, FGD, South C-Mugoya Market. Date: 12th, September, 2014).

The study conclusions implied existence of sex division of labour in fisheries value chain based on gender relations where economic resources and activities related to control were assigned to men; while, those without viable economic outcome to women. These findings are similar to Kamau and Ngugi (2013) in potentials for women fish traders and upgrade within the fish trade value chain who observed that gender division of labour characterized roles related to fisheries sector; harvesting was a preserve for men while women dominate handling, processing and marketing within the value chain. The focus group discussions established that traditionally actual fishing was considered prestigious and a man's role; with control of capital and labour for higher profit margins as confirmed by the following respondent in a focus group discussion:

Fishing requires more resources, freedom and time to be out of the home environment, which can be done by men only. (Woman participant in the FGD in Kariobangi market, 18th September, 2014)

Women are expected to stay at home and only go out to work in the nearby markets; where they can enhance the safety of the family, children and households. (Woman participant in the FGD in South C-Mugoya market, 28th, August, 2014)

In contrast, Shelly and Costa (2002) in a study on women in aquaculture in Asia reported that the role of women in fish farming and harvesting; especially in small fish farms and on the sea shores has long been dominant, where women took part in actual harvesting in most types of fishing and aquaculture

especially in fish ponds for livelihoods. The discussions revealed that migration process by men from rural to urban areas in search of formal employment made women the heads of the rural households where they took over the roles traditionally meant to be for men, such as fishing, heads of households, decisions, planning, and bread winning.

4.2.2 Transportation

Table 4.11 shows that transportation of fish commodities was a high end entrepreneurial activity in the value chain. The study findings indicated that men were more involved in transporting fisheries products from lakes and dams to the selected markets.

Table 4.11: Transportation of fish by men and women

Sex	Markets						Total
	City Market		South C-Mugoya		Kariobangi		
	Men	Women	Men	Women	Men	Women	
Frequencies	10	00	11	03	06	03	33
% Frequencies	30.3	00.0	33.3	9.1	18.2	9.1	100

Transportation of fish commodities to various markets in the value chain was a high end venture and competitive. The study noted that adequate access to transport enables better contact with markets and facilitated access to distant and isolated outlets for higher economic opportunities. In this regard, men had a competitive advantage in accessing markets compared to women. The reasons given by respondents selected for the study were that transportation of perishable fisheries commodities was delicate and required intensive labour,

travelling long distances, capital and security requirements and regular contacts on cellular phones. These were major determinants that restricted women's pursuits in competitive value chains based on socio-cultural factors; hence, subordinate to men.

These findings implied that control over resources in transport sector within the fisheries value chain was entirely dependent on socio-economic and cultural factors of entrepreneurs being reserved for men as noted in the focus group discussions:

Men succeed in coming together or getting loans to purchase trucks with refrigeration for transportation of fish in bulks. This lowers the costs of production and makes it possible for their enterprises (a woman participant in an FGD, City market, 12th September, 2014).

These findings were similar to Ajiboye (1994) in a study in Nigeria; that control of transport sector is a crucial factor that stimulates economic growth through increased accessibility, efficiency and effectiveness. In contrast, Edakkhandi (2012) in a study on value chain and small enterprises development critiqued that development of new technology and innovation in tracking systems of products on transit provides opportunity for women entrepreneurs to participate in high end value chain. In addition, stronger networks are a means for entrepreneurs to reduce risks and costs with respect to transport. The study emphasized that the risks involved in transporting fishery products that target urban markets and beyond are capital and labour intensive, and requires time and physical strength. These were not preferable amongst women entrepreneurs.

4.2.3 Distribution

The distributors are important actors in the fisheries value chain. They avail the fishery commodities from the lakes and dams to market areas. Table 4.12 shows that there were more men than women in fisheries value chain engaged as distributors. The City market, South C-Mugoya market and Kariobangi market had the leading proportions of 21(26.3%) men in the respective proportions of 3(3.8%), 5(6.3%) and 9(11.3%) women.

Table 4.12: Distribution by men and women

Sex	Markets						Total
	City Market		South C-Mugoya		Kariobangi		
	Men	Women	Men	Women	Men	Women	
Frequencies	21	03	21	05	21	09	80
% Frequencies	26.3	3.8	26.3	6.3	26.3	11.3	100

The study findings indicated that distributors control the supply of fisheries commodities to actual market sellers, which demands capital and labour to own tracks with prescribed refrigeration conditions and warehouses. The study established that men have better opportunities as distributors. The reasons given were access to credit facility from micro-credit and formal institutions, cooperatives and associations, competitive entrepreneurial value chain. The study findings revealed that women were in distribution and the reasons given were informal institutions and socio-cultural factors such as customs, traditions and patriarchy; which confine women to domestic chores within their households. The respondents sampled for the study revealed that women

experienced challenges in relation with bureaucracies and access to entrepreneurial information pertaining to transportation. That is, inadequate representations of women in distribution with lower entrepreneurial potentials.

These findings point out that control of the distribution was within men's domain; hence, patriarchy as an ideology has placed women within the private where sex division of labour was the determinant of the activities and roles allocation to men and women in the fisheries value chain. In this regard, men hold ability to control supplies, maintain contacts with the fish producers and potential buyers negotiate costs and organize for the delivery.

Their extensive access to credit may enable advance credit to the fish harvester to purchase fishing infrastructure in order to sustain the production. These findings were similar to Apulu and Latham (2011) who observed that producers prefer to keep contacts with male middlemen who are traditionally believed to be the heads of the trade with adequate information concerning the flow of the trade based on business trust. The study further confirmed Barwa (2003); Hynes and Richardson (2007), who observed that prevailing social and cultural factors and biases weigh heavily against women's entrepreneurial potentials as confirmed in focus group discussions:

The brokering activities in Nairobi city are dominated by men who travel frequently to the several beaches, aquaculture farms and various towns. They also have frequent contacts with traders in different markets. (Woman entrepreneur and participant in FGD, city market, 12th September)

Dealing with women increases risks of making losses due to weaker bargaining power on their part; also, they have limited

time in the market area.(Man entrepreneur and participant in FGD, City market, 12th September, 2014).

Although women's roles as distributors are hampered by lack of access to and control over productive resources and institutions; Overa (2006) in the study on the role of women in the artisanal fisheries sector of Ghana, contrast that women participate as active middle level and distributors in fishery value chain that:

The standing woman is a woman who gets custody of the fish as soon as it is landed. She is either the wife of the canoe owner, a woman that the crew is indebted to, as the owner of the canoe. She is described as the intermediary between the fishers and the processors. Each boat has a standing woman who acts in this capacity. These women have their regular customers to whom the supply the fish (Overa, 1996: 55-77).

4.2.4 Large Scale Sellers

Table 4.13 shows that in City market there were 12(40.0%) men and 2(6.7%) women, South C-Mugoya only 9(30.0%) and Kariobangi market 5(16.7%) men and 2(6.7%) women participated in the value chain as large scale retailers.

Table 4.13: Large-Scale Sales by Men and Women

Sex	Markets						Total
	City Market		South C-Mugoya		Kariobangi		
	Men	Women	Men	Women	Men	Women	
Frequencies	12	02	09	00	05	02	30
Percentage	40.0	6.7	30.0	00	16.7	6.7	100

The study findings indicated that large-scale retail is the bulky purchase of fish from the distributors at better discounts for processing or markets areas. Large-scale retail requires well-developed clientele, high quality of fish products,

specialised labour with experience and knowledge of the market circumstances for competitive entrepreneurial participation. The study findings revealed that large-scale retail requires acquisition of quality products and control of the costs. The large-scale sellers require adequate capital in order to supply in the markets variety of fish in bulk stocks from the harvesters and sufficient cash flow as working capital.

Connell (1987) argued that gender division of labour, power and Cathexis structures expose women to subordination in access and control of factors of production that determines their economic activities. Therefore, the study conclusions revealed that women entrepreneurs have financial and social demands that compete with business capital and are often tempted to divert their working capital away from the business to their needs. It was also noted that women enterprises are less likely to grow to large scale or exhibit growth within the value chain compared to men. The study revealed that women compared to men within fisheries value chain face unique challenges related to capital, cash flow and the geographical area of coverage for successful participation in large-scale trade. The effects of these on their enterprises are slow growth with limited choices and opportunities that may lead to stagnation or collapse of the enterprise.

As Connell (1987) argued, these findings suggested that customary laws have restricted women compared to men's access to and control over assets of production like land, which could be accepted as collateral to access credit for competitive investments. The study revealed that this limitation has led to the

alternative means of borrowing resources to acquire capital. The study reported that these included indigenous borrowing systems; where women obtained informal credit from relatives, money lenders and local group money collectors; with the self-initiated rotating credit associations as one of the most popular schemes.

It was noted from the findings that outcomes of these sources are often meagre to significantly impact on the small-scale nature of women's venture that would shift to the high end value chain. These findings confirmed Stevenson and St-Onge (2005); McCormick (1988) who observed that the more formal the financing mechanism, the fewer the number of women accessing them due to lack of collateral, which limits them to own savings and micro-credit. These findings further confirmed Wanjohi and Mugure (2008) in factors affecting the growth of MSEs in rural areas of Kenya; that despite the availability of Micro-finance institutions that target entrepreneurs, men benefit as women are not able to access their services.

4.2.5 Grading, Sorting and Gleaning

Table 4.14 shows that there were fewer men compared to women with proportions of 5(6.5%) men and 23(29.9%) women in City market; 3(3.9%) men and 27(35.1%) women in South C-Mugoya; 6(7.8%) men and 13(16.9%) women in Kariobangi market.

Table 4.14: Grading/sorting/gleaning by men and women

Sex	Markets						Total
	City Market		South C-Mugoya		Kariobangi		
	Men	Women	Men	Women	Men	Women	
Frequencies	05	23	03	27	06	13	77
Percentage	6.5	29.9	3.9	35.1	7.8	16.9	100

These findings revealed that there were more women than men within grading, sorting and gleaning in the three selected markets. The grading, sorting and gleaning were regarded as post-harvest activities where women play prominent roles in line with their reproductive roles and responsibilities were rendered as lower end value chain with marginal economic potentials.

The activities related to grading, sorting and gleaning occupy the centre of interest at the market areas and include removal of scales and intestines, cleaning gills, grading and arranging the fish commodities based on the quality and size. The reasons given for the dominance of women within this category were based on the division of labour and allocation of roles within patriarchal societies where sex was the determinant. The study findings indicated that cultural beliefs were used to limit women to the post-harvest activities that included fish handling, processing and gleaning within the value chain.

These findings implied that inadequate representation by men entrepreneurs within this level was attributed to the lower economic potentials attributed to roles such as grading, sorting and gleaning as revealed in the discussions:

Women are more concentrated in entrepreneurial activities related to their traditional gender roles; as we see large numbers of women in hotels, restaurants and personal/social

and community services (Male voice in an FGD, Kariobangi market, 18th September, 2014).

These findings confirm Okorly and Kwartan (2006) a study of the state of women in fish smoking in the central region of Ghana who observed that traditionally, actual fishing is considered a men's role while women's roles were post-harvest although, these activities were less economically competitive.

4.2.6 Sales in Market Areas

Figure 4.15 shows that City and South C-Mugoya markets had the leading numbers of men compared to women; while Kariobangi market had more women than men in market selling.

Table 4.15: Participation in market sales by men and women

Sex	Markets						Total
	City Market		South C-Mugoya		Kariobangi		
	Men	Women	Men	Women	Men	Women	
Frequencies	21	05	20	11	10	45	112
Percentage	18.8	4.5	17.9	9.8	8.9	40.2	100

The study findings revealed that market selling was the final stage of the value chain where consumers acquire their goods in exchange with money. From the study findings, it was observed that there were more men in City and South C-Mugoya markets, which were noted as economically viable. In contrast, women were more dominant in Kariobangi market known as less economically viable. The reasons given for this were that; men had exposure to formal

education, which determined access channels to credit, information and training in management and planning sufficient to manage market areas with higher economic potentials.

In line with Connell (1987), the study findings indicated that there were structural barriers that affect women's competitive entrepreneurial pursuits that limited women to lower economic zones of Kariobangi market, namely; bureaucracy, registration and licensing process, security, inadequate access to strategic information, legal institutions and policy.

These findings implied that City and South C-Mugoya markets were geographically located in economic competitive zones with high entrepreneurial opportunities that attract more men than women; while on the contrast, Kariobangi market being located in a lower end economic zone; exhibited lower entrepreneurial potentials. These findings were similar to McCormick (2001) in a study on value chains and the business system in Kenya's garment industry who observed that men strategically locate their enterprises in trading centres, commercial districts or locations where enterprises are more profitable and competitive; while women prefer to operate in less profitable market areas mostly closer to their homes.

The findings implied existential structural factors that prohibit women's performance within competitive markets in economic zones with higher entrepreneurial opportunities. The study respondents in entrepreneurial fisheries value chain selected for this study revealed that such factors include

bureaucracy and legal procedures, inadequate institutional support in-terms of business training and skills, lack of information on market suppliers and patterns, limited access to finance due to lack of collateral and limited access to competitive markets.

These findings were similar to McCormick (2001) who observed that significant differences in the performance of women's enterprises compared to those of men; where women's enterprises are often smaller, less likely to grow, less profitable and often begin with less capital investment as compared to those owned by men. The study findings were similar to those of Kantor (2001) who observed that many entrepreneurs particularly women, are located in low value markets where there are lesser policy requirements for trade. Most of their entrepreneurial pursuits often in service and entertainment tend to be crowded due to fewer barriers. This situation results to saturated markets with little room for growth to large scale and to competitive levels of the value chain.

In conclusion, the study findings revealed that access and control of the economic and productive resources was the determinant of the ventures of entrepreneurial fisheries value chain. Since; this distribution has been influenced by gender dynamics; women potentials were noted as subordinate compared to men. Despite the fact that in City and South C-Mugoya markets, men were in market sales in most cases women were noted to participate in the lower end value chain. Kariobangi market had women as the majority

entrepreneurs most of whom participated in market sales; while men were the minority and spread evenly across the ventures value chain, with majority as distributors. These findings implied trends of disparities by sex in critical areas of high end value chain across the three markets. Consequently men were in fewer numbers in Kariobangi market compared to City and South C-Mugoya market; the data indicated that men continued to be in control of the high end value chain, as women were mostly in lower end. This was attributed to Cathexis that contains women's ventures based on informal institutions (Connell, 1987).

4.3. The Socio-Economic Factors Affecting Participation of Men and Women

This section focuses on objective two of the study, which sought to establish the socio-economic factors that influenced participation of men and women in the entrepreneurial fisheries value chain. The study findings revealed the following as important factors that influence the participation of men and women, namely; gender, marital status, level of education, age and income per month as discussed below:

4.3.1 Gender

The study findings showed high representation of men in the high end value chains, namely; aquaculture/fish harvesting, transportation, middlemen and large scale compared to women who featured mostly in the lower end value chains especially grading/sorting/gleaning and market sales. Earlier, the findings showed that while men were leading in higher economic market areas

notably; City market and South C-Mugoya market women concentrated in Kariobangi being a lower end economic market area. The Chi-square test results showed a significant association between sex and ventures in value chain.

Table 4.16: Cross-tabulation of gender and ventures in value chains

Ventures	Gender				Level of Significance
	Men		Women		
	No	%	No	%	
Fish harvesting	31	88.6	04	11.4	Chi Square (8.354) DF (1) P-Value (0.004)
Transport	27	81.8	06	18.2	
Distribution	63	78.8	17	21.3	
Large Scale	26	86.7	04	13.3	
Grading	14	18.2	63	81.8	
Market Sellers	51	45.1	62	54.9	

Connell (1987) earlier argued that women were limited to roles and responsibilities that checked their economic potentials and limited their trajectories due to the men's hegemony. In this regard, the theorist observes that inequalities resulting from the sexual division of labour were manifested as structural factors that inhibit their optimal performance in the value chains. These findings implied that allocation of roles to men and women in the fisheries value chain was dependent on the traditional institutions, which were structurally and culturally designed to reinforce and perpetrate gender division of labour. The findings therefore reveal that high end value chain required control of productive resources that involved ownership of property, assets and resources in relation to the fisheries value chain. These resources included access to the financial services and credit facility, access to education and

adequate skills in relation to value chain. These findings were similar to those of FAO (2011) on women in agriculture: closing the gender gap for development in Asia, that women tend to have lower access to productive resources than men due to gender specific factors concerning access and control of the factors of production.

The conclusions revealed that economic activities related to fisheries value chain were determined by the traditional gender division of labour, power and patriarchal system of male dominance. These institutions have influenced access and control of men and women to resources associated to the fisheries value chain, which in turn influenced growth in enterprises.

4.3.2 Marital Status

The marital status of entrepreneurs was a socio-economic variable that determined the participation of men and women in value chains. Table 4.3 showed that more men 142(69.9%) than women 96(55.2%) were married; 38(18.6%) men and 22(55.2%) women were single as 11(5.4) men and 40(23%) women were widowed. The study sought to establish the association between marriage status and participation in high end value chain. The chi-square test was carried out and result showed a significant association between married actors in the fisheries sector within the value chains.

4.17: Cross-tabulations of marital status and value chains

Ventures	Marital Status					Significance
	Married	Single	Divorced	Separated	Widowed	
Fish harvesting	41	03	08	12	03	Chi Square (8.904) DF (3)
Transport	33	00	07	08	03	
Distribution	20	05	05	10	03	
Large Scale	19	06	09	10	06	P-Value (0.031)
Grading	13	25	08	11	12	
Market Sellers	31	19	13	12	21	
TOTAL	157	58	50	63	48	376

These results implied that entrepreneurial fisheries value chain was popular for married men and women who control high end value chains. Hence, the married entrepreneurs are assumed to earn support from the family to sustain the fisheries value chains based on stability. This was in conflict to the widespread belief that women who are divorced, widowed or single dominated in the fish trade due to their limited options to support their livelihoods and have independence compared to women who were married (Kamau & Ngugi, 2013).

The findings were similar to those of Buttner (2001) who examined female entrepreneurial management styles, and established that married men and women worked harder in managing an enterprise because of social, financial and psychological support compared to the singles, divorced and widowed. In this regard, majority men were likely to experience more advantages compared to their women counterparts.

4.3.3 Formal education

The study findings indicated that there was association between formal education and potentials of growth in entrepreneurship. Table 4.5 showed that more men had acquired high school and above; while women had no formal education and had done mostly primary education. The markets within the affluent zones routinely dominated by men had more entrepreneurs with formal education compared to the lower zone market areas with higher numbers of women.

These findings implied that education impacted on competitive entrepreneurship. The reasons given were that education provided social capital and exposure to adequate and strategic information in entrepreneurship. To establish the relationship between education and high end value chain the chi-square test was carried out and showed a significant association between the formal education and high end value chain as table 4.18 illustrates.

Table 4.18: Cross-tabulation of formal education and ventures

Ventures	Education				Significance
	No Formal	Primary	Secondary	Tertiary/University	
Fish harvesting	07	17	55	12	Chi Square (9.841) DF (3) P-Value (0.020)
Transport	00	15	28	08	
Distribution	03	17	32	10	
Large Scale	04	25	20	08	
Grading	11	21	18	04	
Market Sellers	10	37	12	02	
TOTAL	35	144	153	44	376

These findings implied that the formal education influenced the nature and economic potentials in entrepreneurial value chains; men exhibited higher levels of formal education, their participation was economically higher as compared to that of women. The findings further showed that formal education was critical for social capital, which was a strategy for improving participation in the value chain.

The study findings demonstrated that persistent inequality, poor representation in decisions, social cultural and structural barriers effective on women participation within fisheries value chain were based on inadequate education amongst women entrepreneurs. These factors have confined women to lower end value chain and lower productivity within the value chain.

These findings were similar to those of Kimenye (2001) in understanding low rates of technology adoption by women farmers, that formal education was positively correlated to the probability of technology adoption, thus, an entrepreneur with formal education was likely to attend trainings, seminars, read, comprehend and apply the information in packaged documents to transfer the entrepreneurial and value chain techniques. The study further concurred with McCormick (2001) that difference in the education levels accounts to the differences in performance of men and women's enterprises.

4.3.4 Age

The study findings indicated that age of entrepreneurs as a demographic factor influenced their nature of participation in the fisheries value chain; where the mid-adulthood (30-40) years were found to be ideal. The reasons given were

that within this age limit, entrepreneurs in value chains have earned adequate experience based on entrepreneurial maturity and may attract confidence from their clientele, potential credit facilitators and stakeholders within the sector. They also have ability to access regular and important information to identify entrepreneurial opportunities; acquired adequate management skills essential for entrepreneurship. The study findings revealed that the upper age limit may not be ideal for effective entrepreneurship.

The reasons given were that high age limits (54-59) years were characterized by unwillingness to try out new ideas or take risks that characterize entrepreneurial value chain and that it entails regular travels, out of the homestead during riskier hours of the night and participation in social networks was a requirement in entrepreneurial fisheries value chain, age became an important variable.

Table 4.19 showed that age brackets 30-34 years comprised the majority 42(20.6%) men and 52(29.9%) women; 35-39 years comprised 43(21.1) men and 27(15.5%) women. The 55 years and above were the least. The chi-square test results showed a significant association between age and ventures within value chain.

These findings were similar to Nwabaze et al., (2013) who observed that men and women within 30 to 40 age bracket are the majority in entrepreneurial fisheries sector and are more favourably disposed to be innovative. The study further concurred with Amotoso and Daramola (2005) in socio-economic factors influencing entrepreneurship among women in fishing communities in

Nigeria, who observed that risk aversion is said to increase with age. The most productive ages were between (30-34) years characterized by high mental alertness and physical stability to cope with the vigor of fishing and its related activities.

To establish the relationship between age and participation in the fisheries high end value chain; the chi-square test result showed a significant association as illustrated in table 4.19.

Table 4.19: Cross tabulation of age and ventures in value chain

Ventures	Age							Significance
	20-24	25-29	30-34	35-39	40-44	44-49	50 above	
Fish harvesting	03	11	23	19	17	08	01	Chi Square (11.800) DF (1)
Transport	01	02	18	20	10	05	02	
Distribution	00	00	03	11	08	05	04	
Large Scale	00	01	02	05	06	06	03	P-Value (0.001)
Grading	23	08	01	00	03	00	03	
Market Sellers	17	22	03	8	02	10	15	
TOTAL	43	44	50	63	48	34	28	376

These findings implied that age limits are bound to determine access to strategic entrepreneurial management, access to strategic markets, patters of entrepreneurial investments and management challenges. Further, it implies that activities related to the value chain within fisheries sector are exclusively reserved for people in their active age, which affects their mental attitude to take risks and invent new entrepreneurial ideas. The study noted that while; the numbers of men within the age bracket (35-39)years increased while those of their women counterparts declined drastically.

4.3.5 Monthly Income

The study found that enterprises receive income from internal as well as external sources for expansion of their operations in order to mobilize more investments for higher profit margins. The internal sources are savings accrued to the entrepreneurial fisheries value chain, while external sources are those originating from lending agencies like micro-finance institutions, government, varied stakeholders and organizations.

Table 4.20 shows that more men received high scale income per month while women received lower scale income per month accrued to the fisheries value chain. It also indicated that men were in more progressive value chain compared to their women counterparts. To demonstrate the impact of monthly income on the level of participation within the value chain, the chi-square test was carried out and the results revealed a significant association between the income per month accrued to the fisheries value chain and high end value chain as bellow shown in table 4.20.

Table 4:20: Cross-tabulation of level of income per month and ventures

Ventures	Level of Income Per Month					Significance
	0-10,000	10,000 to 20,000	20,000 to 30,000	30,000 to 40,000	40,000 and above	
Fish harvesting	4	07	10	32	32	Chi Square (41.497) DF (3) P-Value (0.000)
Transport	15	05	08	03	21	
Distribution	12	09	17	21	18	
Large scale	22	12	11	04	03	
Grading	08	07	10	18	04	
Market sellers	26	22	10	10	10	
TOTAL	87	62	66	75	88	378

Participation in high end value chain was based on the level of income, which translates to capital and credit as determinants. This finding implied that income exerts a positive impact on economic output of an enterprise. Availability of sufficient income is important for entrepreneurs as it lays the foundation for enterprises.

The study findings showed that while men encounter entrepreneurial growth due to their higher income per month, women continue to face obstacles that limit their entrepreneurial growth based on their lower monthly income. The study was informed by two women entrepreneurs that avenues of income for capital and credit were awkward for women due to lack of sufficient savings and absence of lending institutions willing to take responsibility over women's enterprises.

The study showed that although acquisition of additional income for the growth of enterprises and pursuits to viable value chain has often been a challenge to the entrepreneurs; women encountered more challenges than men in securing additional income and financial support through regular channels because their enterprise profile is often less favourable compared to that of their men counterparts, which affects their potentials.

These findings demonstrated that lack of external credit facility leaves the entrepreneurs with insufficient economic resource base, which limits the prospects of growth. The study findings also revealed that based on the monthly income, more men compared to women owned the opportunity of entrepreneurial growth. In conclusion, the conceptual framework complements

this study that socio-economic variables were critical in enhancing economic activities in fisheries value chain.

4.4. The Socio-Cultural Factors Affecting Men and Women

4.4.0 Introduction

In response to the objective three, of the study, that aimed at establishing socio-cultural factors that affect the economic activities of men and women within the fisheries value chain. The study findings revealed that socio-cultural factors increase risks for the entrepreneur, facilitates or restricts access to resources. The study findings revealed that the socio-cultural factors were forces that influenced interactions and relations, which affected attitudes, behaviour and dispositions of men and women based on traditions customs, values and culture as Connell (1987) argued that the three structures articulated by the theory tend to deny women power in economic activities; they are required to depend on their male counterparts who are socio-culturally compelled to control the factors of production.

4.4.1 Traditions and Customs

The study findings showed that women were subordinate to men in economic activities related to fisheries value chain based on the cultural norms, traditions and customs. The study revealed further that male dominance negatively affected women's potentials in decision-making ability within entrepreneurial value chain. The reasons given were that patriarchy determined male dominance. The following were revealed by the study as mechanisms used to reinforce male dominance in entrepreneurial fisheries value chain:

Socialization Patterns

The study findings revealed that socialization process prepared men for productive roles and decisions, while women were educated on roles associated household reproductive work. The skills, which men earned through socialization process, were adequate for entrepreneurial pursuits compared to those specified for women. This implied that traditional values passed across restricted women's potential ventures, which were barriers to their entrepreneurial potentials as noted in the following focus group discussions:

Expressions, opinion formation, thinking for one's own needs were not qualities, which were promoted to develop the girls growing process. Girls were for most part confined to the kitchen and household and not allowed to interact with outside world or access to resources (Woman participant in FGD, Kariobangi market, date, 18th September 2014).

The study findings noted that socialization process reinforced gender division of labour, which resulted to gender stereotyping. These findings implied that roles within fisheries value chain that men and women participated in were stereotyped based on the traditional roles and gender division of labour as noted in the focus group discussions:

Women's working hours are long, strenuous, repetitive and tedious. They wash, cook, fetch water, firewood and engage in agriculture (Woman participant in the FGD, Kariobangi market, date, 18th September 2014).

These findings implied that based on the gender division of labour as prescribed by the socialization process, women have extensive responsibilities and involvements in activities within the household, which limit their involvement in entrepreneurial activities outside their households. The

multiple responsibilities were noted to impede women's aspiration to entrepreneurship.

Inheritance and Property Ownership Right

The study findings revealed that inheritance right and property ownership were regulated by customary law. The women were, therefore, prohibited by customary law from owning or inheriting property. According to the customary law, the right to inherit and own property was traditionally passed through male heirs, however, the woman's right to access and use property was customarily defined by her relation to man. At any rate; customs discriminated women against inheritance and property ownership as demonstrated in the focus group discussions:

A woman while married enjoys the use of property belonging to her husband; while single; she has access to that of her father and guardian. When a husband or her father dies, a woman's right to the land is suddenly placed in jeopardy. (Male entrepreneur and participant in FGD, South C-Mugoya market, 28th August 2014).

The inheritance rights and ownership of property were essential for entrepreneurship as collateral for capital and business running credit. Based on the property ownership, small micro-finance and banking sectors were reluctant to provide loans to women entrepreneurs in fisheries value chain. The reasons given were lack of property ownership for collateral, inadequate entrepreneurial information flow, bureaucracy and extensive institutional requirements based on socio-cultural institutions. Anaglo et al., (2014) in a study on gender and access to agricultural resources by small holder farmers contrasted these findings and noted that market-oriented women entrepreneurs

have significantly better access to NGOs and cooperative credit sources. The study findings indicated that credit accessed was meagre, not given at the right time they needed and cumbersome procedures making processing of the loans difficult. Consequently, inadequate property ownership contained women within lower opportunities of credit access, which determined their concentration in lower end rather than high end value chain.

4.4.2 Norms and Values

Assignment of ventures in entrepreneurial fisheries value chain

The respondents indicated that participation in the choice of roles related to entrepreneurial fisheries value chain was determined by the traditional gender division of labour. As such, activities within the high end value chain were considered as suiting men while those within the lower end value chain suited women. The respondents considered women's entrepreneurial fisheries value chain as less profitable compared to those of their men counterparts based on the roles and activities culturally prescribed for them. The study findings indicated that inadequate profits emerged from heavy reproductive work load amongst women entrepreneurs. Women's culturally prescribed roles were less profitable due to inadequate access to quality products, resources, strategic markets and reproductive roles.

The Extension Services in Economic Activities

The entrepreneurial extension services were meant to assist the entrepreneurs to adopt more improved practices leading to enhancement of production and entrepreneurial practice as indicated in the focus group discussion:

The entrepreneurial extension services mostly focused on promotion of technology to enhance possession utility through purchase of commodities, transfer of funds and marketing commodities online. (Man respondent, City market, 12th August 2014).

The study revealed that the distribution of entrepreneurial extension services was determined by gender and was more accessible to men. The study indicated that entrepreneurial extension service providers preferred men entrepreneurs than women. The reasons given were based on traditions and customs that prohibit associations between men and women who were not married. These findings implied that men controlled the entrepreneurial extension services and engaged in progressive entrepreneurial participation.

4.5 The Institutional Factors Affecting Participation of Men and Women

4.5.0 Introduction

This section focuses on objective four of the study, which aimed at establishing the institutional factors that affect men and women entrepreneurs within the fisheries value chain in Nairobi City County. The study found that institutions, which determine entrepreneurial participation of men and women in value chain, were financial institutions, county regulatory institutions and market areas institutions as follows:

4.5.1 Financial Institutions

The study findings indicated that financial institutions have established partnership with entrepreneurial value chain as providers of initial capital and running costs. The capital was the appropriate and affordable finance to start up an enterprise. The level of such financial opportunities therefore, determined the scale of participation in entrepreneurial value chain. As such, adequate capital determines the capacity of an enterprise to access technology, markets, competitiveness and potentials of growth. It was found that access to financial institutions for capital and running costs was determined by availability of collateral security, level of interest rates and information on existing financial institutions.

Availability of Collateral

The financial institutions have adopted a risk averse policy towards small and medium enterprises due to inability to establish income-generating potential of a venture when analyzing the likelihood of loan repayment. The institutions

demand collateral security as one of the requirements for the access to credit facility. This institutional policy has become a constraint to entrepreneurs in fisheries value chain where women are most hit.

The respondents indicated that most of the financial institutions were more inclined to lending the competitive ventures with higher success and payment rate often dominated by men. The study showed that lower end ventures owned by women discouraged them from seeking for credit facility due to extensive lending conditions, informality and lack of assets registered in their names. These findings implied that the constraints, which women experienced in entrepreneurial participation, were rooted in strong traditional values, which overlap with institutional regulations and result in gender bias.

The study sought to establish whether the respondents had registered any property in their names. Majority of women entrepreneurs in fisheries value chain sampled for the study did not have any property in their names; while men had property in their names, which they used as collateral security for obtaining loan. This implied that men compared to women in entrepreneurial fisheries value chain had collateral security. These findings indicated that it was a requirement for the individuals to produce collateral security whenever they sought for loan facility from financial institutions. Men had higher potentials of obtaining credit facility for higher investments and opportunities of growth compared to women.

Table 4.21 indicates a disparity in access to financial institutions based on collateral requirement where men compared to women owned property in their

name as a requirement. This implies that men sourced their capital from formal institutions; their activities exhibited entrepreneurial growth and higher profit margins. The source of capital for women from informal institutions provided meagre credit, which impacted on the nature of their enterprises as small scale with limited opportunities for growth. The respondents indicated that competing household expenses for livelihoods within women headed enterprises reduced resources and opportunities for sustainable entrepreneurial growth. These conclusions were noted by respondents to result from women's limited inheritance rights, property ownership and land rights.

Table 4.21: Collateral

Collateral Requirements				
	Men		Women	
	Frequencies	Percentage	Frequencies	Percentage
Title deed	90	44.1	15	8.60
Log book	50	24.5	28	16.00
Audited Financial Reports	40	19.6	00	0.00
& statement	45	22.00	00	0.00

These findings were similar to Ulrich (2006) in stimulating entrepreneurs that having access to property rights and land were essential for entrepreneurs in value chains because property is required by financial institutions as collateral security for credit. The study established that lack of land ownership, property and competitive ventures translated to women's inability to access credit for entrepreneurial value chain. These findings implied that although collateral requirement as an institutional factor was an obstacle for entrepreneurs,

women in fisheries value chain rate it as the biggest constraint, which prohibited them from growing their enterprises.

These findings were similar to Gangata and Matavire (2013) in a study on challenges facing SMEs in accessing finance from financial institutions that SMEs fail to secure loans because of restrictive requirements top among them being the collateral requirement, which disabled growth. The study findings indicated that while men in the three markets applied for loans successfully. The study findings indicated that women within Kariobangi market areas attempted but were rejected due to failure to produce collateral security. On the contrast, women in City and South C-Mugoya market areas with no collateral security had alternative security. The respondents revealed that such alternatives adopted included social capital tools such as trust and relations based on networking as security. However, the study showed that these alternative approaches served minimal security to earn competitive loans as respondents revealed that amount of money they received based on non-property collateral was not adequate to transform their entrepreneurial ventures.

Interest Rate

The interest rate as institutional factor determined the level of commitment by men and women entrepreneurs in value chains to take loans. The respondents indicated that higher interest rates were restrictive and influenced decisions of applying for loans compared to the lower interest loans. The study showed that amount of interest rate was an institutional determinant, which influenced the

loan uptake. The amount of interest rate charged was influenced by the nature of security and enterprises in terms of the size and type of venture. In this regard, the more secured the loans and competitive value-chain the lower the interest rate due to the lower risk involved.

From the findings; men entrepreneurs agreed that high interest rates charged by financial institutions did not discourage them from borrowing since the amount of interest rates was dependent on security of the loan and the nature of the entrepreneurial venture. In this regard, men in entrepreneurial fisheries value chain were more positive to apply for loans due their high end ventures, competitive security base and the motivations of lower interest rates. The women entrepreneurs on the contrast had lower motivations to apply for loans as observed in the following voice:

We have enough stock to sustain us; we decided never to attempt loans since we expect not to be granted for lack of collateral, we fear very high interest rates.... (FGD, women entrepreneur in Kariobangi market areas, date, 18th September, 2014).

The study showed that while for men within the three markets the interest rate as a financial institutional policy did affect their pursuit for loans to earn entrepreneurial growth; women relied on personal savings, family and friends for start-up funding and expansion. This has influenced the scale and nature of the value chain.

The Products in Financial Institutions

The respondents sampled for this study indicated that the number of men and women in entrepreneurial fisheries value chain are many compared to fewer

products in financial institutions tailored to them. The respondents argued that specific products offered by financial institutions were limited in scope and mostly targeted higher clientele and not those in small micro-enterprise. This was a major institutional factor in view of the fact that not many micro-finance institutions catered for the specific service needs of small and micro-entrepreneurs in fisheries value chain. The study showed that although men accessed the limited tailor-made credit facility across the three market areas where the study was carried out, women in Kariobangi market were contempt within their credit limitations while those in City and South C-Mugoya pursued for credit products amidst competition.

The study findings indicated that the increase in demand for credit services with specific tailor-made products of entrepreneurs in small micro-enterprises resulted in the emergency of mobile telephone money transfer services with subsequent introduction of mobile micro-finance credit facility. These findings implied that the number of entrepreneurs in fisheries value chain were many with diversified entrepreneurial needs as compared to the financial institutions with specific tailored services; improved access to tailor made micro-finance credit; improves credit access to entrepreneurs and growth of fisheries entrepreneurial fisheries value chain.

4.5.2 County certification and licensing process

The study found that the county regulatory institutions require certification and licensing for one to operate an enterprise. The respondents from the three

markets sampled for this study City, South B-Mugoya and Kariobangi market areas indicated that tedious certification and licensing process was an institutional factor that impacted on the participation of men and women in entrepreneurial fisheries value chain. The study findings showed that various licensing bodies had specific requirements that included money, bureaucracy and time. These requirements were a major competitive determinant and barriers for entry into the formal economy; however, men were more versed compared to women entrepreneurs.

The discussions with the key informants from the ministry and county government informed the study that certification and licensing process determined operations in entrepreneurial value chain as formal or informal. In this regard, the study revealed that while more men preferred to participate within competitive City and South B-Mugoya market areas focused more in Kariobangi market where registration requirement was less binding; although un-official costs, bribes and other payments were used as alternatives as noted in the voice:

The detection of informality is accompanied by penalties, corruption, harassment and confiscation of commodities and assets (Man entrepreneur, FGD, City market, date, 12th September 2014).

The Formality of Entrepreneurial Activities

The study findings indicated that formalization of the entrepreneurial activities referred to ownership of entrepreneurial license, compliance to taxation policy and availability of the inspection report. Formalization of entrepreneurial

activities was a determinant for high potential entrepreneurship given that it was a requirement for investment in the high end market areas.

Table 4.22: Formality of entrepreneurial activities

Formality of the entrepreneurial activities				
Sex	Men		Women	
	Frequency	Percentage	Frequency	Percentage
Licensed	169	82.2	45	25.8
Taxation	129	74.1	58	33.3
Inspection	119	68.3	23	13.2

As table 4.22 shows, more men operated formal entrepreneurial value chain based on ownership of licenses, compliance to taxation policy and inspection reports of their facility. Women concentrated in the informal sector due to lower income, investment capital, tax evasion and high regulatory requirements. These findings implied that the informal sector activities appealed to women since it was relatively easier for their entrepreneurial activities that were often at the household's door steps; however, with lower returns. Men on the contrast complied with the regulatory requirements and invested in competitive markets for higher returns.

These findings implied that women compared to their men counterparts miss out opportunities to participate in public incentive schemes and public entrepreneurial procurement contracts. That while men remain competitive in entrepreneurial value chains with opportunities of growth; women forgo profitable expansion and try to keep to size in order to operate undetected. The study findings indicated that often women make abrupt changes of locations of activities as a means of evading government regulations, which results to loss

of customers, limited access to financial capital and lower opportunities to market growth potential.

4.5.3 Market Areas Institutions

The study found that market areas institutions had security and taxation policies, which influenced participation of men and women in economic activities related to fisheries value chain.

Market Area Security Policy

The study findings revealed that market area security regulations required that market facility was opened for utility between 8:00 am till 6:30 pm as predetermined by the Nairobi county government. This policy was applicable to the three markets sampled for this study City, South C-Mugoya and Kariobangi markets. The market welfare association also compelled all stall owners to pay a monthly fee for security. Although this requirement was applicable to the three market areas sampled for this study, there was a difference in the amount charged by each market area based on the economic viability.

The study showed that performance of men entrepreneurs was not affected by the security policy. In Kariobangi market, women were affected by the policy as the study reported that they came to the market late and left for their households' duties early. On the contrast women in City and South C-Mugoya market areas were competitive to match the extensive market requirements of

doing business. The voice bellow was observed in the focus group discussion to illustrate the impact of gender roles on entrepreneurial value chain:

We have less time available for enterprises and value chain due to the household chores and child care responsibilities (Woman, FGD, Kariobangi market, date, 18th September 2014).

This implied that women were required to engage in routine responsibilities based on the socio-cultural factors as prescribed by the society. Hence, competitive participation in high end entrepreneurial fisheries value chain was considered negative to women's routine responsibilities based on the traditional gender division of labour.

Market Taxes

The study revealed that there were women outside their doorsteps and along the pavements in South C and Kariobangi areas. A more rapidly assessment showed that market stalls were rented and each entrepreneur paid daily tax to the county government. These implied inadequate resources to acquire or rent business premises where lack of physical space was a limitation to growth of value chain. This implied that abrupt changes of location was costly and a measure taken to remain informal. The study noted that bureaucracy in connection with taxation requirements hindered women business growth in entrepreneurial value chain to remain informal. The informal operation was reported to be connected to unnecessary penalties, harassment and confiscation of products.

The study noted that there were more men than women in formal economic activities across the three markets sampled for this study. The women's informal nature of their entrepreneurship tried to keep to size, which allowed them to operate undetected, with limited access to legal, financial support, business development and lower profit expansion as noted in a focus group discussion:

The procedures, official time, costs and legal ventures involved in making a new or sustaining an entrepreneurial value chain are complex, cumbersome for women to own, register and formally license a business (A woman entrepreneur in an FGD, City market, 12th September 2014).

The study findings further noted that entrepreneurial participation by married woman implied autonomy in resource mobilization. This was a threat to patriarchal structure and household power relations. These findings were similar to Amine and Staub (2009) that socio-culturally woman working for pay outside the home was seen as manifesting a man's inability to control his wife and to provide adequately for his family without her assistance.

These findings implied that market area institutions are an additional bother on women who may lack confidence to deal with the corrupt government officials. The study concludes that women compared to their men counterparts in entrepreneurial fisheries value chain have less time available to handle bureaucratic procedures due to their reproductive roles.

4.6 The suggested strategies for intervention

4.6.0 Introduction

In response to the objective 5 the data were analysed on the basis of strategies that could be put in place to enhance equal and effective participation of men and women in entrepreneurial fisheries value chain in Nairobi City County. These strategies included, equal access to formal education, equitable access to capital and credit, adequate distribution of labour resource, access to strategic information, gender representation in leadership and decisions and adequate distribution of land resource.

4.6.1 Facilitation of Equal Access to Education by Men and Women

The study findings indicated that access to adequate education was a social capital and a basic necessity for entrepreneurial growth and expansion in scale and capacity. Education, therefore, entailed ability to obtain opportunities, knowledge and skills. The reasons given were that, education was necessary to acquire and utilize skills earned to transform perception of fisheries value chain as a livelihood and economic opportunity, which improves the household's distribution of resources and as a poverty reduction strategy. Also, noted was that adequate education facilitates access to information necessary for entrepreneurship on credit facilities and access to strategic markets.

Table 4.23 shows that although education was a challenge for women entrepreneurs, both men and women proposed equal access to education. These

findings implied that education was a key factor to drive SMEs activities; hence, women's challenge in access of education 91(52.3%) was critical to their adequate understanding of market dynamics, credit processes, which placed them at a disadvantage.

Table 4.23: Equal Access to Education

Sex	Equal access to education			
	Men		Women	
	Frequency	Percentage	Frequency	Percentage
Education as a challenge	48	23.5	91	52.3
Equal access to education	39	19.1	40	22.9
Total	204	100.0	174	100.0

These findings were similar to those of Kikooma (2011) on negotiating enterprise identities; that the major factor that restrains women from entrepreneurial value chain are inadequate communal support, limited access to education and training and absence of trust in one's capability to access resources. Hence; promotion of formal education for men and women was critical for access to new technology, marketing strategies and institutional support that promote scaling up of determinants of entrepreneurial participation.

4.6.3 Facilitation of Equitable Access to Capital and Credit for Men and Women

The entrepreneurial growth in scale and capacity to the high end value chain was dependent on availability of adequate capital and credit. The study findings indicated that women compared to men inadequately accessed capital and credit, which hampered opportunities for their potential growth. The reasons given by women respondents were discouragement to approach

banking sector and credit institutions for capital and running costs due to the collateral requirements, complex procedures and bureaucracies as prerequisites.

Table 4.24 shows that access to equitable capital and credit was a major problem for women 95(54.6%) as more than half were in dire need for capital and credit than men 24(11.7%). These findings implied that the micro-finance institutions, credit and banking sector had set requirements for credit and capital, beyond the capacity of women. There was need for equitable access to capital and credit facility by men and women entrepreneurs.

Table 4.24: Equitable access to capital and credit

Sex	Equitable access to capital and credit			
	Men		Women	
	Frequency	Percentage	Frequency	Percentage
Inadequate access	24	11.7	95	54.6
Equitable access to all	38	18.6	56	32.1
Total	204	100.0	174	100.0

There was need for government and stakeholders to diversify alternatives for credit facility and furnish entrepreneurs on procedures for capital and credit access. The study indicated that this would include information on competitive financial institutions with lower interest rates for easier credit access. The respondents suggested that capital and credit providers could lower the collateral requirements, where their enterprises could also be seen as security for credit especially for women entrepreneurs. The study noted that lack of

assets for collateral inhibited access to credit. There was need for additional alternative collateral.

These findings implied that availability of capital determines the capacity of an enterprise in a number of ways especially in the choice of technology, access to markets, and access to the essential resources, which in turn influence the viability and success of an enterprise. These findings were similar to Wole (2009) on challenges in financing women businesses that, securing capital for business start-up or operation is one of the major obstacles every entrepreneur, particularly those in SME sector face; amongst whom are women entrepreneurs who face additional constraints to secure financial resources.

4.6.4 Adequate Distribution of Labour Resource

Labour is the human capital used in processing, production, and marketing of commodities and services. The study findings noted that control of effective labour was a requirement for efficient entrepreneurial opportunity that determined increased production and competitive income generation. The respondents revealed that availability of quality labour was determined by strategic training and exposure to various value chains. The study indicated that men had higher access and control of quality labour than women based on demand levels in value chains.

Table 4.25 shows that inadequate access to labour resource was a major constraint for women entrepreneurs 75(43.2%) compared to men 26(12.7%) in entrepreneurial value chain. These findings implied that men accessed and

controlled quality labour, which in turn gave higher economic potentials with opportunities for entrepreneurial growth in scale.

Table 4.25: Adequate distribution of labour resource

Sex	Equitable distribution of labour resource			
	Men		Women	
	Frequency	Percentage	Frequency	Percentage
Inadequate labour	26	12.7	75	43.2
Adequate distribution of labour	67	32.8	94	54.0
Total	204	100.0	174	100.0

The study respondents suggested that the government was an ideal institution to provide framework for distribution of labour resources on equal and equitable basis that will allow women entrepreneurs to access quality labour for higher economic opportunities. There was need for policies and programs on distribution of labour resource.

4.6.5 Facilitation of Equitable Access to Strategic Information for Men and Women

The study findings indicated that access to strategic information was the starting point of identifying entrepreneurial opportunity. The respondents suggested that access to information was essential for resource mobilization in competitive entrepreneurial value chain. The distribution of strategic information was, however, not equal as men compared to women had higher access to strategic information. The social structures and economic policies deprived women potentials of access to strategic information. Table 4.26 shows that 60(34.5%) women inadequately accessed strategic information compared to men 34(16.7%).

Table 4.26: Equitable access to strategic information

Sex	Access to information			
	Men		Women	
	Frequency	Percentage	Frequency	Percentage
Inadequate information	34	16.7	60	34.5
Equitable access to information	35	17.2	40	23.0
Total	204	100.0	174	100.0

The respondents suggested that equitable access to strategic information was essential for effective participation in the entrepreneurial fisheries value chain. These findings implied that access to strategic information has important consequences for women's prospects in entrepreneurial value chain.

The study noted that failure to have information on professional business management, poor skills in financial management hinders women entrepreneurs in accessing resources. So, inadequate accesses to strategic information on entrepreneurial opportunities and channels of accessing credit from financial institutions greatly determine participation of women in entrepreneurial fisheries value chain in scale and capacity.

As a result, the study respondents suggested improvement of channels of transmission of strategies information in line with enterprise development; notably, availability of resources and various forms of credit facilities and training opportunities. The respondents suggested that there could be diversification and improvement in channels of information; that targeted all. These findings were similar to Mira and Ogollah (2013) that being informed about micro-credit services, contributes to better credit accessing to a greater extent. Therefore, since most women operate on small scale and are generally

not members of viable professional organizations or part of the networks often find it difficult to access information.

4.6.6 Representation in Leadership and Decisions

Leadership and participation in decisions refers to the insights on how entrepreneurs approach work and communicate the impacts on their surroundings. Leadership based on adequate decisions is essential for strategic planning in entrepreneurship. Table 4.27 shows that more women 78(44.8%) encountered challenges related to representation in leadership and decisions compared to men 38(18.6%).

Table 4.27: Representation in decisions and leadership

Sex	Representation in leadership and decisions			
	Men		Women	
	Frequency	Percentage	Frequency	Percentage
Inadequate representation	38	18.6	78	44.8
Equitable representation	24	11.8	95	54.6
Total	204	100.0	174	100.0

These findings implied that inadequate representation in leadership and decisions by women was attributed to socio-cultural and economic factors that hinder women's competitive opportunity in entrepreneurial leadership and decisions.

The study respondents suggested appropriate democratic procedures in place for leadership where equal slots were adequately distributed to men and women entrepreneurs. This indicated the involvement of stakeholders in the process of appointment of leaders and representatives for enhanced gender representation. The opinions and views pertaining to leadership and decisions

to be gathered from all entrepreneurs irrespective of gender and social cadre as a way of emphasis on wider consultation and their involvement in leadership and decisions.

4.6.7 Adequate Distribution of Land Resources to Men and Women

The study respondents revealed that land was a primary source of wealth, social status, power and economic opportunities. The study revealed that ownership of land was related to poverty reduction as it gave the owners greater opportunity to earn credit and with higher investment levels. The study revealed that land has greater cultural and legal significance, which in turn influenced potential decisions. The respondents revealed that adequate control of land resource impacts on entrepreneurship as collateral for capital and credit that determines the nature and scale for economic investment. Table 4.27 shows that women 89(51.1%) encountered challenges related to the ownership and control of land resource than men 47(23.0%).

Table 4.28: Equal control of land resource

Sex	Equitable distribution of labour resource			
	Men		Women	
	Frequency	Percentage	Frequency	Percentage
Inadequate control of land	47	23.0	89	51.1
Equitable control of land	32	15.7	124	71.3
Total	204	100.0	174	100.0

These findings implied that men culturally and structurally benefited from ownership and control of land resources than their women counterparts. Lack of land title deed deprived women access of fund to finance their enterprises.

CHAPTER FIVE

SUMMARY, CONCLUSIONS AND RECOMMENDATION

5.1 Introduction

This chapter covers the summary of the study findings, the conclusions drawn and recommendations derived from the research. Suggestions for further research are also included. The purpose of this study was to investigate on participation of men and women in fisheries value chain in Nairobi City County. The study showed that equal access by men and women to formal education, equal access to strategic information, networks, capital and credit would result to appropriate intervention to improve the state of economic activities and increased rate of growth by men and women within fisheries value chain in capacity and scale.

The study sought to achieve the following objectives to map out the areas within the fisheries value chain that women and men participate in Nairobi City County; identify socio-economic factors that influence men and women participation in the fisheries value chain in Nairobi City County; assess the socio-cultural factors that influence the participation by men and women in fisheries value chain; identify the institutional factors that influence men and women participation in the fisheries value chain in Nairobi City County; and suggest the strategies that would enhance equal and effective participation in the fisheries value chain.

5.2 Summary of the Findings

The study findings indicated that men were more presented in market areas within higher economic class notably; City and South C-Mugoya market areas; compared to women whose numbers were higher in economically marginal Kariobangi market area.

This was attributed to men's control of the economic factors of production and decisions over their utilization as postulated by the social structural theory (Connell 1987). Subsequently the study showed that more men were represented in high end value chain notably aquaculture/fish harvesting, transportation, distribution and large-scale, while, women were represented within lower end sorting, gleaning, grading and market sales. On the contrast the study noted that the processing nodes of the value chain were highly feminised, given that most of the processing nodes are informal and insecure. This implied that women's roles were vulnerable; based on their limited access to formal credit services with no land and property inheritance rights.

Gender, marital status, level of formal education and income per month accrued to fisheries value chain were the socio-economic factors, which determined participation of men and women. The study revealed that marriage, level of formal education, age and income per month influenced participation in fisheries value chain. Based on the study findings gender distribution of labour, power and socio-cultural institutions have affected the distribution of socio-economic factors, which in return have subordinated women's

ownership and control of resources. These influence the access and control of factors of production and infrastructures accrued to the fisheries value chain.

The study findings revealed that the socio-cultural factors, which influenced participation of men and women in entrepreneurial fisheries value chain, included socio-cultural factors such as traditions and customs, socialization processes, inheritance and property ownership rights, norms and values. These indicated male dominance, which negatively affected women's potentials in trade, management and decisive voice in the fisheries value chain. The socio-cultural and structural factors affected inheritance rights and property ownership, which subsequently affected entrepreneurial participation.

The study showed that the institutions, which affected participation of men and women in fisheries value chain, included financial institutions, county governance institutions and market areas institutions. In this regard, collateral requirement, interest rate, variety of products on offer within financial institutions influenced the demand for credit facility. The certification and licensing procedures as county institutional factors influenced the formality of operations; while security policies and tax collection requirements influenced the operations of men and women within market areas.

The entrepreneurs suggested promotion of adequate formal education, training and capacity building for potential entrepreneurial growth. This strategy facilitated acquisition and utilization of skills earned to transform perceptions and practice of entrepreneurial value chains. The entrepreneurs suggested that

credit and financial institution's policies and frameworks to lower the interest rates and introduce alternative collateral, to target women with lower access capital and credit facility. Further suggested was equal access to strategic information and improve channels of information transmission. The strategic information would acquaint women and men with information regarding institutional procedures of entrepreneurship against their traditional gender roles. The study suggested appropriate democratic procedures in appointment of leadership and a wider consultation in decisions.

5.3 Conclusions

The study concluded that gender disparities continue to exist in entrepreneurial fisheries value chains, which have a tendency to favour men than women. There were more men 204(54.0%) whose participation was competitive and focused in economically high end market areas based on higher capital, credit intensity, bureaucracy and policy requirements with prospects of growth in scale and capacity compared to women 174(46.0%). The sector was dominated by men 42(20.6%) and women 52(29.9%) in the (30-34) age bracket since entrepreneurial fisheries value chain requires vibrancy.

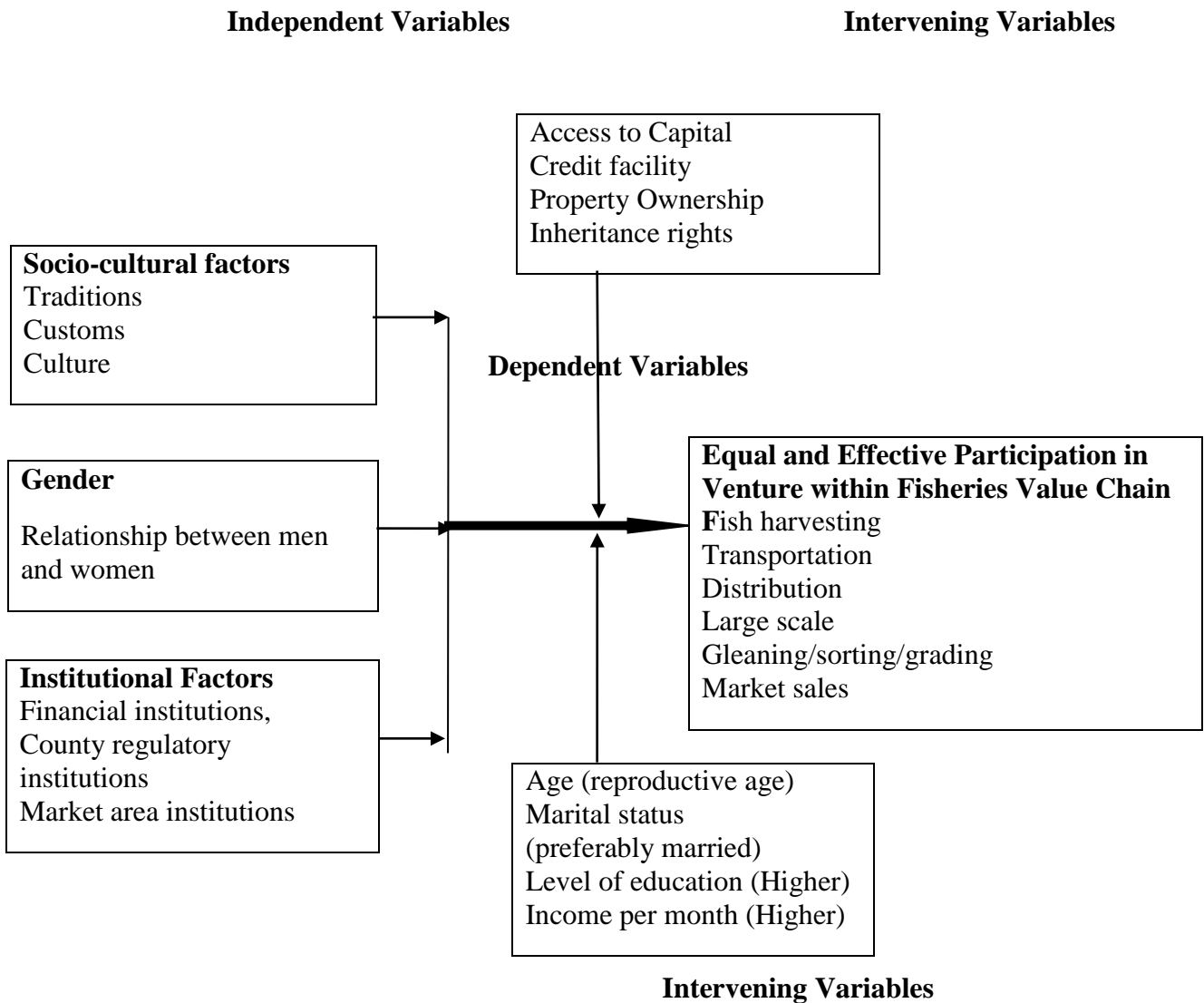
The study concluded that most entrepreneurs were married against the widespread belief that the divorced, widowed and single dominated in the sector due to freedom and limited options to support their livelihoods. That more men than women were formally educated; hence, formal education facilitated access to strategic information and networks to facilitate successful

entrepreneurial fisheries value chain. Accordingly high end profitable value chains were in control of men while women were in less competitive lower end value chains. There was a disparity in the monthly income accrued to entrepreneurial fisheries value chain, since women had lower income per month; their level of investment was subsequently lower. The study concluded that these disparities were attributed to sex division of labour, decisions and socio-cultural values, customs, attitudes and norms; inadequate distribution of economic resources related to the entrepreneurial fisheries value chain, inadequate access to entrepreneurial strategic information and networking.

To investigate the status of men and women in fisheries value chain, the study utilized Longwe (1995) women empowerment framework, which is based on the five levels of empowerment with welfare as the least followed by access, conscientisation, participation and control as the highest. The findings revealed that based on the utilization of the income accrued to fisheries value chain; men ventured into growth in scale of their economic activities while women utilized their income to fulfil their basic needs. In this regard; women compared to their men counterparts within fisheries value chain were at welfare level.

Based on the study findings, reviewed literature, Longwe women empowerment framework (1995) and conclusions, this study proposed the following model (figure 5.1) to enhance increased access and control of economic resources within entrepreneurial fisheries value chain. This model is based on the assumption that the socio-economic variables notably the right

age (30-40 years), marital status, exposure to higher formal education, viable income per month would complement the economic factors such as capital, credit, property ownership and inheritance rights to enhance productivity, equal and effective participation in fisheries value chain.



Source: Developed by the researcher

Figure 5.1: Proposed model/framework to enhance improved access to factors of production, equal and effective participation of men and women in fisheries value chain

5.4 Recommendations

The findings of this study showed that inadequate distribution of factors of production to women based on demographic, socio-cultural and economic characteristics has excluded women from high-end value chain at men's expense. Therefore, men and women actors and the related institutions in the fisheries value chain have a role to demystify and bring about a shift in the value chain as an economic activity for all irrespective of differences by gender.

The findings showed that there was apparent lack of knowledge on the institutional support to boost entrepreneurship based on lower levels of formal education. In addition, control and ownership of property as collateral in relation to credit facility was a major hindrance to women's viability in value chains. The findings also indicated that inadequate access to strategic entrepreneurial information and participation in leadership affected women's viability in the value chain. This study recommends the following to bring about equal and effective participation of men and women:

5.4.1 Equal participation in high end ventures within value chain

- i) Given poor representation of women in high end viable ventures in the value chain, the study suggested that the government needs to formulate gender sensitive policies to support equal and effective participation of men and women in value chain as a livelihood and economic opportunity. Hence, provide necessary infrastructures with

adequate access and utilization by men and women such as road network, electricity, security and improvement of market systems

ii) The county government to establish a framework that checks the violence against women within the entrepreneurial practice; especially, where customs, traditions and culture were used to subordinate women's roles. This will allow the perception of women by men as equal partners and competitors in the value chain.

iii) The outcome of this study showed in order to promote entrepreneurial culture, the government needs to improve the investment climate to facilitate access to finance and credit expansion for men and women in fisheries value chain, thus; to promote the borrowing culture there is need for:

- Men and women in the value chain to be trained in management of cash flow, investment and borrowing.
- The information on how to seek for credit facility be availed to men and women in small micro-enterprises.
- The government to investigate and respond to the problems related to some financial institutions that charge more than recommended 8.0% interest rate when providing fund.
- The government to ensure that the lending process works favourably for women especially in small micro-enterprises.

iv) Challenges related to engagement of all actors in decisions and leadership were observed; hence the study suggests that men and

women in value chain enhance adequate representation in leadership that would encourage representation in decision-making process.

5.4.2 The Socio-Economic Factors

- i) This study finding established that the socio-economic factors were seen to affect the ventures of participation within the value chain, which affected equal and effective participation. The study recommended that the county government to support men and women in value chains to acquire formal education and register in cooperatives and small micro-enterprises as members.
- ii) The study further recommended that it would be fundamental for the men and women actors in the value chains to shift focus from the market-oriented entrepreneurship to client mobilization. This will help their entrepreneurial value chain to grow in scale. This would be a strategy for diversification of markets for sustainable entrepreneurial participation.

5.4.3 The Institutional Factors

This study established that institutional factors such as county registration requirements, daily taxation policies, and security; collateral demands for credit in relation to fisheries value chains affected men and women's equal and effective participation. Therefore, the study recommended:

- 1) That the county in collaboration with stake-holders government ensures that all actors acquire knowledge and skills on procedures and requirements in value chain irrespective of the market areas.

- 2) The study recommended that the county government to provide data base as infrastructure for men and women in value chain to access information on market scenarios, reliable supplies and on existing and potential entrepreneurs.
- 3) That the county government obliges all men and women actors in the value chain to establish and register physical bases and references of their activities. This will enable access by potential clients and stakeholders.
- 4) The study suggested that the finance and credit institutions to formulate gender responsive policies that target women's prospects of acquiring capital and credit. This calls for a shift from the earlier known land as a viable collateral to the possible alternatives like for instance, the enterprise itself, household property and assets as security for credit facility.
- 5) The study findings established that entrepreneurs in fisheries value chain to cooperate and mobilize resources for joint errands such as: ownership of refrigerated facility, trucks, and fisheries resources. This would facilitate savings through combining costs.

5.4.4 The Socio-Cultural Factors

The study findings established that socio-cultural factors such as socialization, traditions and customs, affected equal and effective participation of men and women in fisheries value chain; thus, the following were suggested:

- i) The study recommends that government establishes entrepreneurial information centres, accessible and affordable to all entrepreneurs without biasness based on socio-cultural factors. This will strengthen the capacity of actors to identify demand, costs and potential market.
- ii) The study suggests that the county government and stakeholders to foster capacity and trainings targeting men and women in the fisheries value chain. This process would facilitate social change of attitudes amongst actors to bring about sustainable change.
- iii) The study findings suggested construction of more marketing outlets with modern and adequate infrastructures, notably; refrigeration, electricity, water supply, security and hygiene. This would promote economic activities by reducing the costs of production and demystifying economic activity and entrepreneurship as a male domain.
- iv) The study suggested integration of both men and women in the leadership of market activities and decisions. This would promote women contribution in leadership and development.

5.5 Suggestions for Further Research

Based on the scope and findings for this study; the following are suggested areas for further research:

- i) Participation of men and women in entrepreneurial fisheries value chain in a rural setting.
- ii) The role of ICT in facilitating entrepreneurial engagement in fisheries value chain by men and women.
- iii) Participation of men and women in cereal value chain in Transzoia County.

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APPENDICES

Appendix I: Questionnaire for men and women entrepreneurs in the fisheries value chain

SECTION A: DEMOGRAPHIC DATA

1. Market area (where you operate your enterprises)

.....

2. State your sex (tick where it applies)

Males
 Female

3. State your age (tick where it applies)

Age	Frequencies
15-19	
20-24	
25-29	
30-34	
35-39	
40-44	
45-49	
50-54	
55-59	
60 and above	

4. Marital Status

Married	
Single	
Divorced	
Separated	
Widowed	

5. Religious Belief: 1. Catholic () 2. Protestant () 3. African Traditional () Religion () 4. Muslim () 5. Others Specify

.....

6. Level of education

None	
Basic (Primary) Education	
Secondary (High School)	
Tertiary College	
University	

7. Professional training if applicable name specific area of training

.....

8. House-hold head

Yes
 No.

9. Are you the bread-winner:

Yes
 No.

10. Main Source of Income

.....

11. What is your estimated income per month from fisheries?

Amount in Kshs	Tick where it applies
0-10,000	
10,000-20,000	
20,000-30,000	
30,000-40,000	
40,000-50,000	
50,000-60,000	
60,000-70,000	
70,000-80,000	
80,000-90,000	
90,000-100,000	
100,000 and above	

12. Are there cooperatives, committees, boards, welfare groups?

Yes
 No

13. Do you belong to any?

Yes

No

14. Name some of the benefits

i)

ii)

iii)

iv)

v)

15. Do you participate in any leadership position?

Yes

No

16. Do you have a bank / cooperative loans?

Yes

No

17. Do you earn family support?

Yes

No.

SECTION B: SPECIFIC AREAS OF PARTICIPATION BY MEN AND WOMEN

18. What motivated you to venture into fisheries value chain?

Tick where it applies	
To expand economic base	
To diversity income	
To complement income	
To improve the livelihood	
For pre-occupation	
Inherited the enterprise	
Any other (specify)	

19. Are you involved in any other business?

Yes

No

20. If yes, specify

.....

21. Did you have to change from any other sector to the fisheries sector?

Yes

No

22. If yes, specify

.....

23. What is your specific area of engagement in fisheries value chain?

Tick where it applies	
Aquaculture/fish harvesting	
Transport	
Distributor	
Large scale	
Grading/sorting	
Market seller	

24. How would you categorize the level of your operations within the fisheries value chain that you engage?

Tick where it applies	
Large scale	
Small scale	
Whole seller	
Retailer	
Any other	

25. How many days in a week do you engage in the activities?
(Mark where it applies)

1. Ones
2. 2. Twice
3. 3. Thrice
4. Four times
5. Five times.....
6. Six times

26. State the reasons for your choice

- i)
- ii)
- iii)
- iv)
- v)

27. State the specific roles that men participate in?

- i)
- ii)
- iii)
- iv)
- v)

28. State the specific roles for women?

- i)
- ii)
- iii)
- iv)
- v)

29. Rank the following roles in fisheries value chain in the order of priority as (1,2,3,4,5)

- Fish Harvesting ()
 - Sorting/Grading ()
 - Gleaning (scales) ()
 - Distribution ()
 - Commercial sales ()
 - Subsistence sales ()
 - Commission sales ()
- Note: 1-highest priority
:5-least priority

30. To what extend are the following priorities in fisheries value chain achieved:

Tick where it applies					
Priorities	Not at all	Small extend	Moderate extend	Greater extend	Very Great extend
Social needs					
conomic needs					
otional needs					

31. Are social and emotional needs necessary in the fisheries value chain?
 Yes
 No

32. If yes, explain

SECTION C: SOCIO-ECONOMIC FACTORS

33. Do you engage in other extra roles in addition to entrepreneurial participation?

- Yes
- No

34. If yes, specify

- i).
- ii).
- iii).
- iv).
- v).

35. What is the source of your fisheries products?

Source for fisheries products	Tick where it applies
Lake (s)	
Aquaculture	
Middlemen	
Leading Markets in the County	
Any other source (specify)	

36. What was the source of your capital?

Sources of capital	Tick where it applies
Bank loan	
Fund raising (Harambee)	
Donors (friends & relatives)	
Own Savings	
Cooperative society	
Family support	
Any other (specify)	

37. Did you have any entrepreneurial experience and skills prior to start of this business?

- Yes.....
- No.....

38. If yes; name some of this experiences and skills

- i).
- ii).
- iii).
- iv).

39. If no; explain how you manage to maneuver?

.....
.....
.....
.....
.....

40. Do you seek advice for entrepreneurial skills

Yes.....
No

41. If yes; state some of the skills earned/learned

- i).
- ii).
- iii).
- iv).
- v).

42. Are you connected to net-works for market growth?

Yes

No

43. If yes; name some of such net-works

- i).
- ii).
- iii).
- iv).
- v).

44. Are your clients consistent?

Yes

No

41. If yes, by what strategies do you maintain them?

- i).
- ii).
- iii).
- iv).
- v).

45. What is the role of Nairobi City Council's and Ministry of Agriculture and fisheries development's personnel in the fisheries value chain

- i).
- ii).
- iii).
- iv).
- v).

46. State how you manage your daily returns/accounts

.....
.....
.....
.....
.....

47. How do you save your daily returns?

- 1. Bank Account ()
- 2. Micro-credit savings ()
- 3. M-pesa ()
- 4. Home Bank ()

48. Briefly explain why the choice of savings

.....
.....
.....
.....
.....

SECTION D: INSTITUTIONAL FACTORS

49. Do you have information on agencies working for enterprise development?

- Yes
- No

47. If yes; name any known to you

- i).
- ii).
- iii).
- iv).
- v).

48. If no; how do you get information for enterprise development?

.....
.....
.....
.....

49. To what extent do you engage communication technology for market growth

Tick where it applies					
Engagement	Note at all	Small extend	Moderate extend	Greater extend	Very Great extend
Communication Technology					

50. By what means do you process capital for enterprise development?

- 1. Bank loans ()
- 2. Micro-credit loans ()
- 3. Cooperative loans ()
- 4. Friends/relatives/family ()

51. Are the policies and administrative structure from the Ministry and NCC supportive in facilitation of your entrepreneurial development?
 Yes
 No

52. State some specific areas

- i).
- ii).
- iii).
- iv).
- v).

53. State some of the discrepancies

- i).
- ii).
- iii).
- iv).
- v).

54. Are the market officials cooperative when you need their support?

- i).
- ii).
- iii).
- iv).
- v).

55. State some of the discrepancies?

- i).
- ii).
- iii).
- iv).
- v).

56. Describe some of the roles, which the personnel from the Ministry and NCC are mandated to do?

- i).
- ii).
- iii).
- iv).
- v).

57. What is your opinion on what they are supposed to do?

- i).
- ii).
- iii).
- iv).
- v).

SECTION E: CHALLENGES AND STRATEGIES FOR EFFECTIVE PARTICIPATION

58. Fill in the following matrix and suggest strategies for intervention

Challenge (s)	Disadvantages		Strategies and interventions
	Yes	No	
Shortage of labour			
Limited access to Credit			
Deficiencies in Cash flow			
Inadequate transport systems			
Inadequate equipments			
Limited access to capital			
Inadequate control of land resource			
Limited leadership space			
Poor representation in decisions			
Limited access to information			
Limited access to education			
Storage facility			

59. State how these challenges affect participation by men and women in the fisheries value chain

.....

60. Any other strategy to ensure equal and effective participation by men and women in the fisheries value chain

.....

61. What are the socio-cultural factors influencing your participation?

.....

62. What are the traditional customs that determine your participation?

.....

Appendix II: In-depth Interview Schedule Guide for personnel from the Nairobi County Government and Ministry of Agriculture and Fisheries development

SECTION B: Specific areas of participation by men and women in the fisheries value chain

A. Specific areas of participation by men and women

1. In your opinion which areas of the fisheries value chain do men participate?
2. Which areas do women participate in the fisheries value chain?
3. What are the sources of capital for men?
4. How about women entrepreneurs in the fisheries value chain?
5. What have you learnt about the choice of the areas of participation?

B. Socio-economic factors that influence participation of men and women

1. In your opinion what are the socio factors that influence men and women's participation?
2. What are the economic factors that influence men and women's participation?
3. In your opinion are all their (socio-economic and emotional) needs met?

4. How many hours do men and women spend in these entrepreneurial activities

C. The socio-cultural factors that influence participation of men and women in entrepreneurial fisheries value chain

1. How is your participation influenced by the traditions and customs?
2. How is your participation determined by the socio-cultural factors?
3. What does the culture say about participation of men and women in their areas of participation?

D. Institutional factors that influence men and women's participation

1. Briefly describe your role in fisheries and entrepreneurial participation
2. What are your objectives?
3. What are some of the deficiencies in enhancing equal and effective participation?
4. Briefly describe opportunities for growth by men and women in the fisheries entrepreneurship
5. Are all their entrepreneurial needs met?

E. Challenges experienced by men and women

1. What are the fundamental challenges experienced by men?
2. How about those experienced by women?
3. Briefly explain how men and women relate in the fisheries value chain
4. What challenges do you face as an institution to facilitate equal and effective participation in the fisheries value chain?

F. strategies designed to enhance equal and effective participation

1. Discuss the plan of NCC/Ministry to facilitate equal and effective participation by men and women
2. In your opinion, what is the perception of men and women in facilitation for equal and effective participation?
3. State any other strategies that NCC/Ministry projects for equal and effective participation?
4. How would you advice men and women in fisheries value chain?

**Appendix III: Focus Group Discussions Guide for Men & Women
entrepreneurs in the fisheries value chain**

**SECTION B: Specific areas of participation for men and women
in the fisheries value chain**

- a) What was the source of your capital?
- b) What motivated you to venture into fisheries value chain?
- c) Which specific roles do men participate in?
- d) Which ones are specific for women?
- e) What value is attributable to the roles of men in the fisheries value chain?
- f) What value is attributable to the roles of women in the fisheries value chain?
- g) How does the difference in value attributable to the roles affect the entrepreneurial participation of men and women?

SECTION C: Factors influencing choice of specific areas of entrepreneurial participation by men and women in fisheries value chains

- a) What is the source of your fisheries products?
- b) What are the activities involved in transportation of your consignment to the market?
- c) How do these procedures affect your entrepreneurial participation?
- d) What determines a successful consignment?
- e) Which roles/activities do men and women participate?
- f) What factors determine the choice by men and women to specific areas of the value chain?
- g) How does the choice affect entrepreneurial participation by men and women in the value chain?

SECTION D: The challenges

- a) What challenges affect participation of men in the fisheries value chain by labour, credit, cash flow, transport, equipment, capital, land entrepreneurship, leadership, and mobilization of different actors in the sector, decision-making, opportunity for sharing the information and education?
- b) What challenges affect participation of women in the fisheries value chain by labour, credit, cash flow, transport, equipment, capital, land entrepreneurship, leadership, mobilization of different actors in the

sector, decision making, opportunity for sharing the information and education?

SECTION E: Strategies for equal and effective participation

- a) What strategies can enhance equal and effective participation by men and women in the fisheries value chain in key areas of fisheries value chain by labour, credit, cash flow, transport, equipment, capital, land entrepreneurship, leadership, mobilization of different actors in the sector, decision making, opportunity for sharing the information and education?

Appendix IV: Observation checklist

- 1) Note activities of men, women and how they are involved in control of fisheries value chain
- 2) Note frequencies of clientele
- 3) Carefully observe options of payments
- 4) Note the level of entrepreneurial activities by men and women
- 5) Nature of labour distribution by men and women
- 6) Note the roles of men and those of women
- 7) Options of payment/cash flow by men and women entrepreneurs
- 8) Nature of decisions by men and women
- 9) Note the relationships between men and women
- 10) How men and women solve issues
- 11) Note the nature of competitions between men and women either for resources or customers
- 12) The marketing strategies by men and women
- 13) Manifestation of leadership on the ground
- 14) Presentation during entrepreneurial activities
- 15) Note activities by men and women in transportation of fisheries products
- 16) Nature of roles assigned to men and women in processing
- 17) Activities of men and women in advertisement
- 18) Nature of entrepreneurial activities by men and women as whole sellers, retailers and door to door sellers

Appendix V: Work Plan

Year	Month	Activity
2014	January–February	Presentation of proposal for examination
	February-March	Corrections; consultations with supervisors;
2014	August	Processing the permit; sourcing for stationeries; preliminary contacts with potential respondents; data collection tools preview; appointments for interview schedules.
2014	August-September	Data Collection; Data cleaning; cross-checking data with some respondents; preliminary data analysis
2014	October-January	Analysis of study findings; Drafting the research findings; Completion of the first draft
2014	January to April	Correction of the first draft and presentation of the second drafts
2014	May to August	Correction of the second draft and presentation of the third draft
2015	December	Correction of the third draft and submission of the fourth and final draft

Appendix VI: RESEARCH AUTHORIZATION



**KENYATTA UNIVERSITY
GRADUATE SCHOOL**

E-mail: dean-graduate@ku.ac.ke

Website: www.ku.ac.ke

P.O. Box 43844, 00100
NAIROBI, KENYA
Tel. 8710901 Ext. 57530

Our Ref: C82/11261/08

DATE: 24th June, 2014

The Permanent Secretary,
Ministry of Higher Education, Science & Technology,
P.O. Box 30040,
NAIROBI

Dear Sir/Madam,

RE: RESEARCH AUTHORIZATION PAUL KIZITO– REG. NO. C82/11261/08

I write to introduce Mr. Paul Kizito who is a Postgraduate Student of this University. He is registered for Ph.D degree programme in the **Department of Gender and Development Studies**.

Mr. Kizito intends to conduct research for a Ph.D proposal entitled, "Participation of Men and Women in Entrepreneurial Fisheries Value Chain in Nairobi County- Kenya."

Any assistance given will be highly appreciated.

Yours faithfully,

A handwritten signature in black ink, appearing to read 'Lucy N. Mbaabu', written over a circular stamp or seal.


MRS. LUCY N. MBAABU
FOR: DEAN, GRADUATE SCHOOL

DNN /rwm

Appendix VII: RESEARCH PERMIT

CONDITIONS

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

REPUBLIC OF KENYA

NACOSTI
 National Commission for Science, Technology and Innovation

RESEARCH CLEARANCE PERMIT

Serial No. A-3282

CONDITIONS: see back page

THIS IS TO CERTIFY THAT:


MR. PAUL KIZITO ODUOR
of KENYATTA UNIVERSITY, 78763-619
nairobi, has been permitted to conduct
research in Nairobi County

on the topic: PARTICIPATION OF MEN AND WOMEN IN ENTREPRENEURIAL FISHERIES VALUE CHAIN IN NAIROBI COUNTY-KENYA


for the period ending:
31st August, 2017

Permit No. : NACOSTI/P/14/9807/3226
Date Of Issue : 24th September, 2014
Fee Received :Ksh. 2000

Applicant's Signature



Secretary



National Commission for Science, Technology & Innovation

