LIBRARY Michigan State University

# PLACE IN RETURN BOX to remove this checkout from your record. TO AVOID FINES return on or before date due.

| DATE DUE | DATE DUE | DATE DUE                     |
|----------|----------|------------------------------|
|          |          |                              |
|          |          |                              |
|          |          |                              |
|          |          |                              |
|          |          |                              |
|          |          | _                            |
|          |          |                              |
|          |          | _                            |
|          |          | 1/98 c:/CIRC/DateDue.p85-p.1 |

1/98 c:/CIRC/DateDue.p65-p.14

# The Economic Sociology of Kenya's Lake Victoria Beach Communities: The Intersection of the Economy, Communal Social Relations, and Gender

Ву

Deborah P. Theado

#### **A DISSERTATION**

Submitted to
Michigan State University
in partial fulfillment of the requirements
for the degree of

**DOCTOR OF PHILOSOPHY** 

Department of Sociology

1998

#### ABSTRACT

THE ECONOMIC SOCIOLOGY OF KENYA'S LAKE VICTORIA BEACH COMMUNITIES: THE INTERSECTION OF THE ECONOMY, COMMUNAL SOCIAL RELATIONS, AND GENDER

By

#### Deborah P. Theado

Although some attention has recently been directed to the species changes occurring within Lake Victoria (e.g. Pitcher and Hart, 1995), scant attention has been focused on women's experience within the Lake Victoria fishery. This research seeks to correct that oversight. This research explores the societal and economic experiences of women in the fishery communities of Kenya's freshwater beaches. A particular focus is directed to women who work within the fishery. From March through August of 1995, 17 beach communities were visited and 150 women and men were interviewed for this study. Geographically, these beach communities ranged from Kenya's northern regional boundaries with Uganda to Kenya's southern-most borders with Tanzania.

Women have multiple and varied responsibilities within their socially expected roles in the fishery and the beach communities which are ethnically dominated by the Luo people. Their responsibilities include providing for their children and themselves despite challenging economic circumstances. To accomplish these tasks, women use their communal social relations which consist of the inter-dependencies individuals develop as a result of societal interaction (e.g. Minar et al., 1969; Hiskes, 1982; Goudy, 1990; Overing, 1989; Fiske, 1991).

Methods employed to uncover these beach-level socio-economic experiences included an extended interview schedule and tools which allowed formal observational assessments of households, beach communities, and social relations. Scales were constructed to measure the fit between economic and social demands and subsequent reliance upon social relations. Findings suggest that the women draw heavily upon established social relations and that these social relations are critical to their survival in challenging social and economic circumstances.

# Finally.

To the Women of the Beaches who took the time to talk, teach, laugh, play, and ultimately, to dance with me, I carry you in my heart always.

I have told your story as best I could. It is but a poor reflection of your reality.

#### **ACKNOWLEDGMENTS**

I am indebted to a good many people on both sides of the Atlantic Ocean who helped me through this, some by prodding, some by cajoling, and some by ignoring me.

They have all contributed to the successful completion of this, at times, overwhelming task.

# My Kenyan Colleagues:

Erokomano ahinya Jaduong, Mr. James Ogari, Director, KMFRI Inland Lakes. In the same manner in which you have supported my work, my home will always be open to you and to your family.

To Owaduwa Ernest Ondiek Yongo, KMFRI, socio-economist: ilal ahinya, without you and your humor - we would have all died many times. Anyar JoLuo always. In owaduwa. Erokomano, Owaduwa

To Ongola, KMFRI, driver: we could never have gotten where we did and as far as we did without you. I am grateful. Erokomano, Omera

#### My U.S. Colleagues:

My new colleagues at Beloit College offered continuing support, shoulders to cry on and commiserating stories of their own graduate processes. I extend special thanks to the members of Beloit College's FAC-96.

To Committee Members Christopher K. Vanderpool, William Derman, and

Lawrence Busch: At varying times and in varying ways, each of you provided a particular

kind of support and encouragement which was essential to my completion of this work

and critical to my emotional well-being. Thank you.

To my Committee Chair, David Wiley: You will never know how much it meant to me to hear your voice, patient and calm, prior to my evacuation from Angola. Thank you for your patience, persistence, and encouragement through this entire process.

Support for this dissertation research was provided from IIE/Fulbright and

Michigan State University. I received pre-dissertation funding from the IPFP program of

SSRC and the American Council of Learned Scholars. My thanks to these funders.

And finally, to my Friends and my family:

David Plank and Betsy Eldredge, also Michael and James. From a tender opening in my heart, I thank thee all. Your support and encouragement is incalculable.

Joann Neuroth, this also belongs to you. You started this process with me.

Without the 5:30 a.m. calls, who knows what would have happened. I thank thee also.

Theo Mace, you came on in the middle and, through sickness and health, you have stayed until the end. You are indeed family. How do I thank thee?

And, of course, to Joan Penfield, perhaps you are the only one who knows how much this means. Thank you for consistently caring. This may belong to you most of all.

# **TABLE OF CONTENTS**

| LIST OF TABLES   | x  |
|--|----|
| CHAPTER 1  |    |
| INTRODUCTION   | 1  |
| Theoretical Perspectives to Be Employed                                |    |
| The Socio-cultural Context of Kenya's Lake Victoria                    |    |
| The JoLuo and the Fishery.   |    |
| History of Kenya's Freshwater Fishery                                  |    |
| Women and Fishery Activity   |    |
| The International Fishery Economy and Women in Beach Communities       |    |
| A Preliminary Discussion of Women and Power                            |    |
| Foucault, Giddens, and Smith on Power.                                 |    |
| The Activities of Women Historically in the Fishery and in Luo Society |    |
| Migration Issues   |    |
| Present Day Politics of Ethnicity for the JoLuo                        |    |
| The JoLuo and the BaSuba   |    |
| Study Objectives.  | 32 |
| The Social Relations of Economic Activity                              | 32 |
| The Gendering of Fishery Activity and Micro-Sized Economies (MSEs)     | 34 |
| Data Collection and Methodology  |    |
| CHAPTER 2  |    |
| THE LITERATURE   | 39 |
| Identification of the Relevant Literature.                             |    |
| Economic Sociology   |    |
| Economic Theory and Women.   |    |
| The Failure of Prior Analytic Models of Economic Activity to Capture   |    |
| Behavior   |    |
| Institutional Economics.   |    |
| New Institutional Economics (NIE)                                      |    |
| Limitations of New Institutional Economics (NIE).                      |    |
| The Impact of a Monied Economy   |    |
| The Overlay of Socially Constructed Systems.                           |    |

| The Impact at the Beach Level Micro-sized Economies Social Relations Gendered Research Linkage of Household Patriarchy and Male Dominance with World Syn Economy. Kenyan Women Women and Security Summary  CHAPTER 3 METHODOLOGY Research Design Beach Selection Participant Selection Participant Selection Beach Entry Interview Sites The Interview Process Instruments and Analysis  CHAPTER 4 FINDINGS REGARDING LAKE VICTORIA'S BEACHES and COMMUNI Geography The Gendered World of the Lake Women's Entry Into Beach Communities Demographic Profile: Age, Children, Education  | 53          |
|--|-------------|
| Research Design.  Beach Selection  Participant Selection  Beach Entry  Interview Sites  The Interview Process  Instruments and Analysis  CHAPTER 4  FINDINGS REGARDING LAKE VICTORIA'S BEACHES and COMMUNIT  Geography  The Gendered World of the Lake  Women's Entry Into Beach Communities.  Demographic Profile: Age, Children, Education  A Case of Childcare Responsibilities  A Case Study of Business Start-up  Household Responsibility  The World Economic System - Its Intersection with Fishery Women  Problems and Strategies  Identification of Categories of Respondents' Problems and Strategies  | 60          |
|  | 62          |
|  | 63          |
|  | 64          |
| Linkage of Household Patriarchy and Male Dominance with Wo   | rld Systems |
| Economy.   | 65          |
| Kenyan Women   | 70          |
| Women and Security   | 71          |
| Summary  | 72          |
| CHAPTER 3  |             |
|  | 74          |
|  |             |
| The Impact at the Beach Level Micro-sized Economies Social Relations. Gendered Research Linkage of Household Patriarchy and Male Dominance with World Sy Economy. Kenyan Women. Women and Security. Summary.  CHAPTER 3 METHODOLOGY Research Design. Beach Selection. Participant Selection. Beach Entry. Interview Sites. The Interview Process. Instruments and Analysis.  CHAPTER 4 FINDINGS REGARDING LAKE VICTORIA'S BEACHES and COMMUNI Geography. The Gendered World of the Lake. Women's Entry Into Beach Communities. Demographic Profile: Age, Children, Education. A Case of Childcare Responsibility. The World Economic System - Its Intersection with Fishery Women. Problems and Strategies |             |
|  |             |
|  |             |
|  |             |
|  |             |
|  |             |
| FINDINGS REGARDING LAKE VICTORIA'S BEACHES and COM   |             |
|  |             |
|  |             |
|  |             |
|  |             |
|  |             |
| •  |             |
|  |             |
|  |             |
|  |             |
|  |             |
|  |             |

| CONCLUSION   |     |
|--|-----|
| The Contemporary Frame of Women's Social Reality in Lucland              |     |
| Women and Product Transport  |     |
| · · · · · · · · · · · · · · · · · · ·                                    |     |
| Traders Purchase/Sale Strategies and Social Relations                    | 16  |
| Tradition and Current Social Relations of Fishery Practice               |     |
| Theoretical Implications.  |     |
| Directions of Future Research  |     |
| APPENDIX A - Map of Lake Victoria  | 170 |
| APPENDIX B- Household Interview Schedule                                 | 17  |
| APPENDIX C - Beach Observation checklist                                 | 22  |
| APPENDIX D - Household Observation Checklist                             | 22  |
| APPENDIX E - Complete Data Tables  | 22  |
| APPENDIX F - Complete List of Variables                                  | 24  |
| APPENDIX G - Measure of Linear Association: Business Strategie Relations | •   |
| BIBLIOGRAPHY   | 24  |

# LIST OF TABLES

| Table 1 - Region, Size and Fishery Type of Originally Selected Beaches, 199576      |
|---|
| Table 2 - Fish Species and Popular Name   |
| Table 3 - Number of Respondents at each Beach by Gender                             |
| Table 4 - Number of Respondents Who Have Farmland                                   |
| Table 5 - Size of Farms for Female Respondents, 1995, All Districts, Value in Acres |
| Table 6 - Female Respondents Who Have Animals                                       |
| Table 7 - Total number of Women Respondents Who Rent Farmland94                     |
| Table 8 - Number of Acres Respondents Rent for Farming                              |
| Table 9 - Number of Acres Rented for Respondents Who Rent                           |
| Table 10 - Respondents Who Lived at This Beach for the Past 12 Months96             |
| Table 11 - Respondent's Means of Transport by Single Use of Transportation Only     |

| Table 12 - Respondent's Use of Multiple Means of Transportation                           | 99   |
|---|------|
| Table 13 - All Respondents Who Report Walking as Some Part of Transport                   | 99   |
| Table 14 - Amount of Time Respondent Needs to Travel to Her Primary Ma                    |      |
| Table 15 - Respondents Who Travel More Than 15 Minutes to Market                          | .101 |
| Table 16 - Respondent's Ethnic Identification   | .102 |
| Table 17 - Age of Respondents (Females)   | .109 |
| Table 18 - Number of Respondent's Children Who Are Currently Living                       | .110 |
| Table 19 - Total Number of Children Respondent Currently Supports                         | .111 |
| Table 20- Number of Children for Whom Respondent Provides Care But Whom She Did Not Birth | .112 |
| Table 21 - Age of Youngest Child Whom Respondent Supports (Whether Birther Not)           |      |
| Table 22 - Age of Oldest Child for Whom Respondent Provides Regular Care (Summable)       | -    |

| Table 23 | - Number of People Eating in Respondent's Household on a Daily Basis1     | 15 |
|----------|---|----|
| Table 24 | - Number of Years Respondent Has Been Married (Summary Table)1            | 16 |
|          | 5 - (Women) Respondent Considers Self to be Sharing Household w<br>pouse  |    |
|          | 5 - Women Respondent's Report of Husband's Age by Categories (Summa able) | _  |
| Table 27 | - Women Respondent's Self-report of Age by Categories1                    | 18 |
| Table 28 | - Male Respondent's Report of Wife's Age (Data for First Wife only)1      | 19 |
| Table 29 | - Female Respondent's Who Report Not Knowing Husband's Age12              | 20 |
| Table 30 | - Male Respondent's Report of Wife's Age1                                 | 20 |
| Table 31 | - Husband's Report of First Wife's Number of Years of Education1          | 21 |
| Table 32 | - Husband's Report of Second Wife's Number of Years of Education1         | 21 |
| Table 33 | - Husband's Report of Third Wife's Number of Years of Education1          | 22 |
| Table 34 | - Women's Report of Spouse's Number of Years of Education 1               | 23 |

| Table 35 - Education Level for Female Respondents                        | 124 |
|--|-----|
| Table 36 - Male Respondent's Educational Level                           | 125 |
| Table 37 - Respondent's Report of Number of Co-wives                     | 128 |
| Table 38 - Women's Report on Spouse Contribution of Food                 | 129 |
| Table 39 - Men's Report of Wife's Contribution of Food or Money          | 129 |
| Table 40 - Women's Report on Others' (Not Husband) Contribution of Money |     |
| Table 41 - Men's Report of Others' Contributions                         | 130 |
| Table 42 - Childcare Strategies and Practices                            | 133 |
| Table 43 - Which Relative Provides Childcare                             | 134 |
| Table 44 - Living Space When Working                                     | 135 |
| Table 45 - Distance From House to Beach                                  | 135 |
| Table 46 - Number of Hours Women Work In Their Fishery Practice Per Day  | 137 |
| Table 47 - Time Women Respondents Leave Home                             | 137 |

| Table 48 - Time Women Respondents Go Home at End of Day                     | 138 |
|---|-----|
| Table 49 - Number of Hours Male Respondents Work                            | 139 |
| Table 50 - Time Male Respondents Leave Home to Begin Work                   | 139 |
| Table 51 - Time Male Respondents Go Home at End of Day                      | 140 |
| Table 52 - Respondent Shares Childcare with Co-wives                        | 141 |
| Table 53 - Respondent Cooks with Co-wives                                   | 141 |
| Table 54 - Respondent Farms with Co-wives                                   | 141 |
| Table 55 - Does Women Respondent Identify Any Business Competition          | 142 |
| Table 56 - Women Respondents' Identification of Business Competitors        | 143 |
| Table 57 - Travel time to market for all Women Respondent                   | 145 |
| Table 58 - Women Respondents' Travel Time to Market - (more than 15 minutes | 145 |
| Table 59 - Male Respondents Time from Home to Beach - (men in fishery only) | 146 |

#### Chapter 1

#### Introduction

There is a developed and an on-going body of literature which explores the lives and existence of the particular species of fish which inhabit East Africa's Lake Victoria. However, the lives of the people who inhabit Kenya's Lake Victoria beach communities have received limited attention. Further, social scientists have failed to articulate the social relations of fishery economics, the social relations of gender, and the particular socioeconomic strategies of women living in those communities.

The purpose of this research is to explore and describe the lives of a particular segment of women living and working in Kenya's freshwater beach communities. My intent is to document how women integrate their lives with their economic activity. Their economic activity occurs both within, and outside of, the freshwater fishery. Finally, I explore the intersection of economic activity and gender and the resultant dynamic within the arena of social relations which shape Kenya's Lake Victoria communities.

#### Theoretical Perspectives to Be Employed

This research inquiry is directed towards women's activity to provision themselves and provide care for their families. It is hypothesized that these critical activities of personal sustenance and economic livelihood are embedded within a spectrum of social relations. Briefly, social relations will be understood as the social connections between and among individuals or groups of people. It is expected that these social relations facilitate or inhibit successful accomplishment of the essential economic and household tasks in which women engage. Further, these social relations may be understood to be overtly

manifested or they may be less visible to observation and therefore submerged within other forms of social organization. An extended discussion of this concept will be presented later in this writing.

To effectively contextualize women's socio-economic experiences within the Kenyan fishery requires that multiple theoretical concepts be utilized to most accurately capture the reality under which women who work and live in fishery communities exist. In addition to consideration of pertinent social science discussion regarding Africa and Kenya, three major theoretical perspectives of social experience are engaged to provide the frame for this research: economic sociology theory, gender theory analysis, and social relations theory. This critical combination of theoretical paradigms provides a more inclusive set of analytical tools with which to discern women's socio-economic experience within Kenya's Lake Victoria communities and the socially constructed economies within which they must operate.

I explore Kenyan women's socio-economic experience in the freshwater fishery with particular regard to the local level of marketing activity. Accordingly, this discussion considers women's activity as it crosses into specific economic arenas. However, this discussion is not a focus on economic activity *qua* economics. That is, I do not intend to critique the subject of economics. It is not that the topic, e.g. a critique of neo-classical economics, is not worthy of extended consideration, it is. (For a thorough critique of the topic see, e.g. Granovetter and Swedberg, 1992; Pujol, 1995; Kuiper and Sap, 1995; Ferber and Nelson, 1993.) However, this current research is not a critique of the limitations of extant economic theory. Instead, my intention is to highlight the interactive

nature of economic activity, gender, and the social relations which surround those socially constructed systems. Finally, the goal of this research is to articulate/describe the lives of women who reside and/or work within Kenya's freshwater fishery communities (i.e., to make overt the social parameters which surround women's lives and to characterize women's experiences within those parameters).

## The Socio-cultural Context of Kenya's Lake Victoria

It is important to understand the social context in which women operate. As a result of the need to operate within a monied economy, there has been a subsequent migration of males from rural areas to urban centers where they seek waged labor.

Because the usual practice is for males to migrate singly and to leave their families in the rural areas, women are left alone as single household providers. This migratory history and its implications must be considered.

The Luo people are the dominant ethnic population in this region. Therefore, the gendered roles of Luo culture also impact the daily necessities of women's paid and unpaid labor as well as women's work opportunities. Further, political rivalry occurs at the national level due to the Luos' status as the ethnic majority in the Lake area and because they are potentially the third largest ethnic group in Kenya.

This political concern regarding Luo numeric dominance has presented additional political complexity for the Luo. It has resulted in an official census extraction of a subgroup of Luo, the *BaSuba*, from the larger Luo group (1989 Kenyan National Census, released 1994). This separation is perceived by many Luos as an attempt to lessen their numbers overall and to remove them as the acknowledged third largest ethnic group in

Kenya. This "ethnic" separation of the BaSuba from the Luo contributes a sometimes uncomfortable political contour to the dynamics of the social world in which women operate. Therefore, I present an overview of the Luo people historically as well as consideration of their present-day socio-political experiences.

Finally, it is crucial to understanding the lives of those in the fishery to consider the fishery practices of Lake Victoria. The introduction and the on-going presence of the nile perch (*latus niloticus*) in Lake Victoria and the subsequent change in, as well as reduction of, fish species within the Lake have dramatically impacted all those whose lives are dependent upon the Lake.

Therefore, I will discuss the context of the fishery and Lake Victoria in which women operate. Luo history and contemporary ethnic considerations will follow that discussion. A discussion of the implications of urban migrations complete this introductory section.

#### The JoLuo and the Fishery

The JoLuo (Luo people) came to Kenya's Nyanza Province (see map, Appendix A) as pastoralists who had engaged in farming activities and cattle-raising prior to migration (Ochieng', 1974; Wiley and Yongo, 1992). Over time, the Luo ventured beyond their subsistence farming practice and began the practice of fishing. Eventually, their involvement in fishing expanded such that today the Luos are the ethnic majority of fishers who fish in Kenya's (approximately) 6% of Lake Victoria (Reynolds and Greboval, 1988; Hoekstra, 1992). The present research also finds the ethnic majority of fishers to be Luo. (see discussion later in this writing). As the current research also demonstrates, fishery

involvement, whether as fisher or in ancillary work as processor or marketer, is a common economic activity for Luo people living in the lake area.

The occupation of fishing has not always been viewed as viable economic activity; additionally fishing was not considered an appropriate or respectable pathway to opportunity (Jensen, 1973). This differs from the status which it currently enjoys among the Luo and others in fishing communities. Presently, fishing is viewed as an economically viable and socially respectable activity. In fact when asked in what fashion would they expand or change their economic activity, participants in the present study responded that they would purchase new fishing gear, either as an addition to their existing equipment or as a new venture. Both males and females stated the desire to increase their economic involvement in the fishery.

Today the Luo engage in all facets of fishery activity from catching the fish to its processing, its transport, and its sale. Over time the social and ecological context in which these activities occur has changed. With the entry of international marketers, acquisition of fish has become more challenging, both for fishers and for those who sell the product at the local and domestic Kenyan market level. Since the international market has entered, some fish species have disappeared; other species are reduced in availability. Finally, introduction of new species into the Lake have subsequently impacted the overall present-day ecology of the Lake (see for example, Reynolds and Greboval, op. cit; Moreau, 1995; Twongo, 1995; Pitcher, 1995).

#### History of Kenya's Freshwater Fishery

The historic impact of the external world on artisanal fishers has recently come under scrutiny. Wiley and Yongo (1992) posit that, in Kenya, this impact came about as a result of a combination of factors. They argue that the demand for fish from European colonialists living in Kenya's highland area combined with the desire of those managing the building of the railroad (which would ultimately stretch from Nyanza Province to Mombasa) to obtain an inexpensive and easily obtained protein source for railroad construction laborers account for some of the dynamics which challenge the livelihoods of artisanal fishers. And finally, Wiley and Yongo (op. cit.) argue that introduction of "Irish Linen Nets" into the fishery in 1905 was a major factor in the reduction of fishing stock which continues to the present day. They argue that the Irish linen net provided a cheap and accessible fishery gear. Therefore as a result of the international attention on and demand for product from Kenya's lake fishery, as well as the resultant introduction of this more easily obtained gear, the amount of fish harvested increased.

As early as 1924, a letter from the Ministry of Agriculture and Fisheries in London lamented the reduced access to an adequate fish catch close to shore (Wiley and Yongo, ibid.). In that writing, Henry Granaries, from the Ministry of Agriculture and Fishery in London, states to Captain Caldwell:

All we know is that the fisheries have been falling off. The fact that, as I understand you, the fishery used to be successfully prosecuted fairly close to shore and is successfully prosecuted at a considerable distance from the shore may provide a clue to the cause (as quoted in Wiley and Yongo, 1992, p. 2).

The concerns regarding the need to proceed further from shore in order to obtain a

sufficient catch, raised in this writing of 1924, are echoed in a 1927 report to the Game Warden from the Senior Commissioner for Nyanza, Kisumu, which states:

It is generally admitted that the catches of fish are less than they were. In the early years, the average catch is estimated to have been over 25 fish per 100 yards of nets while boats operated at only about a mile from shore. In later years, the catch fell to 5 per net and to get these the boats have to go from 12 to 15 miles out. ... There appears to be no doubt whatever that fish taken in the Lake are decreasing... (ibid., p. 3).

The substance and implication of this archival data make it apparent that the introduction of new gear technology and vessel improvement impact the opportunities for and the amount of the overall fish harvest (Wiley and Yongo, op. cit.). These occurrences provide the backdrop for later and continuing changes in the fishery which come as a result of Kenya's Independence in the 1960's. Subsequent changes in public policy and its implementation also result from this colonial legacy. It important to understand that formal social relations, as codified in laws and promulgated regulations, certainly changed. In addition, it is reasonable to surmise that informal fishery practice and the social relations surrounding indigenous beach-level activity also shifted as the regulatory burden imposed as the result of "an illegitimate and alien invasion by foreigners" of the former colonialist regime was lifted via Kenya's Independence (Wiley and Yongo, op. cit.).

In the 1980's, international demand for nile perch (*mbuta*) increased. The subsequent reported increases in *mbuta* catches seemed to be in response to this demand. This increase in the presence and capture of *mbuta* signals an almost simultaneous decrease in the presence of the favored indigenous fish, known as *ngege* or tilapia (Wiley and Yongo, 1992; Reynolds and Greboval, 1988; Witte, Goldschmidt, and Wanink, 1995).

Many sources (e.g., see references above, in particular see Pitcher and Hart, ed., 1995) provide excellent and detailed discussions of the ecological status of Lake Victoria as a whole. My purpose here is not to duplicate that effort but merely to provide an overview of the environmental and ecological impactors that resulted in the historical legacies which contribute to shaping the social, environmental, and economic milieu which women living and working in contemporary beach communities encounter.

Additionally, as Harris, Wiley, and Wilson (1995) suggest, arenas traditionally occupied by artisanal fishers and accomplished at the beach level are challenged by the entry and dominance of international economic activity. The impact of the world economic system on local level activity will be discussed later in this writing. However, it is important to understand the operating of local social and economic systems as occurring within the context of and resulting from the dynamics of several levels of activity, including community, provincial, nation-state, and ultimately, an international arena. The present research effort further explores this issue (of international impact) with regard to fishery activity, e.g., processing, trading, and preparation, which has been traditionally accomplished by women within the beach communities.

#### Women and Fishery Activity

Although females are not generally permitted or tolerated within fishing vessels except in unusual circumstances, the present research found that it is not unusual for women to be boat owners. Data collected regarding individuals who are active in Tanzania's Lake Victoria fishery also suggest the presence of women boat owners (see Wilson, 1995).

However, the type of fishery activity in which women may engage is socially proscribed. As an example of men's prohibition of women working on the lake itself, men at Kenya's Gingo Beach stated that "the lake is too dangerous for women" and that "women would be too afraid to be in the boats." Gingo men also suggested that women tended to decrease the fish catch by their mere presence. However, women standing nearby and actively listening to this discussion in its entirety snorted derisively. It is reasonable to conclude that particular gendered social relations of Luoland prohibit women's participation in the catching phase of fishery activity.

However, an exception to the banning of women on the fishing boats occurred at a small beach near Muhuro Bay area. In this instance, this woman's work as a fisher was acknowledged and accepted by all in the community. Her particular social circumstances included a husband who was known throughout the community to be mentally infirm. As such, she had been allowed to adopt the role of active fisher in her family system and within the community as a whole. Her activity was accepted and unchallenged.

Generally however, women dominate numerically and are most visible in the activities of processing and sale or marketing of the fish product. Discussion of women's proscribed fishery activities and males' subsequent incursion into these areas of processing and sales follows.

# The International Fishery Economy and Women in Beach Communities A Preliminary Discussion of Women and Power

Pre-feminist theoretical discourse of women's relations in social organizations frequently focused on the role of "power." That concept was understood to be influenced

by status, wealth, as well as by the one's relations to others, particularly women's relations to males who hold "power." However, feminist discourse broadened this more narrow understanding and argued that the impact of gender and gendered roles resulted in a pervasive set of overriding social relations which had to be addressed with particular attention. This understanding of social relations as gendered argued that simply laying on a prior set of theoretical models obscured, occluded, and overlooked the actuality of women's experiences. In essence, the concept of power (as well as other sociological concepts as they had previously been understood) was too limited a concept to incorporate women's lived experience (e.g., see discussions by Smith, 1987,1990; Hill Collins, 1990, 1991; Baca Zinn et al., 1986; Harding, 1987, 1991; Lorber, 1993).

It was argued, correctly, that simply viewing women as "oppressed" by a larger and male-created social organization failed to identify or address the ways in which that social organization or that "oppression" was constructed (e.g., Dorothy Smith's work regarding "relations of ruling," 1987 and 1990). That is, this feminist theoretical work argued, correctly, that the sets of values, rules, "norms," and organizing principles which created and shaped the social structures were not gender neutral. In fact, these structures were a direct outgrowth of male values, male norms, and ultimately were structured to benefit males. What feminist theorists offered was the excavation of the prior unacknowledged hegemony of a dominant schema of social organization. In essence, feminist theorists argued that the dominant schema of social understanding was (and is) shaped by those with dominance of gender, class, and those who hold social ascendance over others (e.g. Hill Collins, 1990, 1991). In general, those engaged in feminist argument

and theory held that the inherent shortcomings of prior models which attempted to describe the social construct of "power" did not have adequate elucidating "power" to highlight or assess women's experience within social organization and, therefore, could not adequately articulate women's lives.

For example, Luo women are subject to the social relations of gender extant within their culture. Therefore, one of the concerns a woman with a business must manage is her husband's demand for money. Despite what ostensible "power" in the form of relative amounts of wealth or goods she may have, her "power" lessens (as compared to that of males) when she is subjected to the gendered social relations of Luo culture which relegate her status as female as secondary to the status of those whose status is assessed as male.

An additional example of the manifestation of gendered social relations and power within Luo culture is evidenced by consideration of women's use of time. The tasks which women and girls must accomplish define their use of time. Their discretionary time when compared with the free time of males (that is, time to use as they self-define without the intervention of males) is negligible. As one female respondent in the present study suggested: her advanced age and her widowed status are what allowed her to take time to talk with me. Younger women with husbands, she assured me, would not be "allowed" to "waste" their time in such a fashion. She stated that should these younger married women talk with me "[T]hey would be punished for wasting their time."

Therefore, to simply overlay those gender-biased theoretical models would erase or obscure the particularistic gendered experience of women's lives. Thus, my research integrates cross-disciplinary foci to capture women's experience within extant social

structures. It is possible that the more overt or gross manifestations of "power" may be captured via the use of these traditional theoretical models. That is, the access one has to land, goods, and resources may be easily measured. However, the more subtle displays of power and the more subtle manifestation of gendered social relations are most likely overlooked in those models. In the following discussion, I will consider the models of power assessment offered by Foucault and by Giddens. This will be followed by a summary of Dorothy Smith's concerns regarding the "relations of ruling" which shape social organization.

#### Foucault, Giddens, and Smith on Power

According to Ramazanoglu (1993) "Foucault has argued that [it] is not where discourses come from nor what interests they represent, but what effects of power...they ensure (ibid., p. 19)." Despite the narrowness of Foucault's posit, which fails to account for the social milieu in which the discourse occurs and thereby misses the gendered social relations which construct the discourse itself, there is value in understanding that the exercise of discourse "ensures the effects of power." That is, the social manifestation of discourse permits the public demonstration of "power" and insures the capability of the actor to continue to display "his" (sic) standing within the larger community.

As mentioned briefly above, Foucault fails to articulate the social dynamics in which the discourse exists and within which it is conducted. These dynamics which are frequently a result of gendered social relations reflect the societal organization which permits men to exercise "power over" others, i.e., to manifest dominance. Foucault constructs an argument which addresses only the differences in discourses but does not

address the differences in types or amounts of power. The danger in this limited perspective is that it fails to account for the social relations of dominance which are attendant and essential to the creation of the discourse itself. Therefore adoption of Foucault's model of power or discourse is inadequately structured to accommodate women's experience in the fishery.

Anthony Giddens, a British sociologist, offers another model for the assessment of power. As Giddens (1984) states, "[t]he main concern of social theory is... the illumination of concrete processes of social life (p. xvii)." In his attempt to achieve that illumination of social life, Giddens posits a theory of structuration while critiquing the shortcomings of prior models. In that critique, he argues that the role of the individual must be assessed with regard to the individual's ability to act and impact the surrounding social organization. To this end, he introduces the idea of the individual as agent and states:

Agency refers not to the intentions people have in doing things but to their capability of doing those things in the first place which is why agency implies power (emphasis added, op cit. p. 9).

Rather than leave the reader to wonder about this idea of "capability," Giddens goes on to argue:

An agent ceases to be such if he or she loses the capability to "make a difference", that is, to experience some sort of power... [A]n agent is able to deploy (chronically, in the flow of daily life) a range of causal power, including that of influencing those [i.e. the range of causal powers] deployed by others (p. 14).

This statement suggests that the individual must not only be able to act but that the individual must also be able to affect others' actions or others' deployment of power.

Should the individual not be able to affect on other's deployment of power, that individual ceases to be an agent, i.e. ceases to have power.

To demonstrate the variety ways in which power may be deployed, Giddens (ibid.) continues his consideration of this conception of power and additionally states:

Resources ...are structured properties of social systems, drawn upon and reproduced by knowledgeable agents in the course of interaction.

Resources are media through which power is exercised (ibid.).

#### And finally, he states:

Power within social systems which enjoy some continuity over time and space presumes regularized relations of autonomy and dependence between actors and collectivities in contexts of social interaction. But all forms of dependence offer some resources whereby those who are subordinates can influence the activities of their superiors ...[which is] the dialectic of control in social systems (op. cit. p. 15).

This conceptualization of power when applied to women within the social construction of gendered social relations can only conclude that women are without "power," in that their ability to influence the causal power deployed by males is proscribed. Giddens' discussion of power and agency provides a more comprehensive frame for exploring these social constructs than does Foucault. However, Giddens' model also fails to articulate the particularistic social relations of gender. In failing to account for that dynamic of social organization, his assessment of power and agency also falls short as a measure against which to determine women's experience.

Dorothy Smith offers valuable insight regarding power in her presentation of her concept of the "relations of ruling" (e.g., 1987). Smith (1987) states that: "A sociology is a systematically developed consciousness of society and social relations" (ibid., p. 2). She

argues cogently that this "systematic" development of sociology is amiss in its treatment of women's experience because:

...there is a singular coincidence between the standpoint of men implicit in the relevances, interests, and perspectives objectified in sociology, and a standpoint in the relations of ruling with which sociology objectified forms of social consciousness coordinates. Established sociology has objectified a consciousness of society and social relations that "knows" them from the standpoint of their ruling and from the standpoint of men who do that ruling. To learn how to know society from sociology ... is to look at it from those standpoints. It is to take on the view of ruling and to view society and social relations in terms of the perspectives, interests, and relevances of men active in relations of ruling. It is to know ourselves thus. (emphasis added, 1987, p. 3).

Smith's statement argues forcefully of the dangers inherent in simply overlaying extant sociological models which fail to account for the relations of ruling which construct that model. Her conceptualization of the relations of ruling speaks to the gendered dynamics inherent in the foundation of social organization. As Smith states:

I am identifying a complex of organized practices including government, law, business and financial management, professional organization, and educational institutions as well as discourses in texts that interpenetrate the multiple sites of power (ibid).

This last quote points to what Smith terms the "extralocal mode of ruling." As the phrase suggests, she is referencing the frame of social relations which shapes the particular manifestation of social interaction under sociological scrutiny. Her concern is well placed in that it attempts to highlight the unarticulated assumptions inherent in all forms of social relations. In this instance she has correctly targeted the male-based assumptions of power inherent in sociological constructions of that social dynamic. The task of this research is to explore Giddens' "dialectic of control" as it is manifested for women in the fishery and

to make overt the covert "relations of ruling" of which Smith so eloquently outlines the dangers. Luo women's social experience in pre-colonial and colonial settings provides insight into the social relations which also shape their contemporary experience.

### The Activities of Women Historically in the Fishery and in Luo Society

Women who work in the fishery and inhabit the beach communities of Kenya's Lake Victoria lead challenging lives as do most women in African nations (e.g., Coquery-Vidrovitch, 1997). The tasks which women must accomplish on a daily basis incorporate both contemporary as well as historical practices; these tasks can be understood to contain a gendered component (Hay, 1976). The mix of household and economic tasks, as well as the linkages of these activities, create the frame within which women operate and also create the social barriers which women encounter. Additionally, this gendering of roles accounts for the complexities and limitations placed upon their economic activity.

#### Pre-colonial Women's Activity

Ogutu (1979), in his discussion of women's roles in pre-colonial Luoland, states that "....[I]t is clear that trade had become a recognised way of accumulation of wealth (in Ogot, 1979, p. 229)." He goes on to state that "This wealth had a foundation on the land (ibid.)." However, in both pre-colonial and colonial Luo culture, men were those who owned the land and men were those who were able to travel to trading sites (Hay, 1976). Hay (ibid.) states that Luo women are considered to have been the "traders of pre-colonial Luo society" (ibid., p.92). However she argues that this is an "oversimplification" in that "women were primarily involved in ...local trade... (ibid.)." That is, women did not travel to marketplaces but rather engaged in sales close to their living area. Further, women's

C

trade activity occurred usually during harvest times resulting in "...seasonal rather than ...regular [economic] activity (ibid.)." What is obvious is that women were regulated to seasonal market activity and to local trading opportunities in pre-colonial Luoland. Long distance economic activity was considered the province of men.

Therefore in both pre-colonial and colonial periods of Luo society, land ownership, and hence wealth, was the province of men. As Ogutu (1979) has suggested in his discussion of pre-colonial Luoland, trade and land were integral to the accumulation of wealth. Wealth was tied to land ownership. In the patrilineal society of Luoland, a portion of the family's land was passed from father to son upon the son's marriage. As Hay (1976) discussed in her consideration of colonial Luo practices, the remainder of the father's land was divided among the sons at the time of the father's death. This land division practice continues in contemporary times among the Luo. In fact, this practice accounts for many of the economic challenges which women in the present study faced. Several women reported that upon the death of their husband, they found themselves without land and a home since their plot had been appropriated by the sons of their deceased husband's other wives.

Sachs (1996) discusses the work of Parpart and Staudt (1989) regarding Sub-Saharan Africa and the colonial impact on contemporary land ownership. She states that African men were encouraged by colonial practices in "southern and eastern Africa to consolidate land in men's names" (Sachs, 1996, p. 52). As Sachs (ibid.) argues,

"Traditional patterns of access to and control over land in most African societies showed unequal distribution between the sexes, with women's access to land usually being mediated by male family members - women's

husbands, fathers, or adult sons. (ibid., p.53)"

In her consideration of contemporary landholding patterns worldwide, Sachs (op. cit.) discusses the connections of women to land and argues that women account for ownership of less than 1% of land in the world at large. She states:

Land, which is ...extremely significant in the social relations of farming, is usually a farmer's principal asset. Women produce the majority of the world's food, but they share limited control over, ownership of, and access to land. ...Thus, women's exclusion from land ownership limits their access to credit, capital, and other resources (ibid., p. 45).

With the entrance of colonists, extractive demands on indigenous resources of land and labor increased. As a result the focus of production and accumulation moved away from family *dhalas* and toward the larger economy defined by the colonists' demands and wants. Hay (1976) also posits that "labor, not land, was the limiting factor of production well into the early colonial period ...[which] contributed to the high social value of polygyny and the desire for numerous offspring (ibid., p.93)." The labor provided by women was essential to the determination of the standard of living which the household was able to attain.

In contemporary times, women's labor continues to be essential and critical to the household both for the purpose of re-creation as well as for providing an economic base for household operation. When women's household responsibilities and their economic activity (which are discussed later in this writing) are considered, it is obvious that both Hay (1976), with her concern regarding the importance of women's role in the establishing of wealth for the household, and Coquery-Vidrovitch's (1997) concern regarding the demands and time-constraints placed on women as a result of their

household responsibilities offer useful insight into the reality of women's "lived experiences" (Smith, 1987).

#### Colonial Roles for Women

The role of women within historic, i.e. pre-colonial and colonial, as well as contemporary Luo society was and is focused primarily on those activities which "recreated" the household and as well as on those activities which result in primary responsibility for childcare and food preparation. Hay (1976) highlights the tasks of women in her discussion of Luo people during the early 1900's, i.e. colonial times, in the Kowe region of western Kenya. Of particular interest is not only her discussion of women's activities which parallel those tasks needed for re-creation of the household and the provisioning of grains but also her discussion of the "Apamo, the rinderpest epidemic of the 1890's." This epidemic ultimately impacted the agricultural production of households and therefore how households constructed their activities.

According to Hay (ibid.), households in the colonial period, which had enjoyed economic ascendancy as manifested by size of cattle herds, found themselves in economic hardship as cattle were killed as a result of this rinderpest epidemic. Hay (1976) argues that the epidemic fueled householders' efforts to increase their agricultural production as a direct result of the loss of cattle. As Hay states (op. cit.) "...the epidemic accelerated their efforts to exploit the greater potential of their ...environment (p. 90)." Further, although "agriculture had traditionally been the province of women, one result of the *Apamo* was that some men in Kowe became increasingly involved in agriculture in an attempt to rebuild their herds (p. 90)."

An additional burden on indigenous households were the British colonialists. The British colonialists extracted physical resources from the environment in which Kenyan women and men lived (Hay, in Hafkin and Bay, eds., 1976). That is, agricultural products which could have gone to increase indigenous household supplies were re-directed to meet the demands of British colonial interests. As Hay states that: "the real burden of coping with this nearly impossible situation [satisfying British demands]... fell on the women, who remained at home while their husbands and sons sought outside employment (p. 87)." As the unpredictability of the larger colonial economic market re-shaped rural Kenyan women's lives, they were forced "...[t]hrough a continuous process of experimentation and innovation in agriculture and in trade ...to meet the economic demands of the colonial economy and in a broader sense to stay even (ibid., p. 88)."

#### **Women and Contemporary Fishery Practices**

As Hay suggests above in her discussion of men's movement into trade and agricultural activity, as an area of economic activity becomes lucrative, men (despite gendered tradition) move into that economic arena in order reap benefits, thus displacing women whose purview the arena had been. An additional comment of Hay (ibid.) is of interest to this discussion. She states "...[W]ealthy men - particularly those with many wives - scorned work in the fields, whereas poor men might help their wives with most of the agricultural tasks (p. 91)." This last statement suggests that men will also engage in gendered proscribed behavior when necessity or purpose is perceived. Therefore, it is apparent that if economic gain or (at times) necessity is indicated, Luo males in precolonial, colonial, and in contemporary times will enter into economic practices which are

usually socio-culturally gendered.

Men's displacement of women, despite the gendered taboos regarding work tasks, in favor of financial gain continues to be evidenced within contemporary fishery activity.

Men's entrance into the gendered activity of trading, traditionally viewed as women's work, is evidenced in this present research and appears to be a result of the impact of the international market on beach level activity.

Women's specific work within the fishery has been a traditional and historical constant. That is, there are certain tasks and work demands related to the fishery which are only conducted by women and have been so over time. Essentially this work has entailed the cleaning, processing, cooking, and/or trading of fish (Hay, 1976). However in contemporary times, women's work within the fishery has been challenged and, in some areas, ultimately changed in its focus as a result of the international attention directed to the fishery. This international impact is both direct (e.g., the on-site presence of multinational marketers) and indirect (e.g., economic intervention in the form of increased international market demand).

Within Luo society, women's roles have encompassed the processing, preparing, and cooking of foods. As women became involved in the formal economic arena of the fishery, it can be understood as a "natural," although gendered, extension of their expected household and social responsibilities that their assumed tasks within the formal marketplace encompass preparation of foodstuffs within the fishery. The tasks of cleaning, processing, and selling of fish in the local market and at the beach-level market is the arena which historically has defined the socially-constructed understanding of

women's activity (Hay, op. cit.). With the increased present-day involvement of the international market, males are making in-roads into women's fish processing arena. At several beaches in this research effort, men reported that they were "traders and/or processors" of fish. It is my contention, which is supported by Hay's (ibid.) work, that were it not for the monetary gain ostensibly available from international sources, men would have limited motivation to enter into what is considered in Luoland to be "women's work."

# The Impact of the International Market on Beach-level Exchange

An additional impact of the international market has been the advent of male bicycle traders. These men bike into more remote beach areas and purchase fish on behalf of large factories. Then they transport this fish via bicycle to urban areas for delivery. The involvement of these bicycle traders has a complicated impact on women traders. The impact on women can be understood as two-fold. Women's access to both quantity and quality of fish product is reduced. That is, as a result of bicycle traders intervening in beach-level exchanges on behalf of employers with international interests, fish which would have been available to women for purchase is no longer offered or sold to them. That is, higher quality fish product is withheld from women and reserved for international marketers or their representatives. This "withholding" is both the act of keeping fish solely for sale to those international marketers or their representatives who come to the beach and it also results from a price which is prohibitively high for local women traders. Women's price for purchase usually reflects a negotiated price which is traditional Luo practice. This negotiated price permits her to include some "profit" margin in her later

sale of this fish.

Additionally, male bicycle traders can be particularly physically aggressive when approaching fishers to purchase fish. As evidenced during my beach observations and as reported by women respondents, male traders will frequently push women aside as they, the male trader, approach the boat of his choice. It is not deemed significant that the woman was present prior to the arrival of the male trader nor is it necessarily deemed important that she may have already begun discussion with the fisher in question. As a result of the physical aggression of some bicycle traders, on some beaches (e.g. Luanda Kanyang'o) women have learned to move aside fairly quickly if a trader is seen approaching a particular boat or fisher rather than risk physical encounter.

As quantity of product available to women marketers has been reduced through the advent of international involvement at the beach-level, so too has the quality of product available to women been reduced. That is, women will be sold the remains and rejects of what the international traders do not want. Often this will include damaged (e.g. bruised), spoiled, or undersized fish (fingerlings). In fact, at some beaches most notably in the south, a new market niche has been created as some women traders now specialize in the processing and selling of fingerlings.

## Price Setting

Finally, an obvious impact of the international marketers' intervention is their direct impact on the establishment of particular buying prices and their indirect influence on the subsequent selling price women marketers can ask. Jacobsen (1994) discusses the impact of monopsonies, i.e. purchase situations in which the buyer is able to set or

determine the price to be paid. Jacobsen's (ibid.), although writing about labor practices, introduces the concept of "barriers to exit" which can be understood as the seller's inability to travel easily beyond the area of sale or exchange but to which the purchaser (in this case, international marketers or their representatives) have access. As a result, the purchaser is in the unique position of having influence over the determination of the asking price. Thus, indigenous fishers can be understood to be at the fiscal mercy of those large purchasers who bring their refrigerated trucks to the beach sites. This situation which occurs at many beach sites reflects the control of the international marketers in determining the price they will pay for fish.

Later in this writing (see Chapter 4), I present discussion of study participants' answers which reflect that powerful role multi-nationals and large factory buyers have in setting the prices for a given beach. Both male and female respondents report that fish sale prices are frequently set by the international buyers themselves. This may sometimes be in consultation with some particular beach members but more frequently this purchase price is set solely by the international buyers themselves. These buyers are said to argue effectively that they are familiar with purchase prices elsewhere and that only a particular (and low) sum of money is a reasonable price at this particular beach. These prices do not reflect the market value of the fish to be received later on in the market chain. However, the level of this purchase price is frequently too steep for local women traders. The actual price they must pay initially and the price they are able to charge to their later customers prohibits women's purchase ability.

As a result of international intervention, the price women are forced to pay for fish

purchase reflects not the local economy but rather the larger societal economy and by extension, the larger world economy. The impacts on women are again two-fold. First, women are forced to pay a price which they do not assist in setting. Therefore, their ability to include their own costs (e.g. inclusion of overhead costs, labor, or travel) in determining later re-sale price is decreased if not totally inhibited. Second, and of particular sociological significance, the social relations of negotiation and exchange which have been integral to this society and many other African societies are disrupted or curtailed. In essence, the social and economic relations of the community are subject to the usually non-existent mercies of the international economy and its representatives.

# Migration Issues

Kenyan population trends during 1989 viewed in comparison with those of 1979 suggest a movement of rural inhabitants toward more urbanized areas (Kenya Central Statistics, 1979, 1989). Although the reasons behind this movement may vary, a major impetus which can be surmised is the desire for many to increase their access to goods and resources for their families via increased wage-work opportunities (e.g. Coquery-Vidrovitch, 1997; Sheldon, 1996). Subsequently and more importantly those who migrate and those who aspire to migrate hope this move will result in increased income. Of particular interest however is the pronounced gender differential. That is, males more frequently than females inhabit these urban areas (despite an even representation of males and females across the overall population). Kenya Census (1989) data suggests that males out-populate females in these urbanized areas by almost 15%. It is important to understand the implications which urban migration contains for the fabric of social and

cultural organization whether in Kenya, in African societies generally, or in other nations.

Young and Wilmott in their discussion of family patterns in East London in the early 1950's state:

Behind that formality [of state government] stood the rudiments of a much older organization, the kinship-based structure which has preceded the State as a method of government not only in Berthnal Green [the neighborhood area in which they conducted their ethnographic study] but in most of the world. At the time the survey was done, the extended family was, as we put it, the women's trade union, the source of informal mutual aid for women and children and for men too where they were in need of support. With so many relatives living locally there was less pressure and less of a weight of expectation for married couples to bear on their own. Children were still growing up with their grandparents on the spot, being almost as much a part of their family life as their parents. (Young and Wilmott, 1986, p. xvi)

Given the role that kinship ties play and have played in the lives of many around the world, the migratory trend of Kenyans toward urban areas portends of many potential social and communal consequences. As Mitchell (1987) suggests kinship ties and spatial/geographic location have particular relevance within the articulated lives and underlying social relations of many in African societies. Kenyans, and in this particular research the *JoLuo* (the Luo people), are also susceptible to the sociological implications of the migratory influences on kinship relations as suggested by Mitchell (ibid.). Cohen and Atieno-Odhiambo (1989) discuss Ololo which is the Kaloleni area of Nairobi. They describe this sub-section of Nairobi as providing a "home" away from the *dhala* (the Luo word for one's "real" home) for those Luo from Siaya area who are living and working in Nairobi.

As will be discussed later, this movement of men to urban areas for increased

economic opportunity frequently results in women having increased and regular economic responsibility for their families in the rural homelands. How women address these daily economic demands and meet the resultant life challenges is of particular interest since women and children are frequently the most vulnerable part of any population. This study articulates the lives and experiences of a particular segment of those women, i.e., those who seek their economic livelihood in the freshwater fishery located around Kenya's Lake Basin Development Area (LBDA) of Lake Victoria which runs from Kenya's northernmost shared boundary with Uganda to the southern-most boundary shared with Tanzania, and their responses to the life challenges they encounter. As a result, the lives of women in the fishery, their economic and social strategies for accomplishing the tasks of their lives, and the ways in which they utilize their individual social relations and the social relations of their communities to facilitate that life activity provide the parameters and focus of this research and writing.

# Present Day Politics of Ethnicity for the JoLuo

According to W.R. Ochieng' (1974), the Luo people of Nilotic origin, arrived in the Nyanza Province from the Sudan in the late fifteenth century. Following land and resource disputes with neighboring cultural groups, the *JoLuo*, who had existed peacefully with these other groups, began what Ochieng' termed "the spearhead of the great southward movement in the history of migration and spread of the Nilotes" from the Sudan (op cit., p.19). Ochieng' (1974) concludes that four main divisions or groupings of the Luo people resulted from that migration. He suggests that these groups are easily isolated from each other by culture and genealogy but remain within the overall Luo

heritage.

One of those groups, which completed the original fifteenth century Luo migration and subsequently developed its own Luo sub-traditions and culture, is the *BaSuba* (Ochieng', ibid.). This group currently is the source of political disruption in the southern region of the Lake area (along the beaches north of Muhuro Bay area). The controversy and social disruption which surrounds the government's enumerative separation of the BaSuba from the Luo as a group adds to the social complexity which women encounter and must negotiate in order to accomplish their socio-economic activities. Therefore, a brief overview and discussion of this issue follows.

#### The JoLuo and the BaSuba

# The Socio-Political Implications of Separation of the BaSuba from the JoLuo

According to Kenya's 1979 census data, the Luo totaled approximately 79% of the populace in western Kenya's Nyanza Province and about 13% of Kenya's total population. A change in ethnic groupings from 1969 to 1979 resulted in a subsequent reduction in the overall number of Luo people. In 1979 the BaSuba, historically considered a Luo sub-group for prior census activity (most notably 1969), were separated out and named a distinct ethnic group. This group equaled only about 0.40% (less than one-half a percent) of Kenya's total population. However, it is of interest to note that had that re-grouping not occurred, the JoLuo would have been a close contender for rating as the second largest ethnic group in Kenya. Presently, they are considered to be the third largest ethnic group in Kenya.

It is important to note that the re-definition of the Luo into two distinct ethnic

groups occurred following political contention between factions of Kenya's populace. The Luo played a major role in this contention for political influence. (For discussion of the political disruption of the time which resulted in the murder of Luo political figure, Tom Mboyo and the split from the major Kenya party KANU by Oginga Odinga who then formed the Kenya FORD party, (see e.g. Cohen and Atieno Odhiambo, 1989; Miller and Yeager, 1994).

Given the historicity of political jockeying regarding these socio-political parties, the debate continues regarding the purpose and political implication for the separation of the BaSuba from the JoLuo in census collection and interpretation. However, for those who live within the geographical region in which this ethnic question is raised, a series of complex social relations result. The issues of social relations are reflected with regard to ethnic lineage and cultural heritage and with regard to the political and social unrest which resulted from the 1995 community disruption and violence. The social relations of economic activity must also occur within the frame of this socio-political disruption.

Census data for 1989, collected from "24/25 August until 2 September 1989" (Kenya Population Census 1989, p. I-1), was not available to the public until late 1994 and early 1995. At the time of the release almost 5 years after its collection, the Luo people were reported to be about 12.4% of the total Kenyan population. They numbered about 2.7 million people. The BaSuba were counted to be about 0.50% or one-half percent of the entire population, totaling no more than about 108,000 people.

## Culture as Determinant of Ethnicity

During my research interviews it was apparent that some accepted this

contemporary social construction of ethnic difference. That is, when asked their ethnicity identity, some respondents replied that they were of "mixed" heritage from BaSuba and JoLuo unions. Whether this ethnic differentiation is "legitimate" or not is debatable.

Discussion offered by Ochieng' (1974) as well as perspectives offered by laypersons within Kenyan society would challenge this ethnic separation. A brief overview of that argument follows.

As Ochieng' (1974) concludes, culture and genealogy provide the connections which articulate the boundaries of any ethnic grouping, despite subtle variation within the ethnic category. Ochieng' (ibid.) regards the commonality of language and culture as the measure of ethnic inclusion. His contention is exemplified by an encounter and discussion I had with a man of the Teso ethnic group. "William" (not his real name) worked in the hotel in which I stayed and used as a base during the course of my research. On a daily basis, he and I talked frequently about my work and his life.

The Kisumu hotel from which I traveled to my activities on the beaches had a multi-ethnic staff. As a result, I learned greetings in a number of different languages, e.g. Kalenjin, Kikuyu, Kisii, Luyhia, and KiSwahili. However, my major language focus was on *DhoLuo*, the Luo language, since my work would take me mainly into contact with the Luo people. Therefore, as I learned the Luo language hotel staff of any ethnicity, as well Kisumu dwellers, would often engage me in conservation in DhoLuo. Essentially, all who spoke DhoLuo became my teachers.

In talking with William, initially in DhoLuo and then in English, we talked of his culture and his ethnic group. He described the Teso as a "tiny" ethnic group from west

Kenya "with not many members." Many Kisumu community residents and hotel personnel had suggested that as a result of my language acquisition that I was truly a "daughter of the Luo" ("In nyar JoLuo" which, dependent on the inflection, can be understood as "you are a true daughter of the Luo!"). While talking with William, I jokingly suggested that instead of my "becoming" Luo, I should instead set my aspirations on joining the Teso in order to swell their numbers substantially. In an extremely serious and somewhat shocked fashion, William looked at me and responded that it would not be possible for me to become Teso because I "did not know [their] language."

The implications of William's concern suggest that the commonality of shared language, and by extension the sharing of cultural traditions which is frequently manifested via language development may lead to one's inclusion within a particular ethnic group or identity. To apply his concerns to the BaSuba and JoLuo, it would appear that the shared language and cultural tradition of these two groups would prohibit separation of the two into different ethnic groupings. Additionally, it makes more plausible the argument that something other than clarity of ethnic grouping underlies the separation. Further, it lends credibility to the claim of many that political motivation is the impetus behind this enumerative separation.

Data gathered during this research further challenges the separation of the BaSuba from the Luo and supports the argument offered by Ochieng' (1974) as well as the concern raised by William. That is, those who identified as BaSuba provided telling information regarding the existence of a distinct BaSuba language. Respondents who identified themselves as BaSuba most often stated that they were "not fluent in" the

BaSuba language or, more interestingly and perhaps more truthfully, they stated that the language did not yet exist.

The lack of a common language and the small size of identified members of this ethnic group leaves one wondering the purpose of attempting to separate out this group from the larger Luo grouping. Given the history of political contention between the Luo and the standing government as well as other political factions, it is not unreasonable to conclude that the attempt to diminish the Luo in number is more politically motivated than it is an attempt to acknowledge an additional ethnic grouping. Whatever the motivation for the distinction, this division provides an additional and challenging social construct through which those in the fishery and other beach area inhabitants must proceed in order to conduct their lives.

# **Study Objectives**

## The Social Relations of Economic Activity

Economic sociologists, Swedberg and Granovetter (in Granovetter et al., 1992) state:

Economic action is a form of social action; Economic action is socially situated; and, Economic institutions are social constructions (ibid, p.6).

Despite the seemingly self-evident nature of these concepts, these framing parameters have been infrequently applied to research exploring individual economic activities (e.g. Swedberg et al., op cit., Smelser et. al, 1994). In fact, empirical economic research has been too infrequently explored within the social sciences (Etzioni, 1991; Swedberg, 1992). The conceptual delimiters, as stated by Swedberg and Granovetter, combined with an

overriding sociological frame provide the approach for this research.

Those involved in marketing activities in and around the lake beach communities face a series of particular social, political, and economic challenges as discussed above. The historically secure processing and marketing activities of this fishery industry related to Lake Victoria have been eventually dislocated due to the impact of the world market economy into which this indigenous activity of the fishery has been thrust. Further it can be argued that species fluctuation further disrupted that traditional fishery practice. Whether the species fluctuation is a result of a normal ebb and flow of the various fish species, a result of the seemingly cyclical prevalence of a given fish species, or as a result of an actual fish species change continues to be debated (Harris, Wiley, Wilson, 1995; e.g. see Pitcher and Hart, 1995). Whatever the initiating causal factor(s), those involved in local or community marketing of fish have suffered an economic impact which encourages, if not forces, them to aggressively fashion their economic strategies for survival. This research explores those strategies of economic activity and the extent to which those strategies are embedded within communal social relations and to what extent they are, in fact, dependent upon those communal social relations for successful outcomes.

The focus of this research is on the economic activities of the people, both men and women, living and working in Lake Victoria's beach communities. Given the prevalence of women in small scale and micro-sized economies, it is imperative that this study perforce assume an additional perspective to particularize and capture the socio-economic experience within Lake Victoria's gendered fishery market activity. In particular, this study focuses on Kenyan women living and working in Lake Victoria's

beach communities. Women's activities in small-scale and micro-sized economies (SSEs and MSEs) within the fishery and the critical role of social relations in the economic survival strategies of these women provide the research foci. A myriad of socio-economic stressors currently challenge the Lake Victoria beach communities and make more visible the societal barriers which individuals must surmount in their daily lives. This research seeks to articulate those social stressors, to highlight social and economic strategies developed in response to those stressors, and to explore the role of communal social relations in facilitating these strategies in this economically challenged society (Mutiso, 1987; MacGaffey in Robertson et al., eds., 1987; Minar et al., 1969; Hiskes, 1982; Goudy, 1990; Overing, 1989; Fiske, 1991; Vail, et al., 1980; Wiley and Yongo, 1992; Harris, Wiley and Wilson, 1993).

# The Gendering of Fishery Activity and Micro-Sized Economies (MSEs)

Recent study of the market activity in several emergent and re-emergent economies (Liedholm and McPherson, 1991; Liedholm and Mead, 1987; Fisseha, 1982; Eldredge, 1992), suggest that micro-sized economies (MSEs), i.e. businesses with fewer than five employees (for an extended discussion see Liedholm et al., 1987), are an active strategy of individuals to gain access to the immediate economic environment in which they are embedded and, potentially, to participate in the world market economy (Liedholm and Mead, 1987; Roemer et al., 1991). MSEs offer access to profits and livelihood, the common medium of exchange or monetary unit. MSEs can be a vehicle for resource distribution and provide a vehicle for employment opportunities to the under- or unemployed in any community as well as offering additional income sources to the fully-

employed (Castells and Portes, 1989). Such informal economy establishments are often found in areas with marked population concentrations, whether rural or urban (Liedholm et al., 1987).

Women and children historically and universally are a most vulnerable population. Kenyan women, particularly those in the bottom economic strata of society, have devised socio-economic strategies to survive the residual impact of poverty and socially constructed categories of economic exclusion which have relegated them to a set of social circumstances which appear almost impossible to surmount. As stated above, Lake Victoria beach communities have been severely impacted economically and socially as a result of fish species fluctuation, fishery technology change, and ecological changes to the Lake itself (Wiley and Yongo, 1992; Harris, Wiley, and Wilson, 1995). Women, who constitute approximately one-third of the heads of households in these beach communities (Wiley and Yongo, 1992), can be assumed to suffer additional burdens due to their already vulnerable gender status.

Traditional Western exploration of economic activity in non-Western countries has focused on certain market variables as defined in the assumptive models of neo-classical economics, e.g., profit, capital, costs of production or overhead, and labor costs.

Investigation of these variables has failed to adequately grasp and comprehend the social context in which these activities occur (Klitgaard, 1991; Perkins, 1991; Bruce et al., 1988; Guyer, 1988). Further, although women represent a significant portion of those involved in these MSEs (e.g., Liedholm et al., 1987; Downing, 1990), the systemic forces which uniquely impact women within any economic system have been generally ignored (Waring.

1988). Therefore, attention must also be directed to gender issues inherent in the social relations of the economic activity within small-scale and micro-sized economies (Downing, ibid; Feldman, 1991).

The primary hypotheses of this research are:

- 1. Simple associational or contractual relationships are not sufficient to obtain entry into or achieve success within the marketplaces; it is expected that parallel market activity is actually dependent upon highly developed and complex communal social relations;
- 2. Successful economic survival strategies by women require strengthening, extending, and drawing upon their communal social relations.

Secondary or implied hypotheses are as follows:

- 1. The viability, or marketability, of a product may not be a simple function of consumer need but also a reproduction of complex communal social relations, e.g., marketers will sell what is available to them and consumers will buy what is available;
- 2. The function of these communal social relations may be either affective or financial in nature and outcome (Mutiso, 1987; MacGaffey, 1987).

  Support networks are more salient when social or economic setbacks are

encountered;

- 3. The access of women MSE owners to items essential for production and marketing opportunities is positively correlated with the social networks, communal relations, and affinal linkages to which they have access (Obbo, 1980; e.g., Obbo, MacGaffey, or Bujra in Robertson et al. eds., 1986).
- 4. Social, public, or NGO policy development which takes into account and builds into economic projects these extant *Gemeinschaft* social relations is more likely to be successful;

To answer these research questions, data such as the following has been collected:

- Type and amount of women's market activity in and around Lake Victoria's beaches;
- 2. Type and amount of assistance received in facilitating the woman's market activity, e.g., capital;
- 3. Coping strategies utilized by women in response to disruption of societal infrastructure and traditional livelihoods;
- 4. Role of affinal ties of birth, marriage, or kinship imputation in these strategies;

# **Data Collection and Methodology**

This study was undertaken along the shoreline communities of Kenya's Lake

Victoria. Over the course of about 10 months, from January 1995 until November 1995, I

conducted a series of interviews with and observations of women and men inhabitants of 17 beach communities. Colleagues from the Kenya Marine and Fishery Research Institute (KMFRI) accompanied me and facilitated my research efforts. Data was gathered via an interview schedule, formal observational tools, and field note material.

These 104-question interview schedules (see Appendix B), specifically designed for this research effort, incorporate the areas of concern raised in the hypotheses and other issues of social concern. For example, the interview schedule included questions regarding: respondents' demographics, formal educational experience, literacy, numeracy, nutrition and food sources, income-producing work activity both within and outside of the fishery, agricultural activity, the specific demands of their income-producing activity, and the ways in which any of those demands are accomplished in concert with family members, friends or business partners. A specific set of 6 questions was directed to all female participants. The interview took approximately 60 to 90 minutes to administer. Interviews were conducted at beach sites as well as households. A more detailed discussion of the issues of methodology and analysis occurs later in this paper.

# Chapter 2

#### The Literature

#### Identification of the Relevant Literature

In sociology, as in the other social sciences, any theory must be assessed for its utility in explicating the variances and vagaries of social experience. All theories are based on a series of assumptions which "theoretically" shed light on a set of socially obfuscated empirical observations of the broader societal setting. Within those assumptions are the inherent shortcomings of the theory itself or, to paraphrase a Marxian concept, potentially the seeds of its demise lie within it. That is, when the model or formula which the theory espouses fails to account for a wide enough or complete enough swatch of social life, the model needs to be re-assessed for its utility and applicability.

It can be argued that neo-classical models of economic activity have failed to account for the social reality in which the economic model was created (which introduced its own series of biases) and within which the economic system under scrutiny exists.

These limitations perhaps reflect more the limits of the humans applying the model and those interpreting the outcomes of those models rather than the limits of the economic model itself. That is, there has been a failure on the part of economists, who are in fact social scientists, and other disciplines of social analysts to remember the hidden and background assumptions of economic theory and to make overt those caveats when applying those models of social investigation.

This failure to acknowledge the impacts of social reality accounts for the present day limitations of most economic theory. As Smelser and Swedberg (1994) suggest neo-

classical economics has based its theory on the assumption that the economic actor is one who is engaging in "rational" choice. That is, the actor has been perceived to be uninfluenced by additional variables of her/his social milieu and to instead have based her/his decisions on perceived economic outcome alone. Smelser et al. (ibid.) state: "...[T]he actor is uninfluenced by other actors... All economic actions are assumed to be rational (p. 4)." This assumption excludes the dynamics of the social milieu in which the actor operates. Consideration of Anthony Giddens' theory regarding power and agency is pertinent here.

Giddens (1987) argues that those who have agency reflect both the ability to act and the knowledge that they are able to act. The awareness of their ability to act results from their perception of the agency of their group, the larger social context of which they are a member. This suggests that several social milieux within which one may be a member dictate the immediate agency experienced by an individual. This has relevance later in this discussion for women's ability to operate and act within the fishery. The fishery activity is bounded by and operationalized as a result of males within the beach communities and by males from international marketing enterprises. Luo women, as are women within many cultures (see feminist discussion of gendered practices, e.g., Stacey et al., 1986; Harding, 1987,1991; Lorber, 1993), are constrained in their economic activities by socio-historical cultural traditions which are influenced by economic as well as gendered historical practices (e.g. Hay, 1976). Therefore their ability to act as economic agents is limited by the gendered constraints placed upon them by the socially constructed economic arena in

which they act. As such, their ability to act as "rational" economic agents in a neoclassical theory model is prohibited.

These unexplored assumptions of economic activity limit the researcher's ability to have a more complete understanding of the economic actor's behavior and motivation for particular action. Additionally, the impact of the socio-cultural environment in which the economic action takes place is excluded. Conceivably this exclusion of essential socio-cultural information precludes successful research interpretation of "facts" critical to economic and social activity. Lorber (1997) raises an interesting argument in her article "Believing is Seeing." Although she is discussing the limitations of biology as determinant of sex, her concern provides added value to the present discussion. Of particular relevance is her statement: "When we rely only on conventional categories..., we end up finding what we looked for - we see what we believe (ibid., p. 20)."

Therefore, discernment of the socio-economic experience of Lake Victoria's beach community inhabitants demands a critical analysis not simply of individual income levels but of the particular economic experience framed within the social context in which beach inhabitants live. Further, because the research focus of this effort results in study of the local-level fishery marketers, an economic arena in which women predominate, an understanding of the gendered social context must be articulated (e.g. Downing, 1991; Guyer, 1988; Hill Collins, 1987). To appropriately contextualize women's socio-economic experience within the Kenyan fishery, a combination of theoretical perspectives will be utilized to most accurately capture the reality under which women exist in the fishery.

To reach this end of articulating the socio-economic reality under which those in Kenya's beach communities live and work, three major theoretical perspectives of social experience are engaged in this research. Specifically, utilization of economic sociology theory, gender theory analysis, and a perspective on communal social relations provide the major paradigmatic foci. This critical combination of theoretical paradigms, and articulation of their intersection, provides a more inclusive set of analytical tools with which to discern local level marketers' socio-economic experience within Kenya's Lake Victoria fishery and the socially constructed economy of that freshwater fishery.

When Marx described "social relations," he was considering the forces of production within the context of the larger society.

In the social production of their lives men [sic] enter into definite relations that are indispensable and independent of their will, relations of production which correspond to a definite stage of development of their material productive forces. The sum total of these relations of production constitutes the economic structure, the real basis on which rises a legal and political superstructure... (Contribution to the Critique of Political Economy, Preface p. xvii).

He was discussing the relationship of those who owned the means of production and those who were "employed" to utilize those tools of production.

In this research, this concept of "social relations" has broader application and utility. Within the context of this research "social relations or communal social relations" refers to the interconnections of individuals and/or groups within and across societal subdivisions. This conceptualization of social relations would dictate that the interactive relations between and within beach communities, social groups, ethnicities, and rural and urban inhabitants should be of primary consideration and of essential importance when

considering socio-economic life. An expanded discussion of this topic will follow later. The concept of social relations within the frame of economic activity is best understood as both horizontal and vertical within class (Marx) or status group (Weber) and horizontal or vertical across class or status group. Additionally, the ways in which social relations are called upon (or not) and exercised (or not) as part of one's economic activity can frequently provide the impetus for the success or failure of the economic endeavor. This research demonstrates that contention.

This research follows and expands upon a Weberian and Durkheimian concept of economic sociology. I approach the question of economic activity and socio-economic survival within the frame of sociology in order to capture the base structure of social relations which underlies it. In addition, that sociological base is both integral and critical to the outcome and shape of economic action at any level, whether that level is local or community, national or nation-state, or global and international or a combination of all these levels.

Further, articulation of the over-arching social construction of reality which frames and shapes the context in which this segment of Kenyan life occurs dictates the necessity of an articulation of the overt and subtle constructions of economic and social reality within which Kenyans and others operate at the local fishery level. Therefore a discussion of the political economy of world systems and its impact at the household level is also warranted.

# **Economic Sociology**

As stated earlier, the intersection of three constructs of economic sociology provide the starting point for the economic perspective of this research:

- 1. economic action is a form of social action
- 2. Economic action is socially situated
- 3. Economic institutions are social constructions (Granovetter and Swedberg, 1992 p.6.).

Of particular interest are the implications inherent in each of these tenets as stated by Granovetter and Swedberg. A common implication and one that appears almost selfevident is that economic action is a form of social action or interaction. The larger implication is: given this, the question must be followed to identify the particular series of social interactions, social weave or social relations, which also impact this "economic action." With regard to Granovetter et al.'s (ibid.) second sentiment, not only the nature of the particular social situation needs to be verbalized; there is an inherent need to overtly contextualize that economic action within the experienced social reality of the inhabitant of this particular social location. Finally, economic institutions are social constructions. Simply put, economic institutions, and hence the study of economics, are not impervious to the whimsies or particular proclivities of individuals whose specific sensibilities ultimately combine in social organization or what we label society. Therefore to fail, in some fashion, to account for those human frailties or "depravities" as James Madison originally framed the issue (see Simon, in Williamson, 1994), is to set oneself and one's economic model up for predictive failure.

In any economic assessment of a situation, the underlying or framing human interactions, whether covert or overt, subtle or blatant, impact the resultant findings. Interestingly, it must be understood that the perspective of the researcher economist (e.g. the researcher's social location and, in fact, the assumptions which create the economic model in use) as well as the economic system under research scrutiny (which itself is a result of the social construction of reality), each carry biases, subjective understandings, or social shapings to the situation and each need to be assessed from their particular standpoint or social location (Berger and Luckman, 1966; Gouldner, 1970; Hill Collins, 1987; Dorothy Smith, 1986). To explicate this idea within the context of this writing, it is important to acknowledge and account for the fact that the human interaction, or social relations whether dyadic or communal, lends itself to the shaping or construction of the resultant economic situation. Failure to analyze or account for these social relations results in a weak, or ultimately flawed, economic model. In this research, the major goal is to unearth the communal social relations which facilitate or inhibit marketers in the Kenya's freshwater fishery in their socio-economic strategies for survival and economic livelihood.

## **Economic Theory and Women**

Many have begun to challenge the assumptions upon which traditional economic models have been built. Numerous writings catalog the particular limitations which traditional economic models have perpetrated with regard to lack of social contextualization (e.g. McCloskey, 1990, 1985; Smelser and Swedberg, 1994; Tai Landa,

1994; Nelson, in Kuiper and Sap, 1995; Ferber and Nelson, 1993). Discussion of the particular failings of traditional theory to capture women's experiences has also begun.

In a thoughtful assessment of the shortcomings of the neoclassical economic tradition with regard to women's economic behavior, Pujol (1995, in Kuiper, et al., ed) suggests that the flaws of this economic model can be summarized as having inherent in it assumptions which characterize women as:

- 1. All women are married, or if not yet, they will be. Similarly, all women have or will have children.
- 2. All women are (and ought to be) economically dependent on a male relative: father or husband.
- 3. Women are (and ought to be) housewives, their reproductive capacities specializes them for that function.
- 4. Women are unproductive (whether absolutely or relative to men is not always clear) in the industrial workforce.
- 5. Women are irrational, they are unfit as economic agents, they cannot be trusted to make the right economic decisions (op cit., p. 18).

These assumptions, Pujol argues (ibid), come directly from the social locations of the economists themselves and are, in fact, a reflection of their "strongly held Victorian values" rather than a reflection of some universal norm (Kuiper and Sap, 1995 p.6).

These assumptions, which are unspoken within this economic tradition, not only fail to acknowledge the ways in which western women are economically and socially viewed and codified (into a perspective which fails in its ability to capture their experience), the model also fails to acknowledge that the differing social construction of other nation-states and cultures may also not "fit" within this narrow view of human

economic behavior. This present study of the economic sociology of Kenya's Luoland starts from the assumption that cultural practices and social relations impact and shape economic activity and that women devise and utilize economic and social strategies which may or may not be consciously articulated but which can be sociologically observed, recorded, and analyzed.

# The Failure of Prior Analytic Models of Economic Activity to Capture Human Behavior

The following discussion considers the limitations of two prior models of economic analysis which have been employed by others to respond to the concerns which I outlined above. Those models, institutional economics and the subsequent re-vamping of that model labeled new institutional economics (NIE), attempted to articulate the social and human factors inherent in economic behaviors. For different reasons, I contend that each of those models prove insufficient to capture the human factors and social relations inherent within economic activity. Given the limitations of these models, it is therefore critical to employ a model of assessment which fully captures the social nuances inherent in socio-economic activity. I subsequently offer consideration of a model of theoretical integration critical to this end. The integrative model of the impact of social relations on women's economic activity is the model subsequently applied to my research on Kenya's Lake Victoria beach communities.

## **Institutional Economics**

Pragmatic philosopher Charles Saunders Peirce (1935, in Hodgson, 1994, p. 61) argues that both inductive and deductive reasoning contain limitations. He suggests that

actual intellectual creativity can result from neither of these strategies of scientific inquiry. Rather, the generative aspect of intellectual creativity comes from the "transfer of metaphor from one scientific discourse to another" via what he terms "abductive reasoning." That is, it would appear from his argument that the synthesis for assimilation of diverse ideas form a moment of insight resulting in what may be termed new knowledge. However, this result is not necessarily, nor even perhaps usually, a "logical" progression of one bit of outcome information to the next.

This perspective underpins the assumptions which provide the foundation for the Institutional economics of the early 1900's. Limitations of this theoretical perspective, as well as the less than rigorous articulation of its theoretical base, led Gunnar Myrdal to describe it as containing "naive empiricism." Myrdal offered this assessment depite his own initial support of this economic perpsective (Hodgson, op.cit). A combination of factors but particularly its not well-defended theory led to its eventual disuse.

# New Institutional Economics (NIE)

The introduction of new institutional economics (NIE) offered for some an economic model which sufficiently addressed the limitation of prior models. NIE was seen to provide an adequate accounting of the larger context in which economic activity occurred. The following discussion provides an overview of the parameters of NIE and addresses the limitations of this model given the present research issue.

Williamson (1994), in his discussion of transaction cost economics and organization theory, suggests that there has been a failure within prior economic theory to consider the institution or organization by which the economic transaction is bounded and

thus the application of institutional economics theory is limited. He argues this failure compounds the inaccurate assessment of economic activity in that the empirical influences of exchange are not fully captured in traditional neo-classical economic assumptions. He attempts a nested or layered graphical schema of transaction costs economics or "the governance of contractual relations" (ibid., pg. 80). After consideration of Williamson's model, the limitations of this approach will also be considered.

In Williamson's model of his "layer schema", he represents the secondary or non-primary interactions as a series of dotted lines. In this representation, the secondary interactions attempt to capture the human impact on what he labels the "institutional environment." Williamson is clear on stating that "governance does not operate in isolation." However, relegation of individuals' or human impact on the larger socially-constructed institutional environment as secondary to the institutional superstructure of the environment itself fails to account for the fact that the particular superstructure under scrutiny was created by individual and "secondary" human impacts.

# Limitations of New Institutional Economics (NIE)

The central theme of New Institutional Economics (NIE) is efficiency. That is, an institution exists only because it is efficient. Granovetter et al. (1992) suggests that a major short-coming of NIE theory is that "the economic definition of efficient is confusing and contradictory and lacks subtlety". In a cogently framed argument, Granovetter et al. (ibid.) suggest that the NIE approach fails to adequately consider the historical context which fostered the emergence of the particular institution under consideration. Further, this lack of contextualization results in an ahistorical or hypothetical (as opposed to

actual) consideration of the considered institution. In critique of Schotter's NIE (e.g. 1981) work, Granovetter et al. state:

Schotter prefers hypothetical to actual history: If something exists, it must be (or have been) beneficial for someone or some organization. This type of argument was once popular in sociology but would today be dismissed as crude functionalism (op. cit., p. 15).

I would go further in this critique by arguing that the NIE perspective fails to account for the social reality in which the institution exists and within which it was created.

## The Impact of a Monied Economy

Frequently, the introduction of an external system into, or overlaid upon, an extant social system implies more complex results than simple assumption of an additive result might suggest. That is, the attempt to understand the impact and changes of an introduced system demands minute attention to detail. For example with regard to the introduction of money and monied systems, Hodgson (1994, op cit.) states:

...the account of the emergence of money...suggests that this event cannot be explained simply because it reduced costs or made life easier for traders. The penetration of money exchange into social life altered the very configurations of rationality, involving the particular conceptions of abstraction, measurement, quantification, and calculative intent. It was a transformation of individuals and their preference functions rather than simply the emergence of institutions and rules.

Some of the possible implications for the extant social system are obliquely referenced in Hodgson's statement. A full articulation of the spectrum of potential social system impacts may not be possible. However, it is important to attempt overt consideration of some of the impacts which can produce a shift in or adaptation of social relations which occur within the impacted social system. The following discussion begins that consideration.

# The Overlay of Socially Constructed Systems

As the socially constructed economic system of the fishery at the beach-level is considered, it is important to acknowledge the overlay of the external context in which this activity occurs. In fact, what is critical to the present discussion is the consideration of a social system within a social system within a social system. That is, at the very least, gross consideration or attention must be directed to a beach-level system which exists within the Kenyan nation-state system which itself exists within a world economic system.

As the larger social relations of the nation-state and the world economic system impact local Luoland practices within beach communities, it is critical to consider the resultant changes on the social relations which exist within the community at the local and beach-level. Consideration of that potential change suggests, at the least, the following possible results: displacement or disruption of local-level economic social relations, mutation of local-level economic activity; and finally evolution or metamorphosis in local level socio-economic relations. Further, at a minimum, consideration must also be given to the impact of world-market demand for nile perch on the gendered social relations of the traditional culture of the Luo people and the family system in which they live and operate.

There are varied ways in which money is utilized, considered, or created within individuals' life plans. Zelizer (1994) references, within the Western societies of the United States, "a remarkable range of invented monies" e.g., supermarket coupons, gift certificates, bus tokens etc. which give substance in the form of a monied response to the demands of social relations. Given the varied forms monied social relations may assume,

it is not unreasonable to assume that social relations which heretofore did not fall within the realm of monied repsonse may, at some point, move into the realm of a quantified monied repsonse. With regard to this Kenyan beach-level society and its economy, an overview of the potential impact of monied exchanges on beach-level social relations is warranted.

An example of the impact of monied exchange has manifested itself in a Luo tradition of "sharing the grief." When a Luo family member dies, those who are friends and relatives of the immediate family which has suffered the loss are expected to "share the grief" by money contributions. These donations are used to offset the cost of transportation of the body to the *dhala*, i.e., the geographic location in which one's birth placenta is buried. These "share the grief" contributions are also used by remaining family members to get on about their economic lives once the formal mourning ceremonies are completed. Some of the women participants in this present study spoke of using funds received as a result of "sharing the grief" to start their economic endeavors. Ostensibly, this "monied" practice of the social relations of loss assists women who are economically widowed to develop strategies for obtaining economic autonomy.

Within the Kenyan fresh-water fishery, the social relations of buying and selling, or market exchange, take on a formal contractual relationship as well as retaining elements of traditional communal social relations. That mix, i.e. the interaction and the resultant social impact on buying and selling practices, is the essence of this investigation.

## **World Systems Theory**

Wallerstein (1991) suggests that the value inherent in world-systems analysis is not so much in its theory *per se* as in the ability to frame a series of questions heretofore unavailable but absolutely critical to the work of social science researchers and theorists. The value inherent in this theoretical framework is no less obvious than when considering the international division of labor, economic activity, and the implications of those structures at the local, i.e., beach, community, or household level. The following discussion presents an overview of the complexities which world systems theory identifies and suggests some of the implications for Luoland fishery.

Wallerstein and Smith (1992) speak of the capitalist world system of economics as embodying a series of interrelated production activities which revolve around an economic axis of "core" and "peripheral" geographic locations and involve tasks which can be understood as more or less core and peripheral. Profits accrue to those located within the more core axial locations and controlling the more core production activities. These series of inter-related production activities are conceived of as existing along a "commodity chain" which serves as a connector of seemingly diverse and, sometimes mistakenly assumed to be, unrelated actions. Units of production can include a variety of actions: e.g., individual activities of petty market productions, households unit activities as well as larger manufacturing activities or gross resource extraction. Wallerstein and Smith (ibid) suggest that production activities "clump" at varying points along these commodity chains and they label these "nexus" points.

A concern of utilizing the world systems analysis framework or model is that it appears somewhat linear in construction (e.g. "production commodity chains") and attempts to encompass a series of complex production activities which often occur in distinctly non-linear fashion. In fact, identification, and even definition, of these production activities and the attempt to articulate the relationship between them, frequently has been hampered because of the very lack of discipline in their manifestation. Further, they occur on varying levels of social dimensions and can be misunderstood both in their manifestation and in their inter-relationships particularly as these production factors interact with gender issues (e.g. Walby, 1986; Benería and Stimpson, eds., 1987; Nash, in Smith et al, eds., 1988; Harding, 1987; Hester, 1992).

However, the utility of this model does not lie in what it lacks but rather in what it adds to the discussion of the intersection of gender and world economic systems. The linearity of the "commodity chains" might be utilized as a way to envision the relations between the varying levels of commodity productions within and between local, national, and international strata. The "nexus" or clumping of production activities might be understood to include possible tasks in which any defining unit (e.g. individual, household, or other grouping) involves itself. Further, the value of the "nexus" in this model provides the opportunity for social science researchers to consider the contextualizing or surrounding environment and culture in which the nexus occurs and to incorporate the implications of that ambience and environment within the analysis being conducted.

This analytical framework in the context of household and gender production activity then provides not simply an up-to-down conceptualization of production activity

but also provides for a horizontal explication of those activities and the relations between them as well as providing the ability to articulate the context (historical and geographical) and culture (social and ethnic) in which these activities occur. The end result of applying world system analysis to the questions of gender and households and their interrelationship to the larger world economy is the possibility of a multi-dimensional social analysis which accommodates "within" and "across" analysis of social organization.

Mies (1986) offers a cogent historical overview and discussion regarding "externalization or ex-territorialization" of the labor demands of the industrialized nation-states as a result of the emergence of capitalism as a world-market economy. The international division of labor (IDL) which emerged sometime after the sixteenth century as a corollary to the spreading capitalist world economy, was initially predicated upon removal of raw materials and natural resources from exploited colonies to industrialized nations wherein the manufacture of final products occurred. These finished products were then marketed in the industrialized nations and, at times though infrequently, in the colonized areas. In essence, under what Mies has labeled the "old IDL", the production labor required for finished manufactured goods was contained within the industrialized nation-states, i.e. the United States, Europe, and later Japan. However, the raw materials to create these goods, and the highly profitable cheap labor to extract those materials from the environment, were expropriated from other nation-state locations.

This historical perpsective has a remarkable parallel to the present-day freshwater fishery of Kenya's Lake Victory. Those who labor to acquire the fish frequently cannot afford to purshase that fish themselves and are instead forced (of their own free will - to

paraphrase Marx) to sell their produce on the international market via the Asian wholesalers who proliferate the beaches and waters. The fish are purported to ultimately find their way to the international dining tables of Japan, Great Britain, and the United States.

Wiley and Yongo (1992) state:

Key changes in the contemporary period result from the further incorporation of Kenya into the global economy and the economic changes within Kenya that provide the context for the changes in human linkages to the fishery and to the lake basin environment. The most important parameter for this change, we hypothesize, is the rise of the export market for Kenyan fish... (p. 7).

In addition to the impact on the sale and purchase of fish, Wiley et al. (ibid) suggest that the weakening of the Kenyan shilling against the international money market places an additional demand for production on the fishery since it is one of the few consistent export commodities upon which Kenya is able to rely. The result is:

This softening of the Kenya economy means that foreign currency per kilogram of fish increases and the need for foreign currency from fish also increases due to shortages of ...[foreign exchange]... production in other sectors of the economy (Wiley and Yongo, p.8.).

The method of conceptualization offered by world system analysis also suggests some of the complexities faced when attempting to isolate the intricacies of gendered social relations and economic activity. Potentially, the approach to understanding the social world as a system of interactions operating within several overlying and interacting systems provides a frame for analyzing household relations and excavating buried gendered social relations.

Wallerstein (1991) states:

World-systems analysis is not a theory about the social world, or about part of it. It is a protest against the ways in which social scientific inquiry was structured... [Due to the effect of]... a set of often-unquestioned *a priori* assumptions... [which have]...had the effect of closing off rather than opening up many of the most important questions (pg.237).

The implications of this statement are broad. A primary implication significant to understanding world systems framework is to conceptualize of it as not an answer to social research issues but rather as an approach to elucidation of social structures, while using a theory with less likelihood of falling into unarticulated theoretical assumptions and traps.

Traditional research of gender issues and relations within the larger economic world system has provided inadequate theoretical framing to sufficiently posit the parameters of the issue (e.g. Smith, in Smith et al., eds., 1988; Bruce and Dwyer, in Dwyer and Bruce, eds., 1992; Mies, 1986; Walby, 1986; Hester, 1992). On-going examples of these debates are exemplified by the discussions of, for example, socialist feminists, Marxist feminists, and radical feminists, all engaging in research on economies and gender intersections (e.g. Folbre, in Dwyer, ed., 1988). World systems theorizing offers the potentiality of broadening the heretofore too-narrow boundaries of exploration of the relationship between the world economic system and gender. However, although this world-system analysis theoretical framework may provide insight into the posing of additional valuable research questions, it does not necessarily provide easily obtainable or ready-made answers to those questions.

Consistent with concerns Gouldner (1970) has raised regarding hidden assumptions, as well as Wallerstein's (1991) own arguments regarding *a priori* assumptions, world-systems analysis suggests a method for beginning to untangle the mass of societal threads which obscures adequate social science understanding of the categories of "family" and "household" which are themselves socially constructed. A number of issues confound the attempts of social science researchers to place parameters around this most basic unit of social organization, the household (Wallerstein and Smith, 1992).

The use of traditional neoclassical economic theory, with its assumptions of a "unified household," preempts empirical discovery (Bruce et al., 1989). Historical definitions have failed to address the variety of configurations in which households may manifest. Wallerstein and Smith (1992) argue that this lack of articulation of the particular, often fluid and frequently disparate, manifestations the varied forms of "households" may take, not only across societies (geographic space) but across time-space (i.e. the historicity of households), has failed to consider the close and integral relationship between households and the larger world-economic system.

Further, neither the concept of "families" nor "households" are "primordial." These concepts are in fact social constructions of whatever current reality shapes the social setting in which they are located. Therefore, the construction of the concept of "households" can be understood to be changeable, eminently challengeable, and ultimately contextually dependent. Because households are not "primordial" they can be understood to contain the dynamics of historicity and are therefore shaped and defined as well as "bounded" (Wallerstein and Smith, 1992; Touraine, 1977). Additionally, historicity can be

understood as encompassing both geography, i.e. physical location, and time-space location, or a particular location in time. Both of these concepts imply polity (Giddens, 1979 reprint 1990; Touraine, ibid). The impact of socio-political construction on these conceptualizations implies, in turn, additional elasticity inherent in the manifestation and definition of and, ultimately, the social understanding of the concept of "households" and "families." The idea of "elasticity" with regard to household membership, i.e. those for whom one is responsible, is important to consider given the impact on women's beach-level economic practices and for women's on-going responsibility for the re-creation of the household. These implications for study participants will be discussed in greater detail later.

Wallerstein and Smith (1992) provide a cogent discussion regarding the bounded parameters of "households". They suggest that the relationship between household and global macro-level economic activity are both direct and indirect and not unrelated to both the definition and conception of household. The authors correctly posit that previous scholarly discussions of international economic activity have overlooked the ways in which local economies, particularly the smallest of units, i.e. the household, are forcefully impacted by fluctuations in the larger economies not only at whatever national level in which the household exists but also by fluctuations from the more macro- or international level as well.

To begin exploration of the relationship between the international division of labor and individual locales and households, articulation of potential categories of interaction is critical. However, consideration of that interactional relationship is predicated upon the

particular working definition of the household. The categories of income generation suggested by Wallerstein and Smith (1992), as well as the complex make-up of these categories, offer a valuable starting point for articulating a definition of "household" and therefore for understanding some of the intersections of the household with the larger economies: local, national, and directly, as well as by extension, the international economy. These economic intersections, i.e. the nexus of these varying economies (Wallerstein and Smith, op. cit.), and the relationships inherent in those intersections, provide the departure point for the articulation of the impact, both direct and indirect, of the varying economic arenas on the local and household levels.

#### The Impact at the Beach Level

Each of the income-generating categories, i.e., wages, market sales, rent, transfer payments, and direct labor input (for an extended discussion of these categories, see Wallerstein and Smith, 1992) which identify both a household and the members of that household contain specific characterizations of income production. These varying categories account for varied connections to and therefore, convey differing impacts from the larger market economy. Further, the interactions between particular income generating activities can influence and are influenced by activity in other income generating arenas.

For example, Wallerstein and Smith (1992) identify a connection between the reduction in direct-pay wages and a corresponding increase in informal sector activity. This implies that as direct-payment wages to households are reduced, household strategies for maintaining income levels include entry into or increase of involvement in the informal sector. For example, there is a growing number of Kenyan government employees who

| · |  |  |
|---|--|--|
|   |  |  |
|   |  |  |
|   |  |  |
|   |  |  |
|   |  |  |
|   |  |  |

đ

also have a capital interest in beach-level fishing activities which they use to supplement the declining buying power of their fixed government incomes.

An additional permutation can occur which may impact both income generation and social factors of the households which in turn re-shapes the household itself. As Kenyans are unable to meet their financial responsibilities with only their fixed government salaries, many Luo return to their *dhalas* (or homes of origin). Those from fishery areas (who may be teachers or other government employees) often invest some of their waged-earnings and savings in the fishery. Frequently, they will have amassed more capital than those who have remained on the beaches and therefore, as a result of this accrued financial resource, will become akin to a *jadoung* (an important or "big man") and thus attain positive community regard and status.

Within world-systems theory, it is reasonable to posit that economic forces may act individually or may act in concert with each other to impact the income-generating activity under inquiry and subsequently the household itself. Further, it is not unreasonable to theorize that market forces may interact in a syncretized fashion with each other as well as with other social forces (e.g. Asian/Indian beach-level economic intervention combined with their already existent social status and power provides them with a particular economic mystique when entering a beach community) or ecological forces (fish species changes in Lake Victoria). These resultant interactions produce not necessarily two single impacts but a combined economic force resulting in a newly formed dynamic which negatively impacts a household's income-generating ability and activity.

Discussion of the impact of intermediary vendors on beach-level practices and women's fishery activity occurs later.

#### **Micro-sized Economies**

Recent study of the economies in several Southern African countries (Liedholm and McPherson, 1991; see King, 1996 for an extended discussion of *jua kali* or informal sector activity in Nairobi.) and elsewhere in the world (Liedholm and Mead, 1987; Fisseha, 1982), suggest that micro-sized economies or MSEs are an active strategy of individuals to gain access to the immediate economic environment in which they are embedded and, potentially, to enable their participation in the world market economy (Liedholm and Mead, 1987; Roemer et al., 1991). Liedholm et al. (1987) define micro-sized economies as small-scale economic enterprises which employ fewer than eight to ten people.

Traditional exploration of economic activity has focused on certain market variables, e.g., profit, capital needs, costs of production, or labor costs. Investigation of these variables has failed to account for or to acknowledge the social context in which these activities occur (Klitgaard, 1991; Perkins, 1991; Bruce et al., 1988; Guyer, 1988). Clues regarding the sources of success or failure of nascent enterprises may be contained within factors traditionally relegated to the realm of social relations and unattended to as economic impactors. This study proposes exploration of communal social relations inherent in market economies. Findings should provide insight for future Kenyan socioeconomic development strategies which propose to build socially "from below," whether government-level policy or individual socio-economic strategies.

The systemic forces which uniquely impact women within any economic system have been generally ignored (Waring, 1988). Women represent a significant portion of those involved in these entrepreneurial ventures (e.g., Liedholm et al., 1987; Downing, 1990). Attention must also be directed to gender issues inherent in these social relations of the parallel economy (Downing, ibid; Feldman, 1991).

#### **Social Relations**

Social relations or communal social relations develop among individuals interrelated by kinship, via association (e.g., Mitchell, ed., 1969), or via networks (Simmer, 1955; Wellman et al., 1988; Powell and Smith-Doerr, 1994). These kinship relationships may be lineage-based, imputed, or ascribed (see Harries-Jones in Mitchell, ed., 1969). Communal social relations can be critical to the success or failure of individual survival schemes whether those are social enterprises or economic development strategies (Gilmore, 1991; McCloskey, 1985; Obbo, 1980; Obbo, in Robertson et .al., eds., 1986; Schwartz, 1981; Overing, 1989). It is interesting to note that the discussion of communal social relations is relevant to even the interactions of "virtual" communities constructed over the electronic "geography" of space. Porter (1997), as editor, hosts a valuable discussion regarding the culture and ultimately the social relations and community of the Internet.

Foster (in Porter, 1997) states: "[C]ommunication and community have a common lineage" (p. 23) and suggest that communication forms a basis for community but is not synonymous with it. As they attempt to build an argument for inclusion of Internet

communication as community, they provide an interesting discussion regarding the nature of the foundation upon which "communities" are built.

The term "community" is broadly used to refer to an ideal type of social relations known as *Gemeinschaft*, the embryo of which is found in the relations of kindred individuals (Toennies, 1957, 37). ...[T]he term embodies a set of voluntary, social, and reciprocal relations. This is typically contrasted with its polar opposite, *Gesellschaft*, or impersonal association...the utilitarian sentiment that underpins modern, industrial, urban life (Foster, op cit., p. 25).

The "nation-state," one of the parameters defining a particular geographic "community," is a result of industrialization, technological development, the world political economy, and specialization of labor (e.g. Marx, Weber, Durkheim, Wallerstein). Contemporary nation-states do not evolve from and are not explained by the structure of traditional societies (Giddens, 1981, 1987, 1990). However, the individual's action must be understood within the context of the world system (Giddens, 1987, 1991; Wallerstein, 1974, 1984). The impact of these "social systems within social systems" on the agency of individuals and on the larger social structures or communities, via individuals' subsequent reflexivity, is myriad (Simmer, 1955; Mills, 1963, 1967; Luhmann, 1982; Giddens, 1984). Given these theoretical implications, attending specifically to women's sociological experience within the context of Kenya's Lake Victoria economy is necessary and critical.

#### Gendered Research

The dangers of research assumptions which fail to account for gender differences are well documented (e.g., Silberschmidt, 1991; Baca Zinn et al., 1986). To ignore women's particular experience in the Lake Victoria area only perpetuates erroneous assumptions already challenged within the research on substantive areas in other African

contexts (e.g Stacey and Thorne, 1985; Baca Zinn et al, 1986; Andersen, 1988; Wood Sherif, in Harding, ed., 1987. Schoepf in Seidman and Anang, eds, 1992; Silberschmidt, 1991; Clark, 1991; Horn, 1991; Downing, 1991).

Hill Collins (in Hartmann et al., eds., 1991) broadens that discussion by arguing persuasively that those who are the "outsiders within," i.e. effectively "outside" of the social system but who are forced to operate "inside" that system (e.g. Kenyan women suffering the impact of fish species changes and the intervention of the forces of a world economy), frequently have an informed and informative perspective essential and integral to understanding and potentially enhancing that system to which they are subject. Harding (1987) suggests that research without inclusive scholarship, i.e. "gendered research," results in only a "partial and distorted" account of social experience. Understanding of the socio-cultural impact of introduction of the nile perch into Lake Victoria waters, species fluctuation, and the socio-economic implications of contemporary international market impact is only at an early exploratory stage. There is heuristic value in simultaneously pursuing social information regarding the gendered impact of those fishery changes.

# Linkage of Household Patriarchy and Male Dominance with World Systems Economy

Western feminists have through their own, arguably hegemonic, efforts offered to the larger world a popularized understanding of the concept of "patriarchy" as well as offered cogent arguments elucidating the structural influences of that concept. Despite the ethnocentricity of that hegemony, their discussion of "patriarchal" influences in social structures is not without validity and should not be discounted. As Robertson (1996)

states "Patriarchy is often said to be more important than class among structures of dominance affecting women" (p.47). Some feminist researchers approach the concept of patriarchy differently but ultimately provide similar arguments regarding the pervasive influences of that patriarchy albeit under differing nomenclature. It is valuable to briefly consider those definitional discrepancies.

Nash (in Smith et al, eds., 1988) offers a compelling discussion regarding the inception and essential meaning of the term "patriarchy." Nash (1988) understands patriarchy to be

... [the] dominance of the ascending male generation over women and youths... which ...refers to elder male authority in a gerontocracy...[which] provides reciprocal benefit to subordinate females and youths in the society where it prevails, and it implies persistence from past institutions, principally those related to pastoral societies (p. 15, et seg.).

Nash (ibid.) suggests that popular application of the term "patriarchy" to present-day structures disregards the history of current social structures and misinforms readers as to the longevity of those social institutions. As she cogently argues any number of social structures labeled "patriarchal" are in fact not grounded in traditions persistent from past institutions of pastoral societies. Nash offers this argument in opposition to Millett's original articulation of patriarchy as "...the rule of men as a universal mode of power relationships" (Millett, 1970, in Nash, ibid.). Nash challenges the ethnocentric myopia of this definition and correctly argues the reality of the hegemonic imposition of Millet's redefinition which as Nash says "...rob[s] the term of its ethnographic meaning..." Nash argues that utilization of this term "distorts the evidence by suggesting that the existence of male dominance was prior and universal." In summary, she urges the use of the term

patriarchy be reserved for societies in which the historicity of this type of gendered dominance is apparent.

The application of this social legacy of Nash's interpretation of patriarchy to Luo economic practices and social relations is apparent with regard to present-day practice and women's beach-level experience. Findings from this research support Nash's contention and reflect male social and economic dominance within fishery and beach-level economic activities. Robertson (1996) offers a similar discussion regarding the social construction of the concept of "patriarchy" and the need to situate the construct when considering its application. Robertson states:

But patriarchy, or male dominance, to be more accurate, is not a fixed phenomenon, is historically situated, and changes along with the society that encodes it; it may change from being a primary method of ascribing socioeconomic status to being embedded within a larger class matrix (p.47).

In attempting to highlight why the system of subordination is perpetuated, it is not unreasonable to understand the structural system of patriarchy or male domination as both extension of and integral to capitalism itself (e.g. Eisenstein, 1979; Walby, 1986; Eviota, 1992; Sangari and Vaid, eds., 1988; Nash, 1988). As Robertson (1996, p.48) says "...when economic and political interests coincide, colonist and colonized men may cooperate in the attempt to control women." Discussions offered in Vail and White's \*The Creation of Tribalism (1991) provide support for this contention (e.g. Marks, 1991). Capitalism is predicated upon the necessity of having not just a "core" but also a "periphery." Without the periphery from which to draw its surplus labor and from which to accumulate excess, the "core" countries, or however the entities on the receiving end of

capi Cap to b oth is, ВG ne dev don. the (

dismi

gende

capitalism are defined, and ultimately the system of capitalism, itself cannot continue.

Capitalism is predicated upon accumulation. Accumulation implies an excess or "surplus" to be acquired. The "surplus" is not freely given but acquired at the expense of some other entity, through political or military hegemony (e.g. Mies, 1986; Eviota, 1992). That is, this surplus is taken.

When considering nation-states, this predatory relationship can be described geographically as the "core-periphery." The entity which is exploited and drained to allow the surplus accumulation for some, i.e. those countries or regions within the geographic "core" (which can, at times, include parts of, or persons from, the geographically exploited areas) is the so-called "Third World" or those nation-states which are have also been labeled the "South" versus the countries in the "North" (see for example: Wallerstein, 1979, 1984; Hopkins, et al., 1982; Mies, 1986; Safa, 1982).

Nash (1988) succinctly outlines a series of situations in which households are impacted by world systems changes directly linked to male dominance or patriarchy, under the Mies' definition. Frequently, state policy or development policy fails to address or consider the needs of women, and, directly as well as by implication, fails to consider the needs of households, subsuming the concerns of subordinated groups into the policy development designed to address only the articulated or identified concerns of the dominant group. The implication of this type of development policy is not so much that the concerns of households and women are discounted once identified; the insult is more dismissive than that. The controlling powers frequently have no awareness that those gendered concerns even exist. An example of this is agricultural land reform policy

b.

7

!

pe per

pe<sub>7</sub>

Duj

implemented in many re-emergent economies in which women hold responsibility for household agricultural production and subsistence but were neither consulted prior to nor consulted after implementation of policy threatened household livelihoods (Nash 1988).

Nash (ibid.) additionally extends her discussion to include the "way in which women enter the workplace" or begin their participation in economic-generating activity. These workplace rules, of course, manifest differently dependent upon the status of the nation-state under discussion. That is, the particular "core" or "periphery" standing of the geographic location shapes the actuality of the work experience as well as the look and shape of the workforce within a particular strata of the labor force (e.g., Eviota, 1992).

As Nash argues, the social construction of the workplace can also reflect a "core" or "periphery" standing of particular social groups within a society. For example, in Kenya's freshwater fishery, women are not permitted to be "fishers" or to be present on a fishing boat during the activity of fishing. The particular construction of this task of fishing is relegated only to the "core" of the Luo population, i.e., males, and women, who can be considered as labor "periphery" in this endeavor, are not tolerated as direct participants in the activity of fishing. (In the present research, it is of interest to note that a specific exception is permitted within one beach community, Nyang'wina, as a result of a particular set of social factors. One woman whose husband is mentally incapable is permitted to be a "fisher" and voyage onto the Lake in a boat.)

The valuation of a particular labor task itself, as well as socio-cultural gender perceptions, shapes a women's entry into it as workplace (Papanek and Schwede, in Dwyer et al., eds., 1988). That is, the more or less valued a labor task is within a social

system articulates and determines women's access to that task. Further, the social valuation also determines how, or in what manner, she may enter into that workplace. Women's tasks within the fishery have traditionally encompassed processing, preparation, and trading of fish. This work has been considered "women's work" as it has essentially focused on cooking and food preparation. As international economic attention to the fishery has increased males have subsequently begun to describe themselves as "traders" in the attempt to access a part of the market which has become more lucrative. Additionally, males will direct their wives' entry into processing and preparation of fish in order to capitalize on the diversity of fishery activity.

# Kenyan Women

Official Kenya census data from 1979 states that the Lake Victoria Basin area encompasses one of the three main population regions of Kenya. The other two areas are: Nairobi and the Rift Valley and Central Areas and the coastal area of Mombasa and its surrounds. Population trends of 1979 revealed that more than 67% of Kenya's population lived on approximately 10% of its land mass. Further, these data showed an increase over 1969 population concentration and indicated a trend toward urbanization which appeared on the rise (Kenya Population Census, 1989). Of interest is the fact that more men than women were heading for the towns. This gendered trend toward urbanization may reflect women's continuing awareness of their own social and physical vulnerability in more urban settings where they are likely to fall victim to predatory crime.

Data from this current study of the economic sociology of the fishery reveals that women see the fishery as a potentially viable income source and as a fruitful source for

obtaining safe, secure housing and livelihoods for themselves and their families. Women who are widowed, divorced, or simply alone with their children are able to enter the beach community and obtain entry into both the fishery market activity itself and into the community at large. In some communities (e.g., Nyang'wina Beach), women are able to identify a piece of land and build a shelter on it without challenges from other inhabitants. That is, the community is able to expand and accommodate the entrance and presence of a single (i.e. not accompanied by an adult male) female and her children without necessarily posing a threat to her physical vulnerability while potentially providing her with the opportunity for shelter and income. The same cannot be argued for the entry of a lone female into more urbanized areas.

# Women and Security

Eldredge (1993), while explaining the historical and political reign of Moshoeshoe of the BaSotho people, argues persuasively that the search for security of self, children, family, and possessions provided the impetus for BaSotho acceptance of Moshoeshoe's leadership and authority. Eldredge (ibid) states:

In Lesotho, economic as well as political developments at the local and national levels can best be explained with reference to the **pursuit of security** ...an emphasis on security rather than mere physical survival signifies a recognition that the exploitation of resources to meet material needs is governed by the social system which structures and limits the abilities of individuals or groups to exploit these resources (emphasis added, p. 5).

According to official census data, women do not head to the vagaries and dangers of the towns where their life experiences are more likely to end in exploitation. Rather, women head towards the relatively more secure shores of Lake Victoria. Following Eldredge's

(op cit.) argument, I would argue that a similar motivation, the need for security for themselves and their children, drives these Kenyan Luo women, who are seeking economic and social security as they leave their homes of origin or affinal connection and seek socio-economic connection, onto the beaches of Lake Victoria.

## Summary

Traditional neo-classical economic theory has functioned utilizing the assumption of the economic actor as operating under "rational" motivations. The limitations of general economic assumptions and the particular limitations within specific neo-classical economic theory approaches have been laid out above. It is important to identify the limitations of those prior models in order to understand the complexity of the women's lives. By simply re-applying extant models of economic analysis, this complexity is shrouded and women's economic lives remain obscured.

My goal in this research is to assess the socio-economic lives of women in Kenya's freshwater fishery. The lives of women in Kenya's fishery are complex. They have socially expected tasks of household re-creation to accomplish on an on-going basis. They have economic endeavors with which to contend which are embedded in a complex local and globally impacted market of a re-emergent economy. They have the challenges of raising children, frequently on their own without the active involvement of their spouse. The multiple theoretical perspectives of economic sociology, the sociology of gender with particular regard to African women, and the implications of social relations, or *Gemeinschaft*, are critical to that articulation.

Given the complexity of the socio-economic environment in which women in the fishery operate, it is important to build a model of "relational" economic activity rather than simply relying on a model of "rationality" inherent in neo-classical economic models. This relational model of economic activity provides the parameters for the following socio-economic exploration.

The literature of these theoretical perspectives, i.e. economic sociology, social relations, and gendered experience, informs the presentation and discussion of data to follow. Exploration of the social relations women utilize to accomplish their responsibilities in the areas of household work, child care, economic activity, meeting nutritional needs, etc. follows the methodology presentation.

Met

is ot

**a**cc(

uhi

arti

trav

Re

ac pa

fur

SU

ar

in

inf

WO.

reia

acce

## Chapter 3

## Methodology

The complexity of the social milieu in which women in beach communities operate is obvious. Strategies for assessing and deconstructing the complexity of their lives must accommodate the social and economic environment within which women exist and within which they conduct the business of their lives. Therefore the methods undertaken need to articulate and account for these several layers of social complexity which women must traverse.

## Research Design

As discussed earlier in this writing, I identified three areas of social and economic functioning which impact the lives of women. These areas were: women's economic activity; the communal social relations of their social and geographic setting, i.e. the particular set of communal interdependencies upon which they draw for assistance and support, whether financial or emotional; and, the particular set of gendered dynamics which surround their lives and, on a daily and on-going basis, shape the socially acceptable arenas into which they may enter with impunity. Given these three arenas of inquiry, it was important that the research design itself and the methodology undertaken be able to incorporate the breadth of these social concerns. Therefore in addition to use of expert informant testimony and interviews, I needed to develop instruments for inquiry which would explore economic activity, individual's access to and use of kin and consanguineal relationships, as well as accommodate and reflect the Luo construction of gender and acceptable gendered actions.

## **Beach Selection**

In addition to the substantive areas of inquiry discussed above, this research design had to include the variances of geography which define the Lake Basin Development Area (LBDA) of Kenya's beach communities. The Kenyan section of Lake Victoria comprises approximately 6% of the total Lake area (Welcomme, 1972 in Reynolds and Greboval, 1988). However, the land adjacent to it, Kenya's LBDA area, stretches from Kenya's northern-most boundary with Uganda to Kenya's southern-most boundary with Tanzania. To accommodate the spatial and geographic challenges which women in the fishery who live and work along Kenya's beaches encounter, a representative subset from the over 250 beaches was selected for inclusion in this research. Following Hoekstra (1992), a stratified subsample of Kenya's beaches reflecting the variance in fishery type, beach census size (large, medium, or small), and, LBDA regional location, i.e. north, central or Gulf, and south, shaped the beach selection process. See Table 1 for a listing of those beaches and Appendix A for a map of the beaches selected for participation in this study.

Table 1 - Region, Size and Fishery Type of Originally Selected Beaches, 1995

| Beach              | Region           | Size   | Fishery Type          |
|--------------------|------------------|--------|-----------------------|
| Honge              | North            | Large  | Omena*                |
| Oele               | North            | Medium | Mbuta* and Omena      |
| Wichlum            | North            | Large  | Mbuta and Ngege*      |
| Ludhi              | North            | Large  | Mbuta and Omena       |
| Osindo             | North            | Large  | Omena and Tilapia     |
| Misori             | North            | Large  | Mbuta and Omena       |
| Madundu            | North            | Medium | Mbuta, Omena, Tilapia |
| Kibro              | South            | Large  | Omena and Mbuta       |
| Ng'ore             | South            | Small  | Ngege and Mbuta       |
| Nyang'wina         | South            | Small  | Ngege and Mbuta       |
| Luanda<br>Konyango | South            | Large  | Mbuta and Ngege       |
| Oodi               | South            | Medium | Mbuta and Omena       |
| Gingo              | South<br>Central | Medium | Mbuta, Ngege, Omena   |
| Kiumba             | South<br>Central | Medium | Mbuta, Ngege, Omena   |
| Negegu             | Gulf+            | Medium | Omena and Tilapia     |
| Bala Rawi          | Gulf+            | Medium | Omena, Mbuta, Tilapia |
| Obaria             | Gulf+            | Medium | Talapia and Omena     |

<sup>\*</sup>ngege = tilapia

Although I had identified 20 beaches to include in this study, three (Uhanya in the north, Rasira in the south, and Tabla beach in the south central region) were replaced due

mbuta = nile perch

omena = sardine

<sup>+</sup>due to lack of time, only observational data was collected from Gulf area beaches

to lack of fishing activity which I discovered after arriving at the specific beach site. At Uhanya Beach, the beach had been temporarily closed by fishery officials to prevent overfishing. Two beaches, Rasira and Tabla, were "dead beaches," that is, no fishing activity was taking place at either beach due to lack of fish. At Tabla beach, some residents remained although the majority of housing spaces were empty. Those remaining inhabitants told us that the fishing had stopped at that beach some 10 months earlier due to lack of fish. Those who remained at the beach were convinced that the "fish would return." They were convinced that the reduction in the availability of fish was simply a "cyclical" occurrence.

At Rasira beach there were no inhabitants remaining. Residents in the surrounding area, about 3 kilometers away, told us that fishing had ended at that beach about one year prior. For each of these three beaches - Uhanya, Tabla, and Rasira - I decided to select a beach within close proximity of the inactive beaches following as closely as possible the original criteria of the stratification model, i.e. beach size and fishery type. After consulting with my KMFRI colleagues, Oele beach was substituted for Uhanya, Oodi for Rasira, and Gingo for Tabla.

Three beaches Bala Rawi, Obaria, and Negugu beaches are all located in the Gulf region. Both Bala Rawi and Obaria had been included in the initial beach observation phase of this research. However, no data was collected via the intensive interview schedules used at the other beaches. I had planned to include these three beaches in the interview phase of this study. I felt it was of value to gather data from the three regional LBDA areas, i.e. northern, Gulf, and southern so that geographic variations which might

result in specific patterns of social organization could be identified. I decided to travel to the southern area after collecting data in the northern area to avoid the onset of the rainy season and to insure that data would be collected in the southern region which has historically been less accessible to researchers than has the Gulf region. Therefore, I changed the itinerary to accommodate travel to the southern area prior to the travel to the Gulf area.

However, due to vehicle shortages and breakdowns, we were unable to return to these Gulf sites for participant interviews. The Kisumu KMFRI office, out of which I worked, had only one vehicle capable of the required back road travel. This vehicle was used by all the on-site KMFRI researchers as well as the national director and his staff when they traveled to Kisumu from the national office in Mombasa. The Kisumu office had extremely limited funds for fuel. The national staff had more funds available for expenditure on fuel. There were a great many demands for use of this vehicle by the national staff. As a Western researcher, I also had funds for the purchase of fuel. The heavy use of the vehicle because of the needs of so many led to a great many breakdowns, which resulted in its being incapacitated for large segments of time.

However, after completion of the southern itinerary, we no longer had access to a vehicle, and the Gulf area had to be eliminated as an interview site. As a result I was unable to carry out my research plan to include the Gulf beaches. Therefore, no respondent data was collected at those beaches.

The differing fishery types on Lake Victoria result in differing processing and trade activities. To understand the lives of women in Kenya's beach communities these

e,

Ţ

distinctions of fishery types and activities also had to be accounted for. Therefore, beach selection had to reflect the diversity of fishery types. Table 1 provides a listing of the differing fisheries at the different beaches. Table 2 lists the fish type by scientific and Kenyan name.

Table 2 - Fish Species and Popular Name

| Scientific Name        | Kenyan Name | English Name  |
|------------------------|-------------|---------------|
| Lates Niloticus        | Mbuta       | Nile perch    |
| Oreochromis            | Ngege       | Tilapia       |
| Rastrineobola argentea | Omena       | Sardine       |
| Caradina               | Ochong'a    | Prawn         |
| Haplochromis           | Fulu        | Haplochromine |

# **Participant Selection**

Although women's lives provide the focal point of this research, it was also essential to document the lives and experiences of men in the beach communities. The lives of men provide not just a comparison for exploring women's activities but the lives of men also provide a context for understanding women's fishery and beach community experiences and the social relations which proscribe women's activities. Therefore a subset of this research inquiry had to focus on men and their beach community lives.

Table 3 lists the number of participants by beach and gender.

Table 3 - Number of Respondents at each Beach by Gender

| Beach           | N Females | N Males | N Total |
|-----------------|-----------|---------|---------|
| Honge           | 7         | 4       | 11      |
| Oele            | 11        | 3       | 10      |
| Wichlum         | 7         | 3       | 10      |
| Ludhi           | 7         | 3       | 10      |
| Osindo          | 7         | 5       | 12      |
| Madundu         | 4         | 1       | 5       |
| Kibro           | 8         | 3       | 11      |
| Ng'ore          | 7         | 3       | 10      |
| Nyang'wina      | 11        | 3       | 14      |
| Luanda Konyango | 8         | 2       | 10      |
| Oodi            | 3         | 0       | 3       |
| Gingo           | 9         | 16      | 25      |
| Kiumba          | 10        | 2       | 12      |
| Total           | 99        | 48      | 147     |

The interview schedules took approximately 60 to 90 minutes to administer. The level of interest in our activity was such that people would line up and wait to have the chance to talk with us and give us their stories. In fact, in most communities, our presence was an occasion for any who had time to gather and listen to others engage in the interview. Frequently, I wondered at the on-going interest of individuals as they patiently awaited their turn to be interviewed and listened to the other participants. Despite the time required, all respondents expressed eagerness to participate. A respondent at

Wichlum Beach expressed the sentiment which many held. She stated that participation in this interview provided people with valuable information and education regarding their lives and business activities which they would not otherwise have considered.

Initially, I had planned to spend at least four days at each beach and hoped to interview 10 per day. Two intervening factors changed that plan. Budget considerations determined the maximum number of days which I could spend in the field and provide *per diem* costs for the KMFRI personnel which included the driver and my colleague who acted as translator. Additionally, the costs for fuel determined and limited the amount of travel we could undertake. Therefore, I decided that a limit of three days per beach was the maximum we could spend if we were to accomplish interviews at 20-22 beaches.

Although I had hoped that my colleague and I would be able to interview many more in a given day, it became clear that the maximum interviews we could accomplish in three days of time was just about 10-12 people. Therefore I targeted interviews of at least seven women and three men. Given the limited amount of time women had, interviews with women were given priority. At some beaches, men were frustrated that they were not first to be given the opportunity to engage in this interview activity.

#### Beach Entry

Initial contact and entry into beach communities was facilitated by my KMFRI colleague. Upon arrival at the beach, we would seek out the beach leader or village chief.

Meeting with that individual was conducted usually in a closed setting with several other (male) officials present. Until I was able to discuss my activities in *DhoLuo*, I was li

mited to simply giving the requisite greetings and explaining my interests in English while my KMFRI colleague translated. After meeting with the village chief or beach leader, a public meeting would be called and village inhabitants or those present at the beach (depending on the size of the beach) would be directed to gather to hear about our presence. Usually, we were seated at places of honor accorded to guests as we waited for the beach community to gather. Additionally, we were frequently given something to drink, usually soda, and sometimes we were given food. It is interesting to note that at the poorest of beaches we were always provided with food as we waited. The meetings were usually held on the beach itself under a particular tree designated for gatherings. At other beaches, the meeting would be held in the *banda*, the concrete and roofed open-sided structure in which fish were taken for weighing.

When the community had gathered, the beach leader or village chief would state that the village had guests and that they would do well to listen and learn what these newcomers had to say. In some smaller or more isolated ones beach communities, the area religious leader would pray prior to our research presentation and request that all would be disposed to receptive listening and clear speech. At this point, the village chief would take a sit and indicate that we could now begin our presentation to the village as a whole. As part of our entry strategy, I would begin the presentation by greeting the group in *DhoLuo* and introducing myself and the two members of my research group. I would then continue the presentation as long as I could in the Luo language. During the early stages of my research, I was unable to continue very far. At that point when I would return to English usage, my colleague would begin translating my words. Later, I was

able to complete the presentation regarding my research interests and my requests for their participation without needing translation. Despite my initial stumbling, all the beaches responded positively to my attempts. Several beaches seemed pleased to realize that I was unable to speak KiSwahili but that I could speak *DhoLuo*. My presentation put particular emphasis on the request for women participants and the need for this.

#### Interview Sites

My initial strategy for participant selection had incorporated random selection of households within a two kilometer radius of the specific beach. That strategy was not viable at all beach sites because women who are economically active in the fishery leave their homes extremely early in the morning to go to the beach and await the arrival of boats (some leave as early as 5 a.m.). Other women are engaged in other business practices at the beach site which is the center of activity of the community. For example they may be selling *mandasi* (a doughnut like bread) out of a basket, or running a "hotel," a building which provides sit-down food service from which they sell *myoka* (a fermented porridge-like cereal), *chapati*, a fried flat bread, *chai*, strong tea sweetened with lots of milk, or whole baked potatoes. They also had to leave their homes early in the morning to accommodate the early morning arrival of fishers needing food. Generally, my colleagues and I timed our beach site arrival for just before 8 a.m. Generally, women were not to be found in their homes at this time in the morning.

Given the centering of all activity around the beach sites, our attempts to engage people at their homes were not always successful. At those beach sites where living shelters were located on the beach, this was not a problem, e.g. Wichlum, Honge, or

Ludhi in the north, or Ng'ore and Nyang'wina in the south. Additionally, on beaches which engaged primarily in the *omena* fishery, women had blocks of time during the middle of the day when they were available to talk at their homes as they waited for the omena to dry in the sun. As a result, my subject selection strategy reflected a dual approach which included random selection of households, every third household at sites where homes were located in close proximity to the beach and on the other sites, random selection of women traders at the beach.

As I stated earlier, I gave priority to women participants such that the first sets of interviews at any site were heavily female. This was to insure that there would be sufficient opportunities to accommodate women's busy schedules in the interview process. Time for men during the days was much more flexible and they, as a result, were much more available for interviews. Although I had originally planned to include only 10 participants per beach site, many residents were eager to participant and would wait for hours through the interviews of others in order to participate. For those stalwart individuals, I would conduct an interview. Those interviews are usually included in the summary data presented here. However, some of those interviews are not included. In some cases, the interview was not able to be conducted in its entirety or other concerns were raised as a result of others responding on behalf of the participant. As an example, a woman was insistent that her daughter-in-law participate in this study. The woman herself had already been interviewed and she wanted her daughter-in-law to also "benefit" from the interview. However, in her desire to have the daughter-in-law "learn" she persisted in answering on behalf of the daughter-in-law. This challenges the value of the interview.

Finally, it is of interest to note that those who were persistent in being interviewed are not particularly distinguished by the particular success or lack of success of their economic enterprises.

Beach inhabitants tend to gaze and attend to the entrance of strangers with interest; and, opportunity to engage with the those who come to the beaches is met with a positive response. Therefore, people were usually eager to participate in our interviews. Only two beaches presented a problem. Both were located in the north, Misori and Madundu beaches. As we drove into Misori beach, which is in a fairly remote location, residents ran and hid in their houses. After finally finding the beach leader, we learned of their reluctance to participate. They feared that we were from the fisheries department and not just researchers. Officials from the fisheries department had just visited their beach (about three to five days prior) and levied a series of fines for, according to beach inhabitants, artificially created violations. This was not an unknown practice of fishery field officials. Therefore, fearing that we were part of the same process, the population was reluctant to talk with us at all.

Madundu beach, which was located close to Misori, had suffered the same experience; initially inhabitants were also unwilling to talk with us. After extended discussion, the beach community agreed to let us proceed if a man was allowed to go first in the interview process. I agreed and the first respondent was the beach religious leader. We accomplished three more interviews and then my colleague became ill with malaria, and we were forced to leave and return to Kisumu for treatment for him.

Of interest and as a demonstration of the positive regard in which our efforts came to be held, about 3 months into my research effort, leaders form both Madundu and Misori beaches came at different times to other locations in which we were working to request our return to their beaches to conduct our interviews. At that point, I was not able to accommodate their request due to time, limited financial resources, as well as the logistical constraints regarding the vehicle. Frequently, leaders or residents of other beaches invited us to come to their beach sites and conduct interviews. For example, inhabitants of Rusinga Island and Mfagano Island requested our presence and offered to transport us there. Only time constraints prohibited our accommodating their requests.

# The Interview Process

The interview team consisted of myself and a colleague from KMFRI's Kisumu office. My colleague acted as interpreter.

The interview schedule consisted of 104 major items which covered the areas of demographics, nutrition, economic activity, and women's issues. See Appendix 1 for the complete interview schedule. The demographics section had 27 items. This section covered issues such as respondent's age, ethnicity, marriage status, number of children, ages of children, educational level of respondent and spouse, et cetera. Additionally, questions were covered regarding children's educational costs, decision-making within the household, and respondent's historical involvement within the fishery.

The nutrition section had 16 items. This section covered items regarding household membership, contributors to household food supplies, and types of food eaten within the household. This section also explored the household's dependency on fish as a

food source and the dedication of any of the fish trader's sale products to meet that need.

The areas of questions included numbers and status of individuals making up the household, e.g. elderly, students, handicappers, young children or others unable to work.

Questions specifically related to diet included dietary practices, respondent's access to food, and variety of foods available.

The economic and business activity section had 55 items. The following types of items were covered: business activities, savings practices, daily fishery activities, type and number of customers, travel and transportation costs associated with their businesses, additional MSE or SSE activity within their household, and their own activity during the slow time within their particular fishery. Areas specifically related to economic activity included: decision-making practices regarding earnings and expenditures; overhead, labor, storage, and travel expenses; types of fishery engaged in; number of beaches where respondent bought or sold fish during the prior year; sources where respondent sought problem-solving assistance or advice; formal business training experiences, etc.

The women's section had six items. Items concerning women were covered throughout the interview, but this last section of six questions was to be given to women respondents only and not to men respondents. This section addressed co-wives and shared activities with co-wives. Additionally, I asked women their perspective and understanding of the problems women faced in business. I also asked their perspective regarding the experience of married women in business, the differences for those who are married versus those who are not married and working at a business. I also asked these questions of men but in a group discussion.

#### **Instruments and Analysis**

Instruments included the interview schedule described above. I designed a beach observation schedule to articulate the particular characteristics of each beach site in a formal fashion. See Appendix 3 for that instrument. I also created a household observation checklist to capture the nuances of the living establishments of participants. See Appendix 4 for an example of that document.

As a result of interview data, I was able to summarize a series of social and economic or business barriers which beach community residents encounter and must surmount. Examples of these barriers include: need for money, childcare assistance which must encompass crisis or illness care as well as regular daily care, need for food, access to fish for purchasing, development of a strategy to continuation one's business, access to housing, etc.

From the 104-item interview schedule, 269 variables were identified. In order to build scales of measure which would articulate my research interests, I applied a simple dichotomous scoring to most of the responses after initial coding. That is, if the respondent offered any kind of articulated strategy to business strategy-based questions or any kind of reference to communal social relations in social relations-based questions, then their response was re-coded to a simple no/yes classification. That is, their response was re-coded as zero or one in the subsequent dichotomous scoring. Scoring in this fashion results in nominal measure of these categories and therefore avoids weighting any particular strategy as better or worse than another. Although valuation of the strategy may prove of interest at some point, for this particular research effort it is more important

to determine if a respondent engages in some consciously articulated schema or strategy to meet economic and social challenges. These dichotomously scored variables were then summed into aggregate scales of measure and labeled accordingly, e.g., money, advice, food, school/education, product strategy, etc.

In order to construct the final six typologies of strategies and social relations (which are listed later in this writing), I extracted relevant variables from the 104-item interview schedule and used them to create the summed variables. SPSS functions allowed combination and transformation of the identified variables to isolate the options women fashioned for themselves to meet the challenging realities of their lives. I then combined subsets of these summed scales of measures with other individual variables from the original data set. This last permutation of the data resulted in the final indices which reflect respondents' business strategies and reliance on social relations.

I hypothesized that a positive and somewhat linear relationship would exist between strategies for economic activity and women's social relations. After the construction of these measures of business strategies and social relations, I ran statistical tests to determine the strength of these measures in the lives of beach inhabitants.

Following that, I ran tests to determine the relationship of the indices to each other. Tests for linearity and strength were conducted using Spearman's correlation to determine the measure of association between the two indices of business strategies and social relations. This test was run since the ordinal data in these indices are fully ranked due to the method of their construction. Spearman's correlation provides for a more rigorous testing of data such as these as compared to use of Pearson's R.

#### Chapter 4

### Findings Regarding Lake Victoria's Beaches and Communities

The world experienced by those who live in the Lake Victoria area of Kenya is not an easy one. The compendium of barriers (social, geographic, and environmental) which they must face on a continuing basis and overcome with regularity in order to survive and to ensure their children's survival can seem overwhelming, particularly to those from outside that cultural frame. In many ways the complexity of challenges which inhabitants encounter in the communities of Kenya's freshwater fishery are compounded for those who are female by the simple fact of their gender, the gendered responsibilities of their social roles, and the gendered impact of a socially constructed economic reality.

Therefore to best understand that world, it is important to understand the environmental, cultural, and social referents which shape the parameters of those who inhabit that world.

### Geography

This study was conducted in the shoreline beach communities (all within 0-2 kilometers of the beaches) of Lake Victoria in Kenya ranging from the northern district of Siaya to the central district of Homa Bay to the southern-most district of Migori. Seven beaches in Siaya District were included in this study. They were: Oele, Honge, Wichlum, Ludhi, Osindo, Misori, and Madundu beaches. In Homa Bay district, the following beaches were visited and studied: Gingo, Tabla, Kiumba, Ngegu, Bala Rawi, and Obaria. From Migori District, the following seven beach sites were included: Kibro, Ng'ore, Got Kachola, Nyang'wina, Luanda Konyango, Rasira, and Oodi. (The locations of all of the beaches can be seen on the map in Appendix A.)

Terrain and climate can differ vastly even within districts but certainly between districts. Kenya's Lake Victoria beaches stretches from its northern border to its southern border with Tanzania. However, all of the regions reflect the impact of the Lake winds on these equatorial climates, thus reducing some of the equatorial influence. That is, the winds from the Lake combine with inland winds to produce high to moderate amounts of regional rainfall, more so than occurs within other proximal areas of the western region of the country which do not share Lake boundaries. Typically, seasonal changes produce "long rains" from March until May and "short rains" from September through November.

Comparatively, Siaya District in the northern Lake region has heavier rains than those experienced in the southern and central districts (Migori District and Homa Bay District respectively) which were included in this study. Rainfall is approximately 1800-2000 mm in the northern highlands and falls to 800-1600 in the lowland areas of the central and south areas of Siaya district. According to the 1994-1996 Homa Bay District Development Report, Homa Bay District receives an average of 250-1000 mm during the long rain season and only 500-700 mm during the short seasonal rains.

Migori District, where seven of the beaches in this study are located, is more arid than either of the other two districts; thus, the more limited farming practices reflect this lack of arable land. Many respondents, including all of those located in the Nyang'wina and Ng'ore beaches of Migori District, report with regard to that area that "There is no farming here" or "We do not farm here."

According to the southern regional Migori District Development Plan:

Rainfall in the district shows considerable variation... The relatively wet agro-ecological zones dominate except near the Lake where the air masses fall again (p. 3, emphasis added).

During the interim drier timeframes, land preparation, e.g. hoeing, for agricultural activity is conducted in all areas where farming is more viable. This farming activity provides the on-going food source for most people. About 50% of the respondents farm two acres of land or less. More than 70% of the respondents report some kind of farming or agricultural activity (see Table 4 and Table 5). An overview of the climates in the particular regions occurs later in this writing.

Table 4 - Number of Female Respondents Who Have Farmland

|                  | Frequency | Percent |
|------------------|-----------|---------|
| Have farmland    | 71        | 71.7    |
| Those who do not | 28        | 28.3    |
| Total            | 99        | 100.0   |

Table 5 - Size of Farms for Female Respondents, All Districts, 1995, Value in Acres

| Acres | Frequency | Percent | Cumulative Percent |
|-------|-----------|---------|--------------------|
| 0     | 28*       | 28.3    | 28.3               |
| 1**   | 28        | 28.3    | 56.6               |
| 2     | 23        | 23.2    | 79.8               |
| 3     | 7         | 7.1     | 86.9               |
| 4     | 8         | 8.1     | 94.9               |
| 5     | 2         | 2.0     | 97.0               |
| 6     | 2         | 2.0     | 99.0               |
| 11    | 1         | 1.0     | 100.0              |
| Total | 99        | 100.0   |                    |
| Mean  | 2.133     | Median  | 2.00               |

<sup>\*=</sup> more than half of those in this non-farming category come from Nya'ngwina Beach which has no arable land close by

More than 90% of women in this study reported owning some type of livestock (see Table 6). This is indicative of respondents' continuing ties to agricultural activity despite lack of access to land as well as purchase of livestock as a common method of savings or investment strategies. As one respondent stated in response to questions regarding savings practices and behaviors: "I do not keep money in accounts [i.e. banks or savings institutions]. I buy cows instead, so if you have a problem, you can go and sell cows instead."

There is an on-going and strong tie between agricultural activity and the fishery both as a food source for beach communities and as a financial resource for start-up and

<sup>\*\*-</sup> any amount of land less than a full acre up to and including 1 acre

on-going fishery work. Reports from respondents reflect this practice. In response to questions regarding funds for start-up costs for their fishery business, livestock sales provide an available and accessible source for those funds. For example, as one respondent stated: "I sold hens that I owned...then my husband sold a goat for me; and I added to what I had and started [my business]." Another stated: "I sold cows to [get money ] to start."

Table 6 - Female Respondents Who Have Animals

|                | Frequency | Percent |
|----------------|-----------|---------|
| Has No Animals | 8         | 8.1     |
| Has Animals    | 91        | 91.9    |
| Total          | 99        | 100.0   |

Of those who practice some level of farming, more than 65% rent land to supplement their farming activities. (See Table 7, Table 8, and Table 9.) Of those who rent, most are renting one acre. However, almost 30% rent two or more acres to accommodate their needs for agriculture and access to land.

Table 7 - Total number of Women Respondents Who Rent Farmland

|             | Frequency | Valid Percent |
|-------------|-----------|---------------|
| Do not rent | 34        | 34.3          |
| Rent        | 65        | 65.7          |
| Total       | 99        | 100.0         |

Table 8 - Number of Acres Respondents Rent for Farming

| Acres Rented | Frequency | Percent | Cumulative Percent |
|--------------|-----------|---------|--------------------|
| 0            | 76        | 76.8    | 76.8               |
| 1            | 16        | 16.2    | 92.9               |
| 2            | 3         | 3.0     | 96.0               |
| 3            | 4         | 4.0     | 100.0              |
| Total        | 99        | 100.0   |                    |

Table 9 - Number of Acres Rented for Respondents Who Rent

| Acres | Frequency |       | Percent | Cumulative<br>Percent |
|-------|-----------|-------|---------|-----------------------|
| 1     | 16        |       | 69.6    | 69.6                  |
| 2     | 3         |       | 13.0    | 82.6                  |
| 3     | 4         |       | 17.4    | 100.0                 |
| Total | 23        |       | 100.0   |                       |
|       | Mean      | 1.478 | Median  | 1.000                 |

This year-round involvement in the Lake and beach communities which is implied by the cyclical agricultural activity in which respondents engage is also reflected in individuals' reports that they have remained in this particular beach area over the last 12 months with minimal migratory movement. More than 75% of all respondents report remaining in the Lake area in which they were interviewed rather then migrating from beach to beach "following the fish." (See Table 10.)

Table 10 - Respondents Who Lived at This Beach for the Past 12 Months

| Lived at Beach | Value | Frequency | Percent       | Cumulative Percent |
|----------------|-------|-----------|---------------|--------------------|
| no             | 1     | 19        | 19.2          | 19.6               |
| yes            | 2     | 78        | 78.8          | 100.0              |
| Total          |       | 99        | 100.0         |                    |
| Valid Cases    |       | 97        | Missing Cases | 2                  |

The seasonally heavy "long rains" which do fall can greatly inhibit travel and access to beach communities, particularly in Migori District. Although seasonal road access can be a problem for all beach sites, it is of particular concern when traveling in the southern region where there is less road development than in other lakeside areas.

Beaches and beach communities can be described as remote and inaccessible to the majority of matatus (transport vehicles ranging from antiquated cars to more functional buses or vans) and ndigni (bicycles).

This is particularly true in the southern-central coastal areas of Kenya's Lake Victoria (Migori District which includes which includes Kibro, Ng'ore, Got Kachola, Nyang'wina, Luanda Konyango, Rasira, and Oodi beaches as well as the heavily traveled Muhuro Bay area). Access roads into these beach communities range in viability from impassable and inaccessible to moderate physical barriers which can be overcome with sustained personal effort and a well-maintained vehicle, to reasonably well-maintained and comparatively easily traversed passage-ways. Maintenance of roads and, in some areas

actual creation, of passage-ways is frequently left to the limited resources and energies of the local inhabitants in these regions.

Migori district is described in the Republic of Kenya's District Development Plan for 1994-1996 (1994) as:

Lake Victoria forms an important feature in the district covering about 45% of the Nyatike Division. It is easily accessible and serves as a source of water for the people around it and their livestock. The large mass of water provides an abundant amount of fish which is important to the economic and social development of the region. However, due to poor roads and poor marketing of this resource, maximum potential has not been exploited.... [additionally] the Lake is inhabited by wild animals like crocodiles and hippos which destroy many crops and human life... (emphasis added, p. 3).

As discussed above, roads and access into each beach differ, and to a greater or lesser extent encourage or inhibit entry of transport vehicles, which range from bicycle riding transporters (*jo ndigni*) to vans or lorries driven by employees of large-scale international fishery enterprises. Respondents from all regions report transportation of fish to market as a significant concern in their economic activity. About 70% report "walking" as their means of transportation to get to market and utilize "self-portering" as the means to transport their product (see Table 11, Table 12, and Table 13). Almost 20% of all respondents utilize multiple methods of transportation to get their fish to their marketplace. Women usually must walk some part of the route and then seek motorized transport. The reasons women select a particular market will be discussed later in this writing.

Table 11 - Respondent's Means of Transport by Single Use of Transportation Only

| Means of Transport        | Frequency | Percent | Cumulative Percent |
|---------------------------|-----------|---------|--------------------|
| walked (1)                | 72        | 72.7    | 88.9               |
| bicycle (2)               | 1         | 1.0     | 90.1               |
| bus, matutu (3)           | 2         | 2.0     | 92.6               |
| transport boat (4)        | 2         | 2.0     | 95.1               |
| lorry, van, pickup<br>(5) | 1         | 1.0     | 96.3               |
| bicycle transporters (9)  | 1         | 1.0     | 97.5               |
| Total                     | 79        |         |                    |

Table 12 - Respondent's Use of Multiple Means of Transportation

| Type of Transport* | Frequency | Percent |
|--------------------|-----------|---------|
| 1,2                | 1         | 5.8     |
| 1,3                | 7         | 41.1    |
| 1,4                | 3         | 17.6    |
| 1,9                | 1         | 5.8     |
| 3,4                | 2         | 11.7    |
| 1,2,3              | 1         | 5.8     |
| 1,2,5              | 1         | 5.8     |
| 1,3,4              | 1         | 5.8     |
| Total              | 17        | 99.47   |

Walk = 1; Bicycle = 2; Bus, matutu (multiple passenger taxi) = 3; Transport boat = 4; Lorry, van, pick-up = 5; Bicycle transporters = 9

Table 13 - All Respondents Who Report Walking as Some Part of Transport

|               | Frequency | Percent |
|---------------|-----------|---------|
| walking       | 73        | 73.7    |
| No<br>walking | 26        | 26.3    |
| Total         | 99        | 100.0   |

Although more than 50% of all respondents indicate that they live within 15 minutes of their sale site, of those who live more than 15 minutes from their sale site or marketplace, more than 80% report more than 40 minutes of travel time. Almost 70%

<sup>\*</sup> More than one number reflects a combination of transportation methods.

report at least 90 minutes or more of travel time needed to get to market (see Table 14 and Table 15).

Table 14 - Amount of Time Respondent Needs to Travel to Her Primary Market Location

| Time          | Frequency | Percent | Cumulative Percent |
|---------------|-----------|---------|--------------------|
| 2-5 minutes   | 53        | 53.6    | 53.5               |
| 12-20 minutes | 61        | 6.0     | 59.6               |
| 30-60 minutes | 11        | 11.1    | 70.7               |
| 2 hours       | 7         | 7.1     | 77.8               |
| 3-4 hours     | 11        | 11.1    | 88.9               |
| 5-6 hours     | 6         | 6.0     | 94.9               |
| 7-24 hours    | 5         | 5.0     | 99.0               |
| Total         | 99        | 100.0   |                    |
|               | Mean      | 106.00* |                    |
|               | Median    | 5.00    |                    |
|               | Mode      | 2.00    |                    |

<sup>\*</sup>time is represented in minutes

Table 15 - Respondents Who Travel More Than 15 Minutes to Market

| Minutes      | Number of Respondents | Percent | Cumulative Percent |
|--------------|-----------------------|---------|--------------------|
| 20-45        | 7                     | 16.7    | 16.7               |
| 60-90        | 65                    | 14.3    | 31.0               |
| 120          | 7                     | 16.7    | 47.6               |
| 180-240      | 11                    | 26.2    | 73.8               |
| 300-420      | 7                     | 16.7    | 90.5               |
| 540-<br>1600 | 4                     | 9.6     | 100.0              |
| Total        | 42                    | 100.0   |                    |
|              | Mean = 4 hours        |         |                    |
|              | Median = 3 hours      |         |                    |
|              | Mode = 2 hours        |         |                    |

### **Ethnicity**

The majority (almost 83%) of the inhabitants in the beach communities of Lake Victoria are Luo people (*JoLuo*) in historical origin and self-identify as such (see Table 16). A few of the other inhabitants identify as Luhiya (about 6%), a north and western group who have not traditionally engaged in the fishery but who historically have been agriculturally focused. A very few are from bordering areas of Uganda in the north and Tanzania in the southern-most Lake regions. Of particular interest (and worth continued social science attention) are the BaSuba group. At the time of this research conducted in 1995, this group was found only in the southern region and in the southern beach communities, especially in the Muhuro Bay area. As was discussed earlier, the re-

identifying and naming of this group peaked in May of 1995 following violence which occurred in the previous month. This self-identified group totals about 6% of the respondents (see Table 16 also).

Table 16 - Respondent's Ethnic Identification

| Ethnic Group   | Frequency | Percent | Cumulative Percent |
|----------------|-----------|---------|--------------------|
| Luo            | 81        | 81.8    | 82.7               |
| Luhiya         | 6         | 6.1     | 88.8               |
| Tazanian       | 2         | 2.0     | 90.8               |
| BaSuba         | 6         | 6.1     | 96.9               |
| Luo/Basuba mix | 3         | 3.0     | 100.0              |
| Missing        | 1         | 1.0     |                    |
| Total          | 99        | 100.0   |                    |

This ethnic group, the BaSuba who have only recently been recognized by the national government, clashed violently with the other inhabitants of the area (in particular, the JoLuo) during March and April 1995 in a struggle for increased political power and ownership and access to meager geographic resources. Traditionally, this group has self-identified as JoLuo and has shared both tradition, history, and language with the Luo people. There seems to be no readily identifiable language of the BaSuba people which would serve to further codify their cultural claim. Although one regional respondent who identifies his own lineage as BaSuba in origin stated; "[We are] just starting a written Suba language. It wasn't there before." Others, who identify themselves as BaSuba, go farther and acknowledge that there is not yet developed a spoken language either.

Most regional inhabitants consider the recent change in this self-identification from JoLuo to BaSuba to be more reflective of political disruption with the onset of elections than of substantive change in socio-cultural lifestyle or practices. However, the political disruption, geographic and land contestation, and social unrest which has resulted from this clash creates additional social dynamics and challenges for all within the region to surmount.

#### The Gendered World of the Lake

Articulating the overriding problematic of socio-economic dynamics women encounter offers a useful and critical direction in order to build a picture of women's work and their world within the fishery. Areas which command the time and attention of women, but are not limited to and not necessarily in the order of priority, include: farming and gardening, childcare, attending to the illness of household members, cooking, obtaining food, obtaining water, mending and washing clothes, acquisition of clothes for children, cleaning of household and immediate external spatial environs as well as attending to their economic activity of product acquisition and sales.

Women's lives are hard and extremely demanding. Their lives are much harder than males whose lives can also be also fraught with challenge. Although males rarely, if at all, assume the duties of their female counterparts, women frequently undertake duties reserved for men. For example, men rarely, if ever, cook for their family. That task is reserved for females, including girl children. However, the task of cattle herding which usually is the province of men or boys often will be undertaken by women in addition to

their household duties and responsibilities. It is not unusual to find women engaged in this task of cattle herding.

A 1991 Government of Kenya/UNICEF (GOK/UN) study concluded that: "In general, a man works for 8 hours a day as compared to women who work for an average of 15 hours per day" (p. 8). These findings suggest that women are likely to work at least twice as long a male on a given day. The GOK/UN study only references household activities and does not account for economic activity which must also be accomplished if a women is to survive and to insure her children's survival. Other studies support these inequities in labor time demanded of women in their daily responsibilities as compared to men in their daily responsibilities (e.g. King, 1996; House-Midamba, in House-Midamba and Ekechi, eds., 1995; Whitehead, in Adepoju and Oppong, 1994). Miller and Yeager (1994) state:

Women serve as the chief productive force in the local economies of rural Kenya, and [there are] gross disparities in female versus male labor contributions...

Women perform most routine farm chores, including the arduous tasks of hoeing and weeding. They are also held responsible for gathering firewood and water, sometimes from considerable distances; for managing the household hearth; for tending babies, children, and the elderly; and for carrying planting materials and harvested crops to and from the family *shambas* (production fields) (p. 82).

Findings from this present study also demonstrate the contention that women's time and their use of time reflects more extensive social demands than those placed upon males.

## Women's Entry Into Beach Communities

When women enter a beach with the hope of securing a livelihood for themselves and their families, they may not always be welcomed. The resources are frequently thinly

spread among the inhabitants who are already present. If one has no family or relatives within that social system, entry into the economic activity and into the social situation is even more difficult. The importance of regional connections manifested by family ties cannot be overstated. With the simple question which follows almost immediately after the greeting: in myar kanye? (whose daughter are you?), the significance of one's lineage/kinship and cultural ties is readily apparent. One's response to the question of one's lineage is significant to one's future social relations in that community; so the response of "an nyar (one inserts the name of a specific location)" - "I am the daughter of a particular geographic region" cannot be overstated.

Following disclosure of the general region from which one hails, the specificity of the location within that region is sought. Then begins the recitation of one's relatives in that area under discussion. Following that disclosure, the search for commonality of extended relations between one who seeks entry into the community and the questioners is begun. If fortunate, it may be that the questioner can identify an ancestor, perhaps as distant as a great-grandmother who originally came from that area, which then bodes well for the entry seeker.

If a successful connection can be found, a welcome is extended to the stranger seeking entry into the community. If no connections are identified then any welcome, assistance, or access to area goods and resources is limited or, in some cases, totally withheld. One woman stated that coming into her present southern beach community after the death of her husband in the north, following the confiscation of all of her farm lands by the dead husband's other sons and her own lack of children, made it extremely

difficult to find acceptance in any community because, as she put it, what had she brought to contribute to this new community, "...nothing, no children, no wealth, nothing."

Let me offer a personal example of this experience. At a beach which I had investigated early in my research, there was a fair amount of resistance to our entry.

Usually upon entry, my colleague from the Kenya Marine and Fisheries Research Institute (KMFRI) and I would meet with the beach leader or local area chief and request that he call a public meeting so that we could present our study goals to the community inhabitants. At Honge, a mainly *omena* (sardine) fishery, area leaders and residents were resistant to discussion with us. They were "too busy" and had recently been harassed by the intervention of "police officials" and "fishery department officials." They were therefore reluctant, at best, and unwilling, at worst, to even let us speak with them. Many were concerned that we had come to "fine" them or collect "fees" which had been the intent of the prior "officials" who had come to Honge.

Because the requisite greetings must be proffered, I was able to respond to "in nyar kanye?" with "an nyar USA." As the specificity of my regional connections was determined (in kanye? - you are from where in that area?), beach inhabitants ascertained that I was "Black American," (African American, I insisted). One male listener became excited and insisted I had a sister-in-law (inuri - your sister-in-law) right there on this beach. Most who are able to gather when a visitor appears in the village community are males or boys who have leisure time as opposed to females who have extremely limited "free" time. Discussion of this phenomenon will be considered later in this writing.

I, in my inimical "American" fashion, was too pre-occupied with accomplishing my own goal of entry into this beach to find that information anything more than distracting. Furthermore, I considered the man to be both misguided and factually wrong. Luckily, either my attitude was not too obviously insulting or this very generous man had the grace to ignore me. He raced off to find the woman, my "alleged" sister-in-law, and promptly returned with her.

Indeed, it became clear that *Imura* (my sister-in-law) had a brother who had married an African American woman, and he now lived in the United States. In fact, he and his wife (my sister, my African American sister) were to come for a visit to the *dhala* (the birthplace or "home", one's real home as opposed to the place one may be staying for some period, which is referenced as "ot") in the next two weeks. Because of the significance of this "relative" connection and the implied obligations of social relations, my KMFRI colleague and I were allowed to make a presentation to the beach community and village inhabitants as a group. Later I was permitted and actively encouraged to individually interview and talk with area residents.

Despite my sister-in-law's incredibly busy and time-consuming schedule, she was certain to greet me and check on me several times each day and to ensure that inhabitants were assisting me in all the ways that I needed. Because of my own social location and goal-oriented nature, I would have continued working and interviewing right through meals. *Inura*, who would never give me any name but that, would appear at meal times and insist on taking me to be fed. I was part of her family, and I must be looked after until I could sufficiently "care for myself."

I was fortunate to be discovered and claimed by *Imura*, "my sister-in-law." Women who enter beaches without resources and cannot claim those familial social relations are often without hope for establishing a successful living situation. Without familial ties or resources, they must move on to seek a more receptive environment. As discussed earlier in the review of the literature section of this writing, the significance of communal social relations, whether imputed or based on actual lineage, is critical to functioning within a community and cannot be ignored.

# Demographic Profile: Age, Children, Education

The mean age for woman participants is 35 (see Table 17). More than 55% of the women participants have four or more children whom she has birthed, who are currently living, and for whom they provide some amount of care (see Table 18). More than 10 % of the women have seven or more children whom they have birthed, who are currently living and for whom they provide some amount of care. More than 73% of the respondents report that they are presently caring for 4 or more children (see Table 19).

Table 17 - Age of Respondents (Females)

| Age          | Frequency | Percent | Cumulative Percent |
|--------------|-----------|---------|--------------------|
| 16 - 20      | 3         | 3.0     | 3.2                |
| 21 - 25      | 12        | 12.1    | 15.8               |
| 26 - 30      | 24        | 24.2    | 41.1               |
| 31 - 35      | 14        | 14.1    | 55.8               |
| 36 - 40      | 17        | 17.2    | 73.7               |
| 41 - 45      | 10        | 10.0    | 84.2               |
| 46 - 50      | 7         | 7.7     | 91.6               |
| 52 - 55      | 2         | 2.0     | 93.7               |
| 59 - 67      | 6         | 6.6     | 98.9               |
| Doesn't Know | 4         | 4.0     |                    |
| Total        | 99        | 100.0   |                    |
| Mean         | 35.5      | Median  | 35                 |

Table 18 - Number of Respondent's Children Who Are Currently Living

| Number of Children             | Frequency | Percent | Cumulative Percent |  |
|--------------------------------|-----------|---------|--------------------|--|
| 0                              | 6         | 6.1     | 6.3                |  |
| 1                              | 6         | 6.1     | 12.5               |  |
| 2                              | 8         | 8.1     | 20.8               |  |
| 3                              | 21        | 21.2    | 42.7               |  |
| 4                              | 13        | 13.1    | 56.3               |  |
| 5                              | 17        | 17.2    | 74.0               |  |
| 6                              | 13        | 13.1    | 87.5               |  |
| 7                              | 4         | 4.0     | 91.7               |  |
| 8                              | 5         | 5.1     | 96.9               |  |
| 9                              | 2         | 2.0     | 99.0               |  |
| 10                             | 1         | 1.0     | 100.0              |  |
| Valid cases 96 Missing cases 3 |           |         |                    |  |
| Mean 4.125 Median 4.000        |           |         |                    |  |

Table 19 - Total Number of Children Respondent Currently Supports

| Number of Children | Frequency | Percent | Cumulative Percent |
|--------------------|-----------|---------|--------------------|
| 0                  | 1         | 1.0     | 1.0                |
| 1                  | 7         | 7.1     | 8.2                |
| 2                  | 3         | 3.0     | 11.2               |
| 3                  | 15        | 15.2    | 26.5               |
| 4 .                | 21        | 21.2    | 48.0               |
| 5                  | 15        | 15.2    | 63.3               |
| 6                  | 7         | 7.1     | 70.4               |
| 7                  | 6         | 6.1     | 76.5               |
| 8                  | 10        | 10.1    | 86.7               |
| 9                  | 4         | 4.0     | 90.8               |
| 10                 | 5         | 5.1     | 95.9               |
| 11                 | 2         | 2.0     | 98.0               |
| 12                 | 1         | 1.0     | 99.0               |
| 14                 | 1         | 1.0     | 100.0              |
| Mean 5.255         |           | Median  | 5.000              |

Additionally, women respondents report providing care or support for children whom they did not birth. Care of relatives and extended family is expected within African culture in general and among the JoLuo, in particular, it is the cultural and behavioral norm. These children are frequently the progeny of deceased relatives or deceased co-wives. More than 50% of women participants report providing care for at least one child whom they did not birth (see Table 20).

Table 20- Number of Children for Whom Respondent Provides Care But Whom She Did Not Birth

| Number of Children | Frequency | Percent | Cumulative Percent |
|--------------------|-----------|---------|--------------------|
| 0                  | 43        | 43.4    | 51.0               |
| 1                  | 11        | 11.1    | 62.5               |
| 2                  | 17        | 17.2    | 80.2               |
| 3                  | 5         | 5.1     | 85.4               |
| 4                  | 6         | 6.1     | 91.7               |
| 5                  | 3         | 3.0     | 94.8               |
| 6                  | 3         | 3.0     | 97.9               |
| 8                  | 2         | 2.0     | 100.0              |
| Missing 3          | 3         |         |                    |
| Total 9            | 9         | 100.0   |                    |
| Mean 1.198         |           |         |                    |

## A Case of Childcare Responsibilities

The following case summary provides a narrative of a representative woman's experience. Three years ago after her husband died, Adhiambo came to Ng'ore Beach. (This is not her real name, but one which means "daughter of the evening." Luo names, such as this, generally reflect a feature significant to one's birth.) She was 35 years old and had children. At the time of this interview she has a total of 9 children, at least one of whom was not birthed by her, but for whom she provides daily care. Additionally, she considers herself to be solely responsible for providing food for the 11 people who eat at her table on a regular basis.

More than 65% of women respondents report the age of the youngest child they support as five or less (See summary of this data in Table 21; for expanded data table, see Appendix E.) Almost 50% of respondents state that the youngest child is aged three or younger; and, 10% report having at least one child who is less than one year in age.

Almost 70% of women state that their youngest child is age six or less. In the Kenyan school system, children are not considered school age until they are at least six years old. This school age-criterion combined with the child age-level data of this study suggest that the majority of children can be considered to be still within the household on a daily basis and in a high need and dependency state.

Over 15% of all respondents report that their oldest child is only nine years of age or younger (see Table 22). The oldest child of more than 21% of the respondents is reported as 10 or younger. For many women (almost 56%), the age of the oldest child for whom they provide support is reported as 15 or younger. And, over 74% report their oldest child as 18 or younger.

Table 21 - Age of Youngest Child Whom Respondent Supports (Whether Birthed or Not)\*

| Age                     | Frequency | Percent | Cumulative Percent |
|-------------------------|-----------|---------|--------------------|
| 0 - 1                   | 20        | 20.2    | 22.2               |
| 2 - 4                   | 36        | 30.4    | 62.6               |
| 5 - 9                   | 21        | 21.3    | 85.6               |
| 10 - 15                 | 8         | 8.0     | 94.4               |
| 19 - 32                 | 5         | 5.0     | 100.0              |
| Doesn't know            | 9         | 9.1     |                    |
| Mean 5.156 Median 3.500 |           |         |                    |

<sup>\*</sup> See Appendix E for a complete table of this data.

Table 22 - Age of Oldest Child for Whom Respondent Provides Regular Care (Summary Table)\*

| Age          | Frequency | Percent       | Cumulative Percent |
|--------------|-----------|---------------|--------------------|
| 1-6          | 11        | 10.0          | 10.5               |
| 7 - 10       | 10        | 10.1          | 21.1               |
| 11 - 14      | 21        | 21.2          | 43.2               |
| 15 - 18      | 30        | 30.3          | 74.7               |
| 20 - 23      | 6         | 6.0           | 82.1               |
| 24 - 28      | 10        | 10.0          | 92.6               |
| 30 - 48      | 6         | 6.0           | 98.9               |
| Doesn't Know | 5         | 5.0           | 100.0              |
| Mean 16.716  |           | Median 15.000 |                    |

See Appendix E for a complete table of this data.

The number of dependents within a woman's household is routinely high (see Table 23).

Further, the ability of those dependents to contribute to the household is frequently not as pronounced as the need for care they represent.

Table 23 - Number of People Eating in Respondent's Household on a Daily Basis\*

| Number Eating | Frequency | Percent | Cumulative<br>Percent |
|---------------|-----------|---------|-----------------------|
| 1 - 4         | 8         | 8.1     | 8.3                   |
| 5 - 7         | 36        | 36.3    | 45.8                  |
| 8 - 10        | 32        | 32.3    | 79.2                  |
| 11-21         | 20        | 20.2    | 100.0                 |
| Mean          | 8.156     | Median  | 8.000                 |

<sup>\*</sup> See Appendix E for a complete table for this data.

Therefore, the data suggest that, in addition to accomplishing their economic activity, women must accommodate the labor-intensive care for the children to whom they provide primary support. This implies that many women have children who must either accompany them as they engage in their economic activity or for whom care must be otherwise provided. The amount, level, and type of dependent child care which a woman in the fishery community must plan into her work day can be quite demanding given the age and needs of her children because depending on the child's age, the needs of her children can be quite consuming. A discussion of women's responses to childcare needs and the development of particular childcare strategies is presented later.

Although the mean time women have been married is almost 18 years (see Table 24. For more detailed data, see Table 24a in Appendix E.), almost 1/3 of all respondents

report that they are not living with their husbands (see Table 25). However, only 7% state that they are divorced or separated. The other 25% report that their husbands are deceased. This finding corroborates Yongo (1993) whose findings suggested that almost 1/3 of beach community households are female-headed.

Table 24 - Number of Years Respondent Has Been Married (Summary)\*

| Years Married      | Frequency | Percent | Cumulative Percent |
|--------------------|-----------|---------|--------------------|
| 1-2 years          | 2         | 2.0     | 2.1                |
| 3-4 years          | 4         | 4.0     | 6.2                |
| 5-9 years          | 17        | 17.2    | 23.7               |
| 10-14 years        | 23        | 23.2    | 47.4               |
| more than 15 years | 51        | 51.5    | 100.0              |
| Total              | 99        | 100.0   |                    |
| Mean               | 17.978    | Median  | 16.000             |

<sup>\*</sup>See Appendix E for a complete table of this data.

Table 25 - (Women) Respondent Considers Self to be Sharing Household with Spouse

| Label              | Frequency | Percent | Cumulative Percent |
|--------------------|-----------|---------|--------------------|
| unmarried          | 1         | 1.0     | 1.1                |
| Not Living<br>With | 7         | 7.1     | 8.4                |
| Living With        | 62        | 62.6    | 73.7               |
| Spouse deceased    | 25        | 25.3    | 99.0               |

Many women living and working on the beach do not reside in the same geographic location as their husbands. Women may reside separately from their husbands for particular lengths of time as they conduct their economic activity. Those in the *omena* fishery frequently spend the two weeks of intense monthly *omena* work living on the particular beach where they buy and process their fish because *omena* fish are caught during the "dark phase of the moon." In the off weeks when *omena* fish are not available to be caught, some women will travel back to their homes.

Other women in the fishery live separated from their husbands for extended periods of time. They may live separately for the majority of time. That is, they live on their own with little support or contributions expected or received from their husbands. Their husbands, who frequently live elsewhere, are usually reported as having another wife. Therefore, it is reasonable to surmise that the number of women who are solely dependent upon themselves for economic and food security is actually greater than the 30% suggested by Yongo (1993) or by the data presented in this study.

The average age of a woman's husband is just over 46 years of age (see Table 26). Given women's average of 37 years (see Table 27), there is a 9 year age difference in these spousal sets. Summary data suggest that over 10% of all husbands are reported as being 60 years or older. Males report the average age of their wife as 31 or less (see Table 28). In fact, over 60% of males state that their wives are less than 35 years of age.

Table 26 - Women Respondent's Report of Husband's Age by Categories (Summary)\*

| Age    | Frequency | Percent | Cumulative Percent |
|--------|-----------|---------|--------------------|
| 25 -35 | 10        | 19.7    | 19.6               |
| 36-45  | 23        | 45.1    | 64.7               |
| 46-50  | 10        | 19.6    | 84.3               |
| 51-55  | 1         | 2.0     | 84.3               |
| 56-88  | 8         | 11.8    | 100                |
| Total  | 51        | 100.0   |                    |
| Mean   | 46.471    | Median  | 45.000             |
| Mode   | 45.000    |         |                    |

<sup>\*</sup>See Appendix E for a complete table of this data.

Table 27 - Women Respondent's Self -report of Age by Categories (Summary)\*

| Age        | Frequency | Percent | Cumulative Percent |
|------------|-----------|---------|--------------------|
| 16-25      | 14        | 14.1    | 14.1               |
| 26 - 30    | 24        | 24.2    | 38.3               |
| 31 - 40    | 31        | 33.3    | 71.6               |
| 41- 50     | 16        | 16.1    | 87.7               |
| 51-70      | 8         | 8.0     | 95.7               |
| Don't Know | 6         | 6.0     | ***                |
| Total      | 99        | ***     |                    |
| Mean       | 37.312    |         |                    |
| Median     | 35.000    |         |                    |
| Mode       | 30.000    |         |                    |

<sup>\*</sup> See Appendix E for a complete table of this data.

<sup>\*\*\*</sup>doesn't add to 100% due to rounding

Table 28 - Male Respondent's Report of Wife's Age (Data for First Wife only)\*

| Age     | Frequency | Percent | Cum<br>Percent |
|---------|-----------|---------|----------------|
| 20 - 25 | 14        | 12.2    | 12.2           |
| 26 - 30 | 10        | 24.4    | 58.5           |
| 31 - 41 | 9         | 21.8    | 80.5           |
| 42 - 70 | 8         | 19.2    | 100.0          |
| Total   | 41        | 100.0   |                |
| Mean    | 32.683    |         |                |
| Median  | 29.000    |         |                |
| Mode    | 20.000    |         |                |

<sup>\*</sup> See Appendix E for a complete table of this data.

More than 35% of all women respondents state that they do not know their husband's age (see Table 29). Comparatively, only just over 12% of males report not knowing their wife's age (see Table 28). Although the data shown in Table 30 reflects men's responses with regard to their first wives, their knowledge of second and third wife's age is also fairly complete. This is another one of the many indicators of the pervasive gendered imbalance of social relations and social practices in these beach communities.

Table 29 - Female Respondent's Who Report Not Knowing Husband's Age

|                                | Freque | ency Percent |
|--------------------------------|--------|--------------|
| doesn't know                   | 35     | 35.4         |
| spouse deceased                | 9      | 9.1          |
| doesn't know & spouse deceased | 4      | 4.0          |

Table 30 - Male Respondent's Report of Wife's Age\*

| Age          | Frequency . | Percent | Cumulative Percent |
|--------------|-------------|---------|--------------------|
| 20 -25       | 14          | 29.2    | 34.1               |
| 26-30        | 10          | 20.9    | 58.5               |
| 31-35        | 5           | 10.5    | 70.7               |
| 36-43        | 6           | 12.6    | 85.4               |
| 52-70        | 6           | 12.6    | 100.0              |
| Doesn't know | 6           | 12.5    |                    |
| Unmarried    | 1           | 2.1     |                    |
| Total        | 48          | 100.0   |                    |
| Mean         | 32.683      |         |                    |
| Median       | 29.000      |         |                    |

<sup>\*</sup> See Appendix E for a complete table of this data.

A similar gendered imbalance in spousal knowledge is apparent in respondents' answers to questions regarding their spouse's educational levels. Males report not knowing their wife's educational level less than 10% of the time (see Table 31). In JoLuo culture, men are socially permitted to have more than one wife at a time. The greater their number of wives, the less the incidence of this failure to know their spouse's educational

level. That is, for second and third wives men report only 4.2% and 3% of the time respectively that they "do not know" in response to questions regarding the educational level of these wives (see Table 32 and Table 33).

Table 31 - Husband's Report of First Wife's Number of Years of Education\*

| Years of Education | Frequency | Percent | Cumulative Percent |
|--------------------|-----------|---------|--------------------|
| 0 - 6              | 17        | 35.6    | 37.0               |
| 7-9                | 14        | 29.2    | 67.4               |
| 10 - 12            | 8         | 16.7    | 84.8               |
| don't know         | 4         | 8.3     | 93.5               |
| deceased           | 3         | 6.3     | 99.8               |
| total              | 46        | 100.0   |                    |

<sup>\*</sup> See Appendix for a complete table of this data.

Table 32 - Husband's Report of Second Wife's Number of Years of Education\*

| Years of Education | Frequency | Percent | Cumulative Percent |
|--------------------|-----------|---------|--------------------|
| 0 - 6              | 9         | 39      | 39.1               |
| 7- 10              | 11        | 47.8    | 87                 |
| Don't know         | 2         | 8.7     | 95.7               |
| Deceased           | 1         | 4.3     | 100.0              |
| Total              | 23**      |         |                    |

<sup>\*</sup> See Appendix E for a complete table of this data.

<sup>\*\*</sup> These data correspond to the 23 of the 45 respondents had more than 1 wife

Table 33 - Husband's Report of Third Wife's Number of Years of Education

| Years of Education | Frequency | Percent | Cumulative Percent |
|--------------------|-----------|---------|--------------------|
| 1                  | 1         | 14.3    | 14.3               |
| 2                  | 1         | 14.3    | 28.6               |
| 7                  | 1         | 14.3    | 42.9               |
| 8                  | 2         | 28.6    | 71.4               |
| 12                 | 1         | 14.3    | 85.7               |
| 99                 | 1         | 14.3    | 100.0              |
| Total*             | 7         | 100.0   |                    |

<sup>\*</sup>Only 7 respondents reported more than 2 wives - educational data was collected on the first 3.

On the other hand, some 20% of women (who are only permitted one husband at a time) report not knowing their husband's educational level (see Table 34). This suggests that males are entitled to, and perhaps expected to have, certain information about their mates or potential mates, while women are generally not encouraged to exercise that same social privilege. Further, I would wonder if the higher educational level of second, third and additional wives provides incentive in the form of status attainment to the males seeking to increase their number of wives. Knowledge of one's spouse, whether educational level or age, appears gender-biased in favor of males and perhaps reflects a fairly well-defined imbalance of gendered social relations.

Table 34 - Women's Report of Spouse's Number of Year of Education\*

| Education  | Frequency | Percent | Cumulative Percent |
|------------|-----------|---------|--------------------|
| 0 - 6      | 30        | 30.4    | 31.3               |
| 7 - 10     | 32        | 32.4    | 64.6               |
| 11- 14     | 14        | 14.1    | 79.2               |
| Don't know | 20        | 20.2    | 100.0              |

<sup>\*</sup>See Appendix E for complete table of this data.

Mean formal educational levels for women is approximately five years of schooling or until age 10 (see Table 35). Comparatively for males, mean formal education is about eight years or until about age 13 (see Table 36). Further, more women than men report "no school" for themselves. The incidence of "no school" for women is about 20% while for men that incidence is about 4%. This is a dramatic comparative gender decrease. This educational imbalance reinforces findings by the Government of Kenya and UNICEF study *Gender and Girl Child Concerns in Kisumu District* which was conducted in a more limited geographic area during 1991.

Table 35 - Education Level for Female Respondents

| Education | Frequency | Percent | Cumulative Percent |
|-----------|-----------|---------|--------------------|
| 0         | 18        | 18.2    | 18.6               |
| 2         | 3         | 3.0     | 21.6               |
| 3         | 6         | 6.1     | 27.8               |
| 4         | 7         | 7.1     | 35.1               |
| 5         | 5         | 5.1     | 40.2               |
| 6         | 13        | 13.1    | 53.6               |
| 7         | 21        | 21.2    | 75.3               |
| 8         | 10        | 10.1    | 85.6               |
| 9         | 5         | 5.1     | 90.7               |
| 10        | 4         | 4.0     | 94.8               |
| 11        | 2         | 2.0     | 96.9               |
| 12        | 3         | 3.0     | 100.0              |
| Missing   | 2         | 2.0     |                    |
| Total     | 99        | 100.0   |                    |
| Mean      | 5.412     |         |                    |

Table 36 - Male Respondent's Educational Level

| Education          | Frequency | Percent | Cumulative Percent |
|--------------------|-----------|---------|--------------------|
| no school          | 2         | 4.2     | 4.2                |
| 2                  | 1         | 2.1     | 6.3                |
| 4                  | 3         | 6.3     | 12.6               |
| 5                  | 3         | 6.3     | 18.9               |
| 6                  | 4         | 8.3     | 27.2               |
| 7                  | 14        | 29.2    | 56.4               |
| 8                  | 4         | 8.3     | 64.7               |
| 9                  | 4         | 8.3     | 73                 |
| 10                 | 2         | 4.2     | 77.2               |
| 11                 | 3         | 6.3     | 83.5               |
| 12                 | 6         | 12.5    | 98.1               |
| Technical training | 1         | 2.1     | ***                |
| some college       | 1         | 2.1     | ***                |
| Total              | 48        | 100.0   |                    |
| Mean               | 8.065     |         |                    |

# A Case Study of Business Start-up

Upon arrival at a beach, a woman must find a living space for herself and her children. The case study description of the woman's life begun above continues.

After Adhiambo came to Ng'ore beach, she "found a man who would let me live in his house." She transported *omena* (a small sardine-like fish sold only in bulk) from the fishing boats to the drying area. For this work of carrying "tins" (approximately 5 gallon

containers) of *omena* on her head, she was paid in a "measure of *omena*" (about a half-quart size container). She would process (dry) and save that *omena*. When one large tin was full, she would take it to the market and sell it. She saved part of that sale money and used it to start her own *omena* trading practice on a larger scale. Eventually she stopped portering and now she simply processes and trades *omena*. Her last purchase was 6,000 Kenya shillings (Ksh) which she later sold at Ksh 9,000. (This amounts to about \$130 USD for her purchase price and about \$200 USD for her sale price.)

This particular woman was successful in both her beach entry strategy and in her start-up of a fishery business. However, inherent in her story are a number of experiences which must be taken in account in order to understand fully both the socially constructed restraints which she had to overcome as well as the on-going environmental and economic challenges which are present in that system. Additionally, the demands of her social role as female with full care and responsibility for the household must be acknowledged and accounted for.

This respondent describes her current situation compared to five years prior much as others do. That is, she states that her life is "rach ahinya," much worse now than it was then. Despite this sincerely truthful self-assessment, this woman is presently in a comparatively more stable and secure situation than many of her fishery colleagues. In fact, this scenario could have easily resulted in much more negative and personally dangerous outcomes. For example, had she not been able to develop a relationship which provided housing for herself and her children, or had she not been able to entry the fishery via portering, or had she not been able to successfully dry the *omena* product and save

funds from her interim sales, she would not have been able to attain this level of success. Part of the focus of this research is to identify what factors aid in more positive outcomes versus negative ones. Additionally, it is important to articulate which of these factors (those which aid in obtaining personal and familial security) are already, or can be, self-defined and implemented by the woman herself to ensure the maximal opportunity for security for a woman and her family.

### Household Responsibility

The responsibility for daily household tasks falls on women. That is, it is women's responsibility to care for the house and insure its daily "re-creation," e.g. provision of food and water, gardening, cleaning, childcare. Although structural maintenance for the roof may be a task which can be relegated to males, essentially the care of the home is the concern of the women. This is particularly true for women who are one of several co-wives (over 55% of these respondents report having at least one co-wife, see Table 37). In the co-wife situation, the male is understood to have several homes and to not always be present to physically invest in the care or maintenance of a particular dwelling. He does retain the right to appear in the household and expects to be provided with care. In this situation, the woman's responsibility for the physical maintenance security of her dwelling can be even more pronounced.

Table 37 - Respondent's Report of Number of Co-wives

| Number of Co-Wives | Frequency | Percent | Cumulative Percent |
|--------------------|-----------|---------|--------------------|
| 0                  | 44        | 44.4    | 44.4               |
| 1                  | 32        | 32.3    | 76.8               |
| 2                  | 13        | 13.1    | 89.9               |
| 3                  | 5         | 5.1     | 94.9               |
| 4                  | 4         | 4.0     | 99.0               |
| 7                  | 1         | 1.0     | 100.0              |
| Total              | 99        | 100.0   |                    |
| Median             | 1.00      |         |                    |

Although almost 50% of women respondents and 23% of male respondents describe themselves as bearing sole responsibility for providing food for their household, it appears that women are more likely to state the presence of someone else (non-spouse) who assists in providing food (see Table 38, Table 39, Table 40, and Table 41). That is, women are more likely than males to acknowledge the household and food contributions of another. This suggests that men are more inclined to "fake good" on their response. That is, it appears that men will more often claim sole responsibility for provisioning food when in fact that is not what they do. Therefore, I conclude, and formal and informal observation seem to support this, that women are more likely to have on-going and sole responsibility for providing food on a regular basis for their families and households.

Table 38 - Women's Report on Spouse Contribution of Food

| Contribution | Frequency | Percent | Cumulative Percent |
|--------------|-----------|---------|--------------------|
| no           | 48        | 48.5    | 48.5               |
| yes          | 51        | 51.5    | 100.0              |
| Total        | 99        | 100.0   |                    |

Table 39 - Men's Report of Wife's Contribution of Food or Money

| Contribution | Frequency | Percent | Cumulative Percent |
|--------------|-----------|---------|--------------------|
| no           | 11        | 22.9    | 23.9               |
| yes          | 35        | 72.9    | 100.0              |
| Missing      | 1         | 2.1     |                    |
| Deceased     | 1         | 2.1     |                    |
| Total        | 48        | 100.0   |                    |

Table 40 - Women's Report on Others' (Not Husband) Contribution of Food or Money

| Contribution | Frequency | Percent | Cumulative Percent |
|--------------|-----------|---------|--------------------|
| no           | 68        | 68.7    | 70.1               |
| yes          | 29        | 29.3    | 100.0              |
| Missing      | 2         | 2.0     |                    |
| Total        | 99        | 100.0   |                    |

Table 41 - Men's Report of Others' Contributions

| Contribution | Frequency | Percent | Cumulative Percent |
|--------------|-----------|---------|--------------------|
| no           | 32        | 66.7    | 68.1               |
| yes          | 15        | 31.3    | 100.0              |
| Missing      | 1         | 2.1     |                    |
| Total        | 48        | 100.0   |                    |

Women respondents' statements also articulate this issue and support the conclusion that women bear primary responsibility for the household:

Women work too much in the house [so their businesses suffer as a result].

Certain husbands, if their wives do business, they will give all the responsibility [of the household] to the wife. When women are working like that, they work hard and then have to go home and still have to work [in the house] and then they get sick.

Husbands fight for money when you come from the market. The husband wants to take the money...

Women have less funds for good business. Women have lots of things to do...have more responsibility than husbands. So even if you have big money, it goes off [is spent] because of children, food etc.

[There are no problems] except when [you are] losing money in business. So [there is] no food and then [you have] household problems [and problems] with [your] husband.

Responsibility of the house [is a major problem for women]. Things are expensive and you have children who are eating.

Women also say that problems are incentives for entering into their SSE and business activity. These problems include: illness of children, school fees, the need for clothes for

children and themselves, and the need for food. All of these issues indicate the primary role women play in maintaining and re-creating their households.

A combined effort by the government of Kenya and UNICEF resulted in the Child Survival and Development Programme. In 1989, this program was to created to "identify and respond" to the needs of women and children. It began in 1991 with a participatory rural assessment in Kenya's Kisumu District which is within the Lake Basin Development Area (LBDA) which borders Lake Victoria. This assessment reveals the demands on women's use of time for household activities compared to men. That study stated: "In all the five sub-locations, it was found that the division of labour, access to and control of benefits and resources favors the male. Female children were also found to be more disadvantaged."

Although this study was limited to one more urbanized area of the LBDA, i.e. around Kisumu which is the third largest city in Kenya, those results of gendered time demands and the inequity of socially-constructed gendered responsibilities are reinforced by the results of the study which I recently conducted. The government of Kenya and UNICEF study found women work an average of 14-16 hours per day. Men work an average of 7-9 hours per day. They conclude that women are "predominately responsible for domestic work." The findings from the present study support those findings particularly with regard to household duties, obligations, and responsibilities with which women must contend.

In the present study, when women were asked about their child care strategies, almost 50% state that they leave their children with a relative who is not their husband or

that they leave the children alone (see Table 42). As one woman stated, "I leave them for God to take care of them." As discussed earlier, more than 50% of respondents have children who are age three or under; 10% are under age one, and 70% of these children are age seven or under (see Table 21). Despite the fact that more than 60% of the participants describe themselves as living with their husbands, only about 7% of the women identify their husbands as caregiver to their children during the woman's absence (see Table 25 and Table 42). Women's co-wives provide childcare about 40% of the time for those with who identify themselves as having childcare needs (see Table 43).

Table 42 - Childcare Strategies and Practices

| Childcare  | Frequency | Percent | Cumulative Percent |
|--|-----------|---------|--------------------|
| no care<br>needed                                      | 21        | 25.6    | 25.6               |
| take them along  | 4         | 4.9     | 30.5               |
| leave with a relative                                  | 38        | 46.3    | 76.8               |
| husband<br>provides care                               | 6         | 7.3     | 84.1               |
| non-relative<br>care (e.g<br>cattle herder<br>watches) | 7         | 8.5     | 92.7               |
| leaves<br>children<br>alone                            | 4         | 3.7     | 97.5               |
| hires<br>someone                                       | 2         | 2.4     | 100.0              |
| Missing  | 17        | 17.1    |                    |
| Total  | 99        |         |                    |

Table 43 - Which Relative Provides Childcare

| Relative                 | Frequency | Percent | Cumulative Percent |
|--------------------------|-----------|---------|--------------------|
| co-wife                  | 15        | 14.1    | 39.4               |
| other<br>family          | 16        | 16.2    | 78.9               |
| other<br>children        | 7         | 7.1     | 100.0              |
| Doe not rely on relative | 61        | 61.6    |                    |
| Total                    | 99        | 100.0   |                    |

The households demands placed on women are extensive and seemingly exhausting. Most frequently, the source for all household water is Lake Victoria itself. Acquisition of water means traversing the distance to the Lake, with children, and returning carrying both children and water. The limited area study conducted by the government of Kenya and UNICEF found that daily water acquisition can take from 30 minutes to 5 hours.

Geographic and spatial factors impact women's lives greatly both in terms of the accomplishment of their household demands and in terms of their economic activities. The terrain of northern, southern, and central regions can vary greatly, from hilly and rocky, to pastoral, to arid and dry. Therefore, the terrain which women must cover in their daily trek to potable water, although it varies dependent upon geographic region around the Lake, can be extremely challenging to cross. The majority (about 93%) of participants in the present study describe themselves as living "on the beach" and from one-half to two

kilometers from the Lake itself (see Table 44 and Table 45). In fact, most people live within one-half kilometer. Despite this seeming proximity, given the spatial and geographic realities, it frequently requires approximately 30 minutes to reach the Lake.

Table 44 - Living Space When Working

| Location               | Frequency | Percent | Cumulative Percent |
|------------------------|-----------|---------|--------------------|
| at this<br>beach       | 93        | 93.9    | 95.9               |
| on<br>another<br>beach | 1         | 1.0     | 96.9               |
| Inland                 | 3         | 3.0     | 100.0              |
| Missing                | 2         | 2.0     |                    |
| Total                  | 99        | 100.0   |                    |

Table 45 - Distance From House to Beach

| Distance      | Frequency | Percent | Cum Percent |
|---------------|-----------|---------|-------------|
| 0 -0.5<br>kms | 85        | 85.8    | 88.6        |
| 1 -2 kms      | 5         | 5.1     | 92.8        |
| 3 -5 kms      | 4         | 4.0     | 96.9        |
| 5 -10<br>kms  | 3         | 3.0     | 100.0       |
| Missing       | 2         | 2.0     |             |
| Total         | 99        | 100.0   |             |

Many respondents stated that transportation is a major problem. Much of the route access is via boulder- and/or rock-strewn passages. They state that if access routes and roads were more easily passed, more and larger buyers would come to the beach and they, the fishery workers, could expand and broaden their customer base. However, due to the frequently impassable nature of many of the roads and the limited access of many of the other routes into the beach community, this customer niche is not available to them. The impact of those impassable routes also indicates the individual difficulty women encounter when traveling from their households to the beach to acquire water as these are the same routes that women must use to accomplish their household tasks of water acquisition and washing of clothes, dishes, and children.

Women must balance demanding household expectations and their critical and essential need to engage in economic exchange in order to provide for their families in creative and practical ways. Women in fishery practices can work at their business activities from as little as one hour to a total of 24 hours during a given day. (Some of the difference in the amount of time required is dependent upon the specific fishery in which the woman engages. For example, women involved in *omena* fishery activity engage in labor intensive activity for a concentrated amount of time during the two week timeframe when *omena* fish are most active.) The average work day for women in the fishery is about nine hours. However, almost 30% work 10 hours per day and about 15% work 12 or more hours per day (see Table 46).

Table 46 - Number of Hours Women Work In Their Fishery Practice Per Day\*

| Hours<br>Worked | Frequency | Percent | Cumulative Percent |
|-----------------|-----------|---------|--------------------|
| 2 - 4           | 10        | 10.4    | 11.5               |
| 5 - 7           | 25        | 25.3    | 40.2               |
| 8 - 12          | 39        | 39.5    | 85.1               |
| 13 - 24         | 13        | 13      | 100.0              |
| Total           | 87        | 100.0   |                    |
| Mean            | 8.966     |         |                    |

<sup>\*</sup>See Appendix E for complete table of this data.

More than 15% of women leave their homes by 4 a.m. each day that they are engaged in their work to begin their economic activity (see Table 47). Over 50% have left their homes by 6 a.m. and, more than 72% have left home by 7 a.m. Over 30% do not leave their market site until after 6 p.m.. Almost 20% do not leave until after 8 p.m. (See Table 48).

Table 47 - Time Women Respondents\* Leave Home\*\*

| Time Leave | Frequency | Percent | Cumulative Percent |
|------------|-----------|---------|--------------------|
| 1 - 5 a.m. | 18        | 18.1    | 21.2               |
| 6 - 9 a.m. | 58        | 58.6    | 89.4               |
| 12 -22     | 9         | 9.0     | 100.0              |
| Total      | 85        | 100.0   |                    |
| Mean       |           | 6.718   |                    |

<sup>\*</sup>data for women working in the fishery only

<sup>\*\*</sup> See Appendix E for complete table of this data.

Table 48 - Time Women Respondents\* Go Home at End of Day\*\*

| 24-hour clock | Frequency | Percent | Cumulative Percent |
|---------------|-----------|---------|--------------------|
| 4-9           | 3         | 3.0     | 3.5                |
| 10 - 13       | 22        | 22.2    | 29.4               |
| 14 - 19       | 42        | 42.4    | 78.8               |
| 20 - 24       | 18        | 18.1    | 100.0              |
| Total         | 85        | 100.0   |                    |
| Mean Time     | 16.435    |         |                    |

<sup>\*</sup>Data is for women in the fishery only

In contrast, men report leaving for their activities with more regularity to their hours. That is, they work a predictable eight- or ten-hour fishing shift. For some men this shift may start as late as 11 a.m. Other fishers may begin work earlier with the coming of the dawn but their fishing work will end in mid-afternoon. Those fishers who follow the *omena* fishery may begin work at night around 10 p.m. and continue until morning (see Table 49, Table 50, and Table 51). In each instance their work time is limited to approximately an eight- or ten-hour shift. As indicated above, women's workshifts are longer.

<sup>\*\*</sup> See Appendix E for complete table of this data.

Table 49 - Number of hours Male Respondents Work\*

| Hours  | Frequency | Percent | Cumulative Percent |
|--------|-----------|---------|--------------------|
| 1-4    | 6         | 12.5    | 14.0               |
| 5 - 7  | 5         | 10.5    | 25.6               |
| 8 - 12 | 27        | 56.3    | 88.4               |
| 13 -17 | 5         | 10.5    | 100.0              |
| Total  | 43        | 100.0   |                    |
| Mean   | 9.140     |         |                    |

<sup>\*</sup> See Appendix E for complete table of this data.

Table 50 - Time Male Respondents Leave Home to Begin Work\*

| 24-Hour Clock | Frequency | Percent | Cumulative Percent |
|---------------|-----------|---------|--------------------|
| 2 - 5         | 8         | 16.7    | 18.6               |
| 6 - 10        | 19        | 39.6    | 62.8               |
| 17 - 23       | 16        | 33.5    | 100.0              |
| Total         | 43        |         |                    |
| Mean          | 11.070    |         |                    |

<sup>\*</sup> See Appendix E for complete table of this data.

Table 51 - Time Male Respondents Go Home at End of Day\*

| 24 hour clock | Frequency | Percent | Cumulative Percent |
|---------------|-----------|---------|--------------------|
| 3 - 8         | 14        | 29.1    | 32.6               |
| 9 - 12        | 10        | 20.9    | 55.8               |
| 14 - 18       | 12        | 14.7    | 83.7               |
| 19 - 24       | 7         | 25.1    | 100.0              |
| Total         | 43        | 100.0   |                    |
| Mean          | 12.581    |         |                    |

<sup>\*</sup> See Appendix E for complete table of this data.

How women integrate the time-consuming demands of their households duties and the essential economic activities in which they must engage provides initial insight into their well-developed strategies for economic and social survival. Men, whose household duties are not as consuming, have less of a need to create viable strategies for integrating household duties into their social relations.

As discussed above, women will respond to their childcare needs by: leaving the children alone, having an older sibling provide the care for the younger siblings, or taking the children along with them to the fishery and market site. As stated earlier, some women leave the children in the care of a family member. Frequently, women use their ties with their co-wives to accomplish these childcare needs. Almost 70% of the women report at least one co-wife. Of those who report having at least one co-wife, almost half do not share any household tasks. However, for those women who do share tasks, more women report sharing childcare responsibilities with their co-wives than any other activity

(see Table 52). 52% of the respondents shared childcare with their co-wives while only 34% share cooking (See Table 53). Even fewer (25%) farm together (see Table 54).

Table 52 - Respondent Shares Childcare with Co-wives

|       | Frequency | Percent | Cumulative Percent |
|-------|-----------|---------|--------------------|
| no    | 26        | 26.3    | 47.3               |
| yes   | 29        | 29.3    | 100.0              |
| Total | 55        | 100.0   |                    |

Table 53 - Respondent Cooks with Co-wives

|       | Frequency | Percent | Cumulative Percent |
|-------|-----------|---------|--------------------|
| no    | 36        | 36.4    | 65.5               |
| yes   | 19        | 19.2    | 100.0              |
| Total | 55        | 100.0   |                    |

Table 54 - Respondent Farms with Co-wives

|       | Frequency | Percent | Cum Percent |
|-------|-----------|---------|-------------|
| no    | 40        | 40.4    | 74.1        |
| yes   | 14        | 14.1    | 100.0       |
| Total | 54        | 100.0   |             |

The World Economic System - Its Intersection with Fishery Women

Few of the respondents, male or female, acknowledge the role or the impact of large international or *mizungu* (foreign) traders and factories on their economic activity.

More than 1/3 state that they do not have any business competition (see Table 55). Of the more than 58% who do acknowledge having some business competition, most respond that only those who are in the same MSE as the respondent represent their competition (see Table 56). That is, they usually respond "jo ohala mamoko kaka in" or "those who are small like me are my competition." Although not pertinent to the present writing, it is of interest to note that men respondents who are fishers also do not have a sense of the larger international market in which they operate and the impact which that international economy has on their local beach activity. The impact of foreign marketers on local fishery trade has been discussed earlier in this writing. Many involved in the fishery at the local beach level have little or no awareness of the impact of the larger world economy on their economic activity.

Table 55 - Does Women Respondent Identify Any Business Competition

|       | Frequency | Percent | Cumulative Percent |
|-------|-----------|---------|--------------------|
| yes   | 50        | 50.5    | 58.8               |
| no    | 35        | 35.4    | 100.0              |
| Total | 85        |         |                    |

Table 56 - Women Respondents' Identification of Business Competitors

| Type of Competition | Frequency | Percent | Cumulative Percent |
|---------------------|-----------|---------|--------------------|
| MSE/SSE (1)         | 39        | 79.6    | 79.6               |
| large traders (2)   | 8         | 16.3    | 95.9               |
| Men traders         | 1         | 2.0     | 98.0               |
| Both 1 and 2        | 1         | 2.0     | 100.0              |
| Total               | 49        | 100.0   |                    |

One overt way in which the international or world economic system begins to impact market women is via price setting. When asked about how they determine their selling prices, those whose economic activity is limited to the immediate beach area, generally respond that this price is set by the large factory representatives, sometimes in concert with beach cooperative officials. Whether the interest of the marketers is served in these negotiations is not proven and highly suspect. Respondents state:

<sup>&</sup>quot;The factories make the prices with the fishers"

<sup>&</sup>quot;It is difficult to take for your labor. Because the price is general price for that day and you can't put your own price"

<sup>&</sup>quot;[We are] given prices by the vans. We can try to negotiate it up but usually we just accept their price."

<sup>&</sup>quot;[The] prices are set by companies who come to the Beach, Asians [Indians], and mizungus [whites or foreigners]."

<sup>&</sup>quot;Here at the beach, [you] sell cheap but in the market [in town, you] have to add in transport and other costs." [emphasis added]

<sup>&</sup>quot;People who buy the fish, don't tell us the truth about the price. So that is why the price goes up and down. The Asians [Indians] are doing this."

From these responses, it appears that women whose selling is confined to a single beach location are less likely to have the economic flexibility to negotiate a better price or include a profit for themselves. This suggests that those who travel to other sites to sell their product fare better with regard to pricing outcomes. However, a review of spatial/geographic setting and requisite travel time may suggest otherwise with regard to the viability of such geographic expansion. That is, the mean travel time for all women respondents to their place of sale is 106 minutes (see Table 57 which reflects summary data from Table 14). If those women who travel 15 minutes or less are excluded from the analysis, that average travel time to their market site increases to more than 4 hours (see Table 58 which reflects summary data from Table 15). More than 83% of male respondents in the fishery, on the other hand, report living within 10 minutes walking distance from where their work is located (see Table 59). (This disparity in distances reflects fishers living within close proximity to their source of fish. Women also live close to the source of fish, i.e. Lake Victoria. However, women must travel to reach their points of sale. However, the clients of fishers come to the beaches. So travel is not required for fishers who are male.) Therefore, although a potential solution for women to the fixed pricing imposed by international interests is suggested by travel to other sales sites, it can be somewhat prohibitive for a marketer to geographically expand her sales or to compete for additional market shares via an expanded geographic arena simply due to the amount of time required to travel to additional marketing sites.

Table 57 - Travel time to market for all Women Respondents

| Mean   | 106.00 |
|--------|--------|
| Median | 5.00   |
| Mode   | 2.00   |
| Total  | 99     |

Table 58 - Women Respondents' Travel Time to Market - (more than 15 minutes)

| Mean   | 244.833 |  |
|--------|---------|--|
| Median | 180.000 |  |
| Mode   | 120.000 |  |
| Total  | 42      |  |

Table 59 - Male Respondents Time from Home to Beach - (men in fishery only)

| Minutes  | Frequency | Percent | Cumulative Percent |
|----------|-----------|---------|--------------------|
| 0        | 13        | 27.1    | 31                 |
| 2        | 1         | 2.1     | 33.4               |
| 3        | 2         | 4.2     | 338.1              |
| 5        | 16        | 33.3    | 776.2              |
| 10       | 3         | 6.3     | 83.4               |
| 20       | 1         | 2.1     | 85.7               |
| 25       | 1         | 2.1     | 88.1               |
| 30       | 5         | 10.4    | 100.0              |
| Missing* | 5         | 10.4    |                    |
| Total    | 48        | 100.0   |                    |
| Mean     | 11.024    |         |                    |
| Median   | 5.000     |         |                    |
| Mode     | 5.000     |         |                    |

<sup>\*=</sup> Male respondents who are retired, not working or not working in the fishery

# **Problems and Strategies**

# Introduction

Women employ a variety of strategies to accomplish the multiple responsibilities of their daily lives. The roles they perform are varied and frequently overlap with regard to time constraints. For example, it is not unusual to find that women must take their infants or young children along with them as they accomplish their market activities. Additionally, it is not unusual for slightly older children to bear responsibility for watching their only slightly younger siblings.

However, childcare is only one example of the demands women must satisfy in order to go about their economic lives. The integration of household responsibilities, economic and market activity, and the societally defined constrictions of gender present constant social and economic challenges which women must overcome if they are to function successfully in their world. In this next section, I will present a summary of the problems which respondents articulated and the problems which remain unarticulated by respondents but which are readily apparent to external observers. This will be followed by a discussion of the particular strategies and strategy types which are employed and/or created by women as they meet the continuing demands of their lives in the fishery.

#### **Problems**

As presented above, women encounter many challenges to their physical security as they go about their daily lives. This results in their need to find food, provide childcare, and maintain their household and shelter. Some women engage in economic activity to contribute to the overall household economic activity. As one respondent stated in answer to the question of why she entered business, "Responsibility for the house cannot be borne by one person alone." Another woman stated, "If both [husband and wife] are in money-making activity, [this] would help each other very well." However, other women find themselves in the position of needing to bear sole responsibility for providing for themselves and their children. Typically, respondents in this situation stated, "[I] had problems...[my] husband's money was not enough." He had 5 other wives.

[My] husband had 4 other wives, [there was] no way to get food. I am the fifth wife and others all have children so there are many people to feed. So I started this business. Since [the number of] wives kept getting bigger and to depend on

farming, that is only once a year. And then there may be a bad crop so problems get worse. Finally... [I] got into business to get food for my family.

Another respondent stated, "[I] had problems after my husband died, [my] child was sick, [my] husband was dead, so [I] started in business to help myself." Or, as another woman stated "When husband died, there was no one to look after me."

Women who are solely responsible for their well-being frequently turn to business as a way to provide care for themselves and their families. As one woman stated, "I had children and was not educated to go and look for a job anywhere so I said I should start a business." And finally despite the presence of a husband, a woman may still find herself with sole responsible for the care of her family. One respondent stated the problem of many women when she stated, "Sitting down was no good for me, and my husband was doing nothing."

Women on their own offer these reasons and explanations for entering the economic world of the beach community. These sentiments provide a fairly stark picture of the reality women face and the necessity which directs their economic activity as well as the construction and maintenance of their social relations.

### Strategies

Given the complexity of social, environmental, economic, and gendered life barriers and concerns which women must address and ultimately overcome, the breadth and depth of the spectrum of strategies they must construct, knowingly or unknowingly, can be staggering. Women encounter a range of problems and must respond with some kind of action, (which may or may not be articulated), to ensure their own and their

children's survival. As discussed earlier, the litany of problems can include the following: childcare; food needs; water acquisition; acquisition of a product, i.e., fish to sell; a need for business advice or business training; start-up funds; daily funds; establishing a continuing source for loan; interruption of their fishery work, due to climatic disruptions of drought or usual weather cycles; housing needs; travel to places to purchase product and travel to places where they sell their product; access and road transportation into their market place; initial entry into fish trade; income activity during slow season; finding "customers" (regular, steady, loyal buyers) to whom to sell; obtaining a source of business capital; identifying business competition; including a charge for their labor or not; including a profit or not.

Obviously, these concerns are listed in no particular order and are not to be understood as being presented in their entirety. They are simply provided to give the reader a sense of the range of issues which women in the fishery encounter and which they ultimately must address. The "strategies" women effect are not necessarily articulated as such. The responses women undertake are designed to simply attend to the problem at hand. However, it seems good social science sense to attempt to identify patterns of need within women's lives as well as the solutions women create.

### Identification of Categories of Respondents' Problems and Strategies

The individual interviews and observations (156 interviews of females and males which lasted approximately 60 to 90 minutes at 17 beaches) which I conducted can be summarized across respondents and condensed into categorization of life barriers and/or business challenges. (The research instruments are located in Appendix B, Appendix C,

and Appendix D.) Subsequently, I have constructed the following life and socio-economic or business typologies which codify the challenges women beach community encounter and to which they must respond. These typologies embrace the spectrum of needs women encounter and can be summarized as follows. Women in the fishery must develop strategies for:

- 1. acquisition of money;
- 2. childcare, which includes in times of crisis or illness as well as regular daily care;
- 3. obtaining food for self and dependents;
- 4. obtaining commodity to sell;
- 5. beginning/maintaining a successful business; (For most beach community inhabitants, whether men and women, economic activity or business involvement is simply a way for providing for day to day survival not for long-term economic growth or activity. This is not necessarily their desire but rather reflects practical reality. With no resources to draw on except for those resulting from business activity, one's business activity is the solution to all problems which life presents, e.g. illness, emergency or demands of removed family members. Savings and profit are not always the outcome of business practice. Therefore, respondents usually state that continuation of their daily business is their goal rather than engaging in expansion strategies.)
- 6. housing.

And, finally, for many, it is essential that they develop:

7. strategies for dealing with their husband's demand for money.

It is not my contention that this is the complete list of needs which must be surmounted nor is it the total world of possible typologies of strategies. However, it is an initial codification of the challenges and needs to which women must respond and for which they develop strategy responses.

## **Building Scales of Measures**

As stated earlier, 269 variables were identified. From those variables, a subset of 212 variables were coded across the 156 cases of males and females. Types of response categories were then created to allow respondents' perspectives to be sorted into differing groupings of needs and responses. Following this, a simple dichotomous scoring was applied to most responses. That is, if the respondent offered any kind of articulated strategy to questions concerning business strategeis or any kind of reference to social interdependency in social relations-based questions, then their response was re-coded to a simple no/yes classification. For example, their response was re-coded as zero or one in the scoring. This nominal measuring avoided a valuation or weighting of particular strategy responses and instead merely determines whether or not a respondent engages in some consciously articulated schema or strategy to meet challenges in her/his life. Once an item was dichotomously scored, the particular efficacy of the response within the positive groupings was not evaluated. These re-scored variables were then summed into aggregated scales of measure: e.g., money, advice, food, school or education, productrelated strategies.

Many respondents were able to respond to sections of the 104-item interview schedule with a range of possible actions to the category of needs listed above. From those responses some of the more successful strategies women employed can be identified.

Obviously, not all women were able to articulate a strategy response. For example, some women responded "I do nothing" when faced with a particular problem or challenge. Additionally, not all women necessarily articulated a conceivably successful response. For example, several respondents replied "I pray to God" when confronted with the question of expansion of their business. However, many women were able to offer interesting and potentially successful responses to the range of life barriers which must be surmounted. Examples of their individual responses regarding strategies for these various needs include but are not limited to the following:

- 1. have a relative whom they could use as a loan source
- 2. have a relative who could or does provide child care
- 3. have a dependable product source i.e., they are a regular "customer" to a particular fisher or seller and therefore are guaranteed a product to purchase
- 4. diversified trade for off-season slow times
- 5. travel to a more distant market to get higher price
- 6. could articulate a strategy for increasing business
- 7. have a mentor or advisor to go to for business questions and concerns
- 8. have a plan for selling if they need to be absent from their market stand
- 9. others in their household also engage in some kind of business activity which augments the total household economic base

- 10. others also contribute to food needs of the household
- 11. respondent engages in farming activity
- 12. respondent owns animals (which can be used as a potential source of capital)
- 13. respondent owns buildings other than home
- 14. respondent has access to and use of co-wives resources re: food, farming activity, and childcare
- 15. to pay wages to employees they "share-out" vs. fixed pay. (That is, employees share is a portion of the day's income. Therefore, labor is not a fixed cost but dependent upon actual daily sales which are "split" with an employee.)

In order to construct the final six typologies of strategies and social relations (listed below), a subset of variables were extracted from the 104-item interview schedule and scored to create the following summed variables. Utilizing SPSS processes and functions (e.g., re-coding, new variable creation), the following typologies of strategies were then constructed to reflect the creative options women fashioned for themselves to meet the challenging realities of their lives (new variable names follow within the parentheses). The following new variables were constructed from combined individual data variables to reflect women's strategies: money strategy (MONEY); food strategy (FOOD STRATEGY); product acquisition strategy (PRODUCT STRATEGY); education strategy for children (SCHOOL STRATEGY); and finally, business strategy (BUSINESS STRATEGY). Additionally, a scale measuring the respondent's use of social relations (SOCIAL RELATIONS) was built. The latter two scales result from the summed values

of their sub-categories and provide ordinal measures of business strategies or social relations.

This following variable, MONEY, codifies the respondent's reported access to sources of capital and awareness of their capital investment in their business activity. For the summed variable regarding money resource strategies, the following individual variables scored dichotomously were used (see Appendix F for full variable list and Appendix B for complete interview schedule):

- 1. ANIMAL95 Do you own any animals?
- 2. BNKACT2 Do you have a bank account?
- 3. BGHTYR2 Does respondent know amount of product she has purchased during the last 12 months?
- 4. SV\$B2 Does respondent have business savings?
- 5. MTVHBK96 Does R own any means of transportation, e.g. bicycle, or motor vehicle?

The summed variable of FOOD STRATEGY accesses the respondent's strategy for meeting food needs. The following individual variables were used:

- 1. ETPROD34 Amount of product R uses to meet daily food needs
- 2. SPSCNT30 R's spouse usually contributes food
- 3. OTHCNT31- Others usually contribute food to R's household
- 4. FDDEC12A Who decides type of food R's household eats
- 5. COOK100A Respondent cooks with co-wives.

For the summed variable PRODSTRT, regarding the strategy of product acquisition, the following individual variables were used:

- 1. NUMBCH47 number of beaches respondent bought from on last buying day
- 2. NUMBT47b number of boats respondent bought from on last buying day
- 3. NMTR47b1- number of traders respondent bought from on last buying day
- 4. PLBGHT55 number of places respondent bought from in last 12 months

  For the summed variable SCHLSTRT, regarding the strategy of children's

educational needs, the following individual variables were used:

- 1. PAYFEES9 Does R or someone else pay school fees?
- 2. UNIFORM10 Does R or someone else pay for school uniforms?
- 3. BKSUP11 Does R or someone else pay for books or supplies?
- 4. CHEDU12D Does R or someone else decide children's education?

  (These variables of children's education reflect others' fiscal involvement in the educational activities of the respondent's children. That involvement provides the respondent with additional financial assistance for her obligations regarding her children's needs.)

Subsets of these summed scales of measures and others of the individual variables were subsequently combined to result in the final indices of: the Business Strategy Index and the Social Relations Index. These summed variables created the indices which measure the existence of respondents' business strategies and their utilization of social relations.

The index of social relations (SOCREL) traces the interactive and interdependent nature of economic activity with communal social relations. As discussed above, these variables are coded dichotomously and consist of the following subset of variables:

- 1. STRTFUND- source of start-up funds
- 2. SPSCNT1 spouse contributes to food needs
- 3. OTHCNT31 other contributes to food needs
- 4. BUYREL does respondent buy product from a relative?
- 5. ADVICE2 does respondent get business assistance from relative or friend?
- 6. SLFRU2- does anyone sell for respondent when she is unable to sell for herself or does she simple close her stand?
- 7. YRCHLD1 who provides care for R's children?

A final summed scale was constructed to identify the varied business strategies

(BUSSTRAT) which women design to accommodate their economic and social needs.

This index codifies the presence or absence of strategies for surmounting the barriers women encounter in the world of the fishery. Variables comprising this measure include:

- 1. ADVICE1 does respondent identify a source for advice or counsel in business needs?
- 2. CAPITAL repondent has an identified source for daily capitalization of her business
- 3. BUSCOMP1 respondent identifies business competition
- 4. SLMRE1 respondent has a strategy for increasing her sales
- 5. PRBGET1 respondent has no problem obtaining fish to sell

- 6. PROFIT1 respondent's selling price includes a cost for her labor
- 7. BSTRNG1 respondent reports having had some type of business training
- 8. BSRCD1 respondent keeps some type of records of her business activity
- 9. SV\$BS3 respondent reports savings from business activity
- 10. KNW\$SR1 respondent identifies a loan source
- 11. NUMPLC49 number of places in which respondent sold on last day of market activity (coded as actual value to reflect respondent's economic enterprise in marketing her product)
- 12. PLSOLD59 number of places in which respondent sold in during past 12 months (coded as actual value to reflect respondent's economic enterprise in marketing her product)
- 13. PLBGHT55 number of beaches where respondent bought during last 12 months (coded as actual value to reflect respondent's economic enterprise in acquisition of her product)
- 14. NUMBCH47 number of beaches from which respondent bought from on last day of market activity (coded as actual value to reflect respondent's economic enterprise in acquisition of her product)
- 15. NFSWRK1 respondent's activity during slow time in fishery work
- 16. SLFRU1 respondent has strategy for times when she cannot be at her stand

  Each of the preceding variables provides a measure of the respondent's direct access (e.g.,

  do you know a loan source?) or indirect access (e.g. who sells for you in your absence?)

  to resources which aid their socio-economic activity.

It is clear that women working in the fishery face a plethora of problems. Further, human ingenuity being what it is, obviously any number of strategies can be created and put into play. However, of particular interest in this research is to clarify the existence (or lack thereof) of a connection between women marketers' varying socio-economic strategies for survival and their particular communal social relations. Therefore, the final two summed measures created above, i.e., the social relations index (SOCREL) and the business strategies index (BUSSTRAT), are those which are of most interest in this study. These latter two indices will be the focus of the remainder of this discussion.

It was hypothesized that a positive and essentially linear relationship would exist between strategies for economic activity and women's social relations. That is, as hypothesis number one contended: simple associational or contractual relationships are not sufficient to obtain entry into or achieve success within the marketplaces; it is expected that this parallel market activity is actually dependent upon highly developed and complex communal social relations.

Therefore, after the construction of these indices of business strategies and social relations, statistical tests to determine the independence of these indices were run to test that hypothesis. Following that, tests to determine the relationship of the indices were run. Tests for linearity and strength were conducted using Spearman's correlation to determine the measure of association between the two indices of business strategies (BUSSTRAT) and social relations (SOCREL). This test was run since the ordinal data in these indices are fully ranked due to the method of their construction. Spearman's

correlation provides for a more rigorous testing of data such as these as compared to use of Pearson's R.

The results of this test of association in an 8 x 28 cross-tabulation suggest that there is both an association between the indices and that there is a positive relationship between the two measures (Spearman's Correlation =.38830, p< .00007). A scatter-plot was constructed to visually explore the nature and strength of that relationship (see Appendix G, the graph entitled Measure of Linear Association). Again, the linearity and positive association of these two indices is displayed. Of interest in that table is the clustering of activity in the central area of the graph. A somewhat parallel increase of both business strategies and social relations manifests and then appears to peak at that point (i.e., the intersection of y-axis 14 and x-axis 6). The subsequent drop-off of social relations reported may suggest that the benefits and necessity of strategies and social relations may level off after some degree of business stability is attained. That is, the respondent at some level of utilization of social relations connections is no longer in such particular need to exercise those relations yet is able to retain sufficient business strategies to continue to function with adequate economic stability or success. Although the present set of data being considered do not provide for continued exploration of this point, the leveling off and possible decline in the linearity of the relationship of business and social relations is worthy of future research.

#### Chapter 5

#### Conclusion

Adak makata gi oonge, "I am living with or without them." This is a Luo women's saying regarding the presence or absence of men/husbands. It reflects the reality which women in the fishery must accommodate. That is, women must continue to live and to provide for themselves and their children whether or not a male is present in their lives in an active and economically contributory fashion.

The Chicago Tribune of 22 September 1996 printed a story entitled 'Doily Mamas' Africa's Pure Entrepreneurs. This story went on to discuss the lives of women marketers selling and portering/transporting their goods across nation-state boundaries to South Africa to capitalize on the disposable income present within households there.

To understand those lives, the Chicago Tribune reported a "story." I would argue that social science research, i.e., research which focuses on a particular segment of social activity as does this research, is also the attempt to "tell a story." A set of data in addition to a particular location of inquiry (which includes a theoretical, a geographical location, as well as a social location) provide both the parameters and the threads for the weaving of that story. And although, we as researcher hope (and pray) that the data will "speak for themselves", the particular value of the narrative, the discussion, or the telling of that story can provide the reader and the narrator with a sense of closure and completion of a shared journey into the lives of others. In telling the "story" of women's lives within the fishery, my goal is also to make clear the sets of social interactions upon which economic strategies are poised and upon which much of the success of those strategies depends.

It is important to understand that a particular version of the story of Kenyan women in the fishery of Lake Victoria follows. The presentation or perspective of a story is predicated upon the social location of the researcher/narrator as well as upon the particular frame within which study participants operate. That is, the story to be told reflects my own social location and understanding of the world and therefore "colors" the lens through which I attempt to articulate the lives of women in Kenya's beach community.

#### The Contemporary Frame of Women's Social Reality in Luoland

Dorothy Smith (1987), who early on entered the discussion which began the articulation of the "relations of ruling" (i.e. those relations which shape lives and social structures), states that sociology should provide readers a way of "seeing further into the relations which organize their lives." My goal and purpose in pursuing this research, that is, the way in which women in a most challenging economic system organize their lives, is to make more visible the larger system or "relations of ruling" in which Kenyan women in the fishery must operate. This larger realm includes, but is not limited to the political, social, economic, and international dynamics which shape the world in which women live their lives. These sets of Smith's "relations of ruling" occur on several levels (e.g., household, local or community, regional, provincial, national, and international). It is these relations of ruling which provide the social and economic frame within which women operate. That is, the social relations or "relational" dynamics of their social milieu shape and direct their economic activity. Traditional neoclassical economic approaches fail to provide for the assessment of these relational dynamics.

Hartsock (1985) stated: "[Theorists] have been more willing to focus attention on women's oppression [rather] than on the question of how men's dominance is constructed and maintained (ibid., p. 1.)." My present work reflects the concern raised by Hartsock and is an attempt to focus instead on the lived experiences of women within the fishery and to articulate the frame of social relations within which and by which their lives are shaped. Hartsock (op. cit.) cogently presents the limitations inherent in neoclassical models which have been utilized to explain the social experience of individuals operating within economic markets. I will let her words summarize the limiting assumptive characteristics of neoclassical economic models of "rational exchange theory" and the behavior of the economic being.

The problems of exchange theories are rooted in the theoretical construct of "rational economic man" and in the neoclassical economists' outline of the communities (markets) these men construct. The model of rational economic man in the market involves theorists in circular reasoning, inaccuracy, and ethnocentrism. The deeper problem of which these are symptoms is the vision of community implicit in the market model - vision of community as arbitrary and fragile, structured fundamentally by competition and domination. ..[I]t gives us little insight into the workings of actual human relations (emphasis added, ibid.,p. 38)."

Given the present limitation of neoclassical economic theory, it is critical that a more "relational" model of economic market activity (which actually reflects the social relations of human interaction which can be seen to account for and motivate human economic behavior) be imposed rather than continuing to employ the limited "rational" behavioral model. A relational model of economic activity provides a mechanism for highlighting the social relations inherent in the social practices of economic activity.

Additionally, identification and acknowledgment of the social relations which propel and

constrain women's economic activity is critical to understanding the gendered dynamics of the socially constructed reality which lend themselves to determining women's success or failure within the fishery.

### Women and Product Transport

In 1986 Polly Hill wrote of the invisible and unacknowledged role which women in West African countries occupy. She asserted that this was not unique to that geographic region but also to other re-emergent and segmented economies, e.g. India. She argued that women provide much of the labor and functional infrastructure which permitted both the economy and the society to operate. In addition, she contended that women provide an essential and critical contribution to challenged economies. For example, she pointed out that portering women provided the labor which transported foodstuffs from remote areas to regions urban and otherwise which would not have access to these goods (Hill, ibid.).

Contemporary fishery activity in the Kenyan freshwater arena supports that contention. For example, male bicycle traders do indeed provide necessary transport. However, this transport is usually provided for the larger fish processing interests, not for the small-scale economic activity in which most women engage. Male bicycle traders provide porterage and may act as middle-men or agents but this service is usually reserved for large companies while women traders must self-porter and journey to locations which are less likely to receive or have access to the fish transported by bicycle traders. Findings from this study demonstrate that women marketers more frequently self-transport their product to varying marketing locations than they utilize other forms of transport.

#### International Fish Traders, Social Relations with "Customers", and Women Traders

Women fish traders must seek out opportunities (both for purchase of fish and in order to sell fish) which are not threatened with encroachment of the international and large marketers. Although women themselves frequently state that their competition for customers is only with those "jo ohala mamoko kaka an" (those small-sized traders who sell as I do), it appears that they have limited awareness of the ways in which international traders inhibit their beach-level selling activity. For example, women speak of expanding their trade or increasing their sales reference difficulty in selling to hotels in the more developed areas of Kenya. One woman respondent who had a sizeable hotel in Nairobi as her customer lost that account because that "customer" subsequently shifted its business to a source which she believed to be an international trader.

#### **Price Setting**

Frequently, women are not aware of the impact of the larger traders on their beach-level sales or on their activity in nearby market sites. That is, they do not acknowledge a connection of Wallerstein's (1988, 1992) world economic system on their local beach-level selling activity, i.e., their own selling of fish. However, some women do see the impact of international traders on their initial buying purchase price of fish for resale. They state that the price is artificially inflated and that fish for purchase are reduced in number as a result of the participation by international interests. For example, in response to this same question regarding business competition, one women stated:

Vans [the internationals] are competing here. Vans are offering high prices [based on] kilograms of fish and [so the] price goes up and I only get rejects [the fish which the vans do not want].

One response summarized the series of interwoven problems which market women face at the beach level, e.g., physical intimidation, cost inflation, and unavailability of product, all of which are directly related to the involvement from international traders. Of particular interest is her last concern which is an issue that has not been stated before, i.e., the issue of fish weight and price. She stated:

Men traders push you. [Men traders cause a] hike [in] prices so women can't get fish. They raise prices [because] men are coming in from other places and different companies. [And finally] sometimes [they] weigh [the fish] and weighing is off so you don't get any money or you lose because weight is wrong [and you had to pay too much to purchase the fish initially].

#### Purchase/Sale Strategies and Social Relations

Donaldson (1997), in her discussion of South African women, summarizes well the importance of the role kinship and family, or communal social relations, play in women's social and economic survival. Her discussion, although it is focused on the experience of women in South Africa during apartheid dominance, has relevance for the importance of ties of kinship and communal social relations in the socio-economic lives of women in the fishery in Kenya. She states:

Paramount is the fact kinship instills a sense of social responsibility in and for people associated by birth and marriage. Even the most distant relatives are morally obligated "to be friendly and hospitable and to help one another at work, with gifts of food, clothing, etc. in times of trouble" (Schapera, 1962:45). Thus kinship functions as the social and economic safety net for individual, family, and ethnic existence (Donaldson, 1997, p. 263).

Because so many socially and economically imposed external barriers exist,

Kenyan women in the fishery, of necessity, must evolve effective means of traversing

these socially constructed forms of economic exclusion. It is imperative for their survival and that of their children, that a "way around" the spoken and unspoken rules of the fishery economic community (which is embedded in the over-arching Kenyan and Luo social systems) be found. Women who are able to identify a short- and long-term plan, strategy, or "way around" social constraints to accomplish their business activities and provide for their households are more likely to be successful than those who have not developed personal/business or socio-economic strategies.

For example, when asked what steps are taken to expand their individual marketing activity, women respond with a variety of answers. Some state that they "do not know what to do" and their sales and purchase opportunities reflect that limited range of opportunity which they have constructed for themselves. However, others who are more successful in both their sales and purchase opportunities state "[I] talk to boat owners or others who fish to give me fish on credit." After selling this product, a prior agreed upon price is paid by the woman to the boat-owner or fisher. Creating and then drawing upon these social relations with the fisher or boat-owner allows a woman with limited money resources or one who, for whatever reason, simply wants to expand her sales opportunity to begin that expansion despite her personal shortage of funds.

Other business expansion strategies women described include traveling to different markets sites, "I go to where fish are sold cheap (to buy) [and then I go] to where the prices are good to sell so my business will go on." Or, she may use strategies to maximize resources, "[I] have many customers so that I can take from here or here and get what I need." That is, she may reduce the price she charges in some markets (and absorb a loss).

However to offset that loss, she will increase the price in other geographic areas which can accommodate a higher charge.

Or, she may diversify her sales practices, "I expand my stock and [also] sell different things." This diversification can include the sale of different fish types dependent upon fishery practices or it may he that she will move into a different economic activity during off fishing season if only one type of fishery is practiced in that area. Some women begin to buy fishing gears that can be rented out to fishers and in this way gain additional income. Some women use a variant on this theme and simply loan out their gear so that they will be insured a share in the fish catch, "[I] take the money and put with it [other funds] and buy an *omena* lamp and send it out. This will bring me money." (*Omena* lamps are kerosene-fueled lamps which fishers light and float on the water. This light attracts the sardine-like *omena* to the fisher's net.) One woman combines several of the above strategies and states "[I] talk to my fishers and get more fish when I have more funds [emphasis added]." With this statement, she provides an example of both her "customer" social relations and the way in which she uses that social relation to obtain more product when she is financially able.

Women identify many challenges in obtaining fish. These challenges include the issues of competition for buying fish, the problems of not having social relations upon which to draw as well as the waning of activity at particular beach sites. The following statements offer summary perspectives of those issues. One woman states "[there are] no fish and so many [other people] are looking for fish." Another states "everyone tries to get fish to go to market." "I am new here and people do not know me. So I have a

problem getting fish." Another states, "...I just started, they [other traders] are known more than me." Or, as one woman stated which reflected the experiences of other respondents, "It takes time to find fish, a long time [and then] men traders will push you away." And finally one woman articulated the problems women traders encounter with not just the purchasing of fish but also with the changing environment, "This place [Luanda Kanyango] is just a market, [it is] not a beach anymore." The last comment reflects the difficulty of obtaining fish (that is, the number of traders who wish to buy) as well as the paucity of fish due to the lack of availability of fish from what formerly was a "strong" beach. The latter has resulted from the encroachment of the water hyacinth plant which has invaded the water around the beach area and is no longer used as an active landing site for fishers.

The use of social relations figures prominently in the creation of their individual strategies in obtaining fish to sell. One women states that she has no problems obtaining fish for later sale except "...when there are no fish in the Lake because I have two boats I can depend on." In response to questions regarding obtaining fish to sell, one women summarized effectively both the difficulty in obtaining fish and the necessity of social relations in that acquisition, when she stated that one of the most important aspects of her fisher trade is "...getting to know someone, [a] boat owner. If you don't know someone, you'll have problems getting fish to sell."

#### Tradition and Current Social Relations of Fishery Practice

As a result of tradition and enforced by current practice, women are socially proscribed from entry onto the Lake on fishing expeditions, despite the fact that they may

be the owner of the boat itself. However, it is popularly held as social fact by men in beach communities that "women will bring bad luck and no fish will be caught," or as the men on Gingo beach asserted "women will be too afraid on the Lake because it is too dangerous for them." Women who were standing nearby and listening as this comment was made snorted derisively.

One exception to this social prohibition was found at Nyang'wina beach wherein one woman was proudly described by other women as "on jo lupo" ("she is a fisher") and similarly so described herself "An jo lupo" ("I am a fisher"). Only as a result of her husband's incapacitation (his mental infirmity) was this exception socially permitted by the larger (male) community. This woman not only participated in beach seine activity (which was seen as acceptable for women on this particular beach) but she was also allowed to go on the Lake as crew. Therefore it appears that in unusual circumstances, social norms and social relations may be stretched to accommodate a particular exception but in general it is held that women have no place on the Lake itself as fishers.

What becomes immediately apparent from even cursory observation of women's lives in the fishery is the weight of their daily burden of work and life. It is not so much that men in the fishery do not face life challenges in their daily work activities. It is, however, an added and more challenging burden which confronts Kenyan women in the fishery who must operate within a social system which inhibits and limits their entry into, prohibits their activity in, and proscribes their economic success in the fishery. That is, women encounter the gendered construction of their social reality. (The gendering of a socially constructed reality and/or economic proscription are not necessarily different from

the experience of women within other social, economic, and nation-state systems.) The economic constraints which women encounter limit their access to loans, educational activities, industry equipment, and even the opportunity to "find" adequate fish product within their tightly defined and constrained lives due to the daily demands of re-creating a household.

The demands of household re-creation, (e.g., acquisition of water, production of food, preparation of food, and usually acquisition of food, child care, maintenance of the "home", travel time to and from beaches and markets for the acquisition, preparation and sale of product) leave women with limited time to attend to any but the most pressing needs of care for themselves and their families. When asked to compare their present standard of living with the period of time five years prior, women offered answers which implies the life challenges they must continually face and successfully overcome in order to continue their lives. As one woman stated "[It must be better] Because I am living".

Another stated, "I can say that it is good, just to eat and live." And finally as one woman said, "I live well because I am eating."

Given the varied and extensive life challenges which Kenyan fishery women encounter, what behavioral strategies facilitate women's work? What means do women employ to assist them in their economic pursuits and in accomplishing their household demands? In particular, what communal social relations of women draw upon to successfully fulfill their economic needs and their societally defined responsibilities? Family members, whether antecedent elders, siblings, age-mates, or progeny, provide essential resources upon which women draw. Market-place stand-ins, substitute

purchasers of product, child-care providers, meal preparers, transporters of product, business advisors and teachers, mentors, financial loan resources, as source and provider of product, all of these tasks (and the many more which are not listed here) suggest some of the roles filled when women draw on their ties of communal social relations to satisfy the demands of their daily life struggles.

Women actively develop and nurture their market connections, in both directions of their economic relationships. That is, they perform the role of seller to their customers, and they function in the role of buyer (or customer) to their product provider. In this latter instance, the women marketer herself takes on the role of "customer". There are spoken and unspoken obligations and responsibilities in this interactive social relation of "customer". As "customer", the woman in the fishery is entitled to product from her supplier, the fisher. And as seller to her own "customers", she expects them to buy from her and not from other traders.

This concept of "customer" and subsequent entitlement is not simply for any buyer or purchaser. It is reserved for one who is regarded as regular purchaser and who manifests specific loyalty to the particular seller/fisher. The fisher expects that woman to purchase from him, and the woman expects to buy from him. This last implies both that she will **not** substitute her purchase from this provider by purchasing elsewhere, although she may **supplement** her purchase elsewhere.

It is something of a "closed" system with expectations and obligations on both sides of the interaction. This issue was strongly stated by the statements of women from Luanda Kanyango and Gingo beaches regarding the necessity of "knowing" someone in

order to purchase fish which were presented earlier. Should a fisher of whom she is a customer not have fish to sell on a given day due to a bad catch, women will seek to further strengthen their social relations with the provider via small gifts or assistance, e.g. as a woman from Honge beach reported she will provide kerosene for lamps which is an on-going expense for *omena* fishers, a blanket if it is cold, or a bit of food.

Reciprocal social relations for the provider, could include, perhaps not a reduction in price (because as respondents state "business is business"), but perhaps first pick of product, or a particularly good catch may be held back and reserved for the particular customer. Similarly, should the woman customer be in difficult economic times, the fisher may extend credit (no interest charged) to her and receive delayed payment for an agreed upon price after the woman has sold her product. As discussed earlier, women who are new to an area may have difficulty obtaining this "customer" status because fishers already has a wife, wives, or female relative to whom he is obligated to sell. Women acknowledge this fact of social relations but men state that the opposite is true. For example, the men at Gingo beach state that they will sell to anyone who is there. The women listening to this statement made audible sounds of disagreement.

The social relations of fish selling do entitle the spouse or female relative to a "right of purchase." However, there is a clear separation of spousal or familial obligation and economic ties with regard to selling price. That is, there is no automatic reduction in selling price to the spouse or relative of the fisher. It is also true that even if the woman is the boat owner or owns the gear, no product selling price is assumed or assured. Women in the southern beaches, e.g. Muhuro Bay area, were particularly adamant about this. To

give themselves a discount in the purchase of the fish from the boat would be to reduce their ultimate profit.

#### **Theoretical Implications**

Earlier in this writing, I discussed the ways in traditional economic models failed to capture the social relations within which economic activity occurred. Additionally, I discussed the value of integrating three particular theoretical approaches, economic sociology, gender theory, and social relations theory. This integration of theory appeared valuable based on the complexity of the larger social world within which women in the fishery pursued responses to, as well as attempted to satisfy, their economic needs. In addition, the larger socially constructed economic system presented a series of barriers with women had to surmount in order to survive. Therefore, it was also important to identify the implications of that model which incorporates a world view. Consideration and combination of the three heretofore unconnected methods (i.e., economic sociology, social relations theory, and gender theory) provided a more expanded view from which to understand the economic dynamics in which women operated.

This research demonstrates that much of the economic activity in which women in the fishery engage is dependent upon those social relations, or the "relational" aspects, of economic activity which have usually been overlooked. Economic analytical tools must incorporate these relational ways of being in the economic world if we are to understand the socio-economic impact of the questions we ask.

Combining aspects of economic inquiry, social relations theory, aand gender theory provides a frame for viewing the socio-economic experience of women in the fishery which has not been used before. The value of this integrative model of theory application is that it provides a method for understanding dynamics inherent in this particular issue which was not possible before. The role of social relations in economic activity has been overlooked. The results of this research suggest strongly that overlooking those social relations is to miss many of the keys to economic success or failure.

It is important to realize that this relational model of economic has application across social constructions of experience. That is, the impact of social relations on economic activity is not simply constrained to women's activity nor is it located solely within re-emergent economies, e.g., the Kenyan fishery of Lake Victoria. The implications of this integrative model of socio-economic activity can (and should) be extended to the traditional male enclaves of economic activity and also should be incorporated into the analysis of economic activity in the Western world.

#### Directions of Future Research

Human connections, the essential human inter-dependence of communal social relations, or Toennies' concept of *gemeinschaft*, are evidenced in subtle and overt, articulated and unarticulated, formal and informal manifestations as discussed above.

These communal social relations provide mechanisms essential to women's daily sustenance as well as to her economic survival. Despite a repeated articulated need and desire for additional capital, financial development assistance, women create and exercise economic strategies which provide, in some cases, simply daily existence, but in other

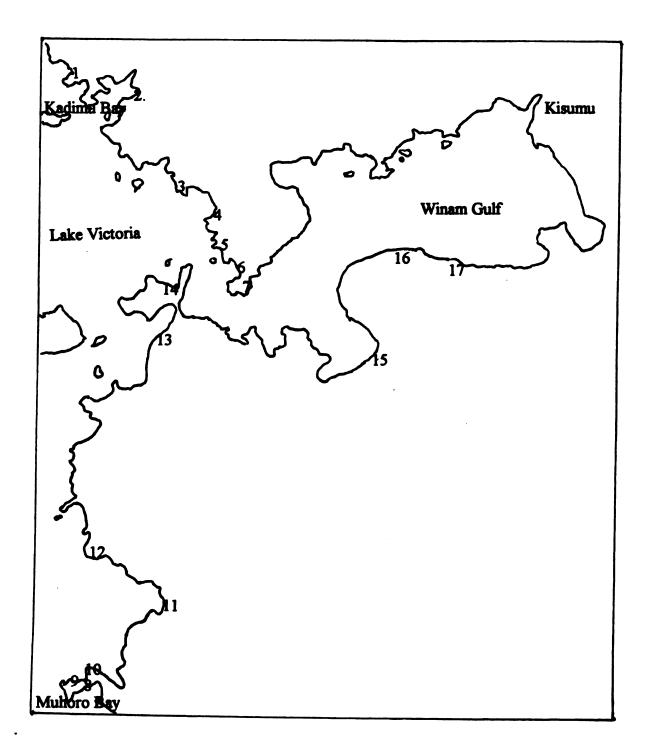
cases enable women to launch their business or businesses towards a level above simple survival and existence to a level of economic stability more promising of on-going success.

This research demonstrates the essential role which social relations manifest in the operations of fishery and beach community women's lives. Despite the challenges of this daily existence and the frequency with which they alone are responsible for their family's continuation, they are indeed able to prove "adak makata gi oonge" ("I am living with or without him"). However, the difficulty of the tasks they must accomplish is indisputable. There is great value in consideration of larger community or state policy intervention to assist women with capital investment. A revolving loan fund would be a reasonable path to follow.

Research which pursued inquiry into the specificity of women's lives in beach communities would provide additional and valuable insight into the continuing struggles women face. It would be of value to interview more community members as opposed to the small but representative sample used in this study. It would valuable to chronicle more completely the particular circumstances of the challenges women face. Additionally, the challenges which men encountered although mentioned in this research effort would benefit from more extensive documentation. Ultimately, this type of research and other research efforts paralleling it provide reasonable paths for those framing social service policy in fisheries management and government and non-government organizations to pursue.

APPENDIX A

Map of Kenya's Lake Victoria Beaches Visited During Study



| Beach               | Region        | Size   | Fishery Type      |
|---------------------|---------------|--------|-------------------|
| 1. Honge            | North         | Large  | Omena*            |
| 2. Oele             | North         | Medium | Mbuta* and Omena  |
| 3. Wichlum          | North         | Large  | Mbuta and Ngege*  |
| 4. Ludhi            | North         | Large  | Mbuta and Omena   |
| 5. Osindo           | North         | Large  | Omena and Tilapia |
| 6. Misori           | North         | Large  | Mbuta and Omena   |
| 7. Madundu          | North         | Medium | Mbuta, Omena,     |
|                     |               |        | Tilapia           |
| 8. Kibro            | South         | Large  | Omena and Mbuta   |
| 9. Ng'ore           | South         | Small  | Ngege and Mbuta   |
| 10. Nyang'wina      | South         | Small  | Ngege and Mbuta   |
| 11. Luanda Konyango | South         | Large  | Mbuta and Ngege   |
| 12. Oodi            | South         | Medium | Mbuta and Omena   |
| 13. Gingo           | South Central | Medium | Mbuta, Ngege,     |
|                     |               |        | Omena             |
| 14. Kiumba          | South Central | Medium | Mbuta, Ngege,     |
|                     |               |        | Omena             |
| 15. Negegu          | Gulf+         | Medium | Omena and Tilapia |
| 16. Bala Rawi       | Gulf+         | Medium | Omena, Mbuta,     |
|                     |               |        | Tilapia           |
| 17. Obaria          | Gulf+         | Medium | Talapia and Omena |

<sup>\*</sup>ngege = tilapia mbuta = nile perch

omena = sardine

<sup>+</sup>due to lack of time, only observational data was collected from Gulf area beaches

## APPENDIX B

|                       | <pre>ahold Interview Schedule (rev: 16 May 95; no Management)    D / M / Y</pre>   |
|-----------------------|--|
| DATE<br>Inte:<br>Sub- | Participant Number:  rviewer:  |
| OI III                | Demographics   |
| Loca                  | tion of interview: Note Gender of Study Participant:  1= beach   |
| 1.                    | How old are you?   |
| W1.                   | In ja higni adi?   |
| 2.                    | What is your clan?   |
| W2.                   | In ja kabila mane? In ja dhot mane?  |
| 3.                    | What is yor husband's/wife's ethnic group?   |
| W3.                   | Chuori/jaodi en ja kabila mane?  |
| 4.                    | What is your husband's/wife's age?   |
| W4.                   | Chouri/jaodi en ja higni adi?  |
| 5.                    | How long have you been married?  1= less than 1 year  2= 1-less than 3 years  3= 3- less than 5 years  4= 5- less 10 years  5= 10- less than 15 years  6= 15 or more years |
| <b>W</b> 5.           | Nyaka ne kendi koro en higni adi? 1= matin ne higa achiel 2= matin ne higni 3  |

|     | 3= mokadho higa 3 to tin ne 5<br>4= mokadho higni 5 to tin ne 10<br>5= mokadho higni 10 to tin ne 15<br>6= higni 15 kata moloyo |
|-----|---|
| 6.  | How many children have you produced who are currently living?  How many children are you currently supporting?                  |
| W6. | Nyasaye ose konyi gi nyithindo adi mantie?  To nyithindo adi maintiegodo ma irito sani?   |
| 7.  | How old is the oldest? How old is the youngest?   |
| w7. | Maduong hike adi? Matin hike adi?   |
| 8.  | Are any of these children in school?  1= no 2= yes  |
| W8. | Be nitie nyithindi moko e school?<br>1= Ooyo 2= Eeeh  |
| 9.  | Who pays the schools fees?  1= husband  2= wife  3= both  4= other (who in relationship to child)                               |
| W9. | Ng'ama chulo negi fis?  1= dichuo 2= dhako 3= Wanduto 4= Jomamako (en wat nyathi nade)?   |
| 10. | Who buys the uniforms?  1= husband  2= wife  3= both  4= other (who in relationship to child)                                   |

| W10. Ng'an | na ng'iewo ne nythindo uniform?<br>1= dichuo<br>2= dhako 3= Wanduto |
|------------|---|
|            |   |
|            | 4= Jomamoko (en wat nyathi  |
|            | nade)?  |
| 11. Who p  | pays for books and supplies?  |
|            | 1= husband  |
|            | 2= wife   |
|            | 3= both   |
|            | <pre>4= other (who in relationship to</pre>                         |
|            | child)  |
|            |   |
| W11. Ng'an | na ng'iewo ne nythindo buge to gimamoko?                            |
|            | 1= dichuo   |
|            | 2= dhako  |
|            | 3= Wanduto  |
|            | 4= Jomamako (en ng'a)?  |
|            |   |
| 12. In you | r family, who makes the following decisions?                        |
|            | 1= husband  |
|            | 2= wife   |
|            | 3= both together  |
|            | a= what food to purchase?   |
|            | b= the type of business you should do?                              |
|            | c= what to plant?   |
|            | <pre>d= decisions about the children's education</pre>              |
|            | e= disciplining the children  |
|            | f= helping relatives on each side                                   |
|            |   |
| W12. E dal | lani ngama keto chikegi?  |
|            | 1= dichuo   |
|            | 2= dhako  |
|            | 3= Uduto (waduto)   |
|            | a= chiemo ma onego ong'iew?   |
|            | b= ohala ma onego ihoki?  |
|            | c= cham ma onego pidhi?   |
|            | d= weche mag somb nythindo?   |
|            | e= neno ni nythindo ni kod kido maber                               |
|            | f= konyo wede kongi koni  |
| 13. What   | is your work?   |
|            | 1= other than fishery (specify)                                     |
|            |   |
|            | 2= fishery (specify)  |
|            | 1= trader 4= boat owner   |

|      | 2= processor   | 5= boat manager      |
|------|--|----------------------|
|      | <pre>3= seller/marketer</pre>                        |                      |
|      | 7= other (specify)                                   |                      |
| W13. | Be itiyo tij lupo?<br>1= Ma ok tich lupo (wach       | i)                   |
|      | 2= E lupo (wachi)                                    | <del>-</del>         |
|      | w1= Ja ohala   | 4= wuon vie          |
|      | w2= Ja los rech                                      | 5= ja rit vie        |
|      | w3= Ja uso   | 6= ja lupo           |
|      | w7= Mamoko (wachi)                                   |                      |
| 14.  | What is the highest grade of                         | education that you   |
|      | completed?   |                      |
|      | a. What year was that?                               |                      |
| W1 / | Ne isomo nyaka klas a di kend                        | o mane itieko?       |
| MT3. | He ISOMO HYAKA KIAS A GI KENG                        |                      |
|      | (w)a. Ne higa mane?                                  |                      |
|      | (W/ u. Ne niga mane.                                 |                      |
| 15.  | What is the highest grade of husband/wife completed? | education that your  |
|      |  |                      |
| W15. | Jaodi/chuori osomo mogik e kla                       | as adi?              |
| 16.  | Can you (check all that apply Speak Read             | Write                |
|      | a= Dholuo ;  | <b>;</b>             |
|      | a= Dholuo ;; b= English ;; c= Kiswahili ; ;          | <del>;</del>         |
|      | c= Kiswahili;  | <u>;</u>             |
| W16. | Bende inyalo ? (ket ran                              | yisi e duto mowacho) |
|      | Wacho Somo   |                      |
|      | a= Dholuo ;<br>b= Kisungu ;                          |                      |
|      | b= Kisungu ;   | <u>'</u>             |
|      | c= Kiswahili;  | <b>;</b>             |
| 17.  | Can you (check all that apply add                    | ):                   |
|      | subtract   |                      |
|      | multiply   |                      |
|      | divide   |                      |

| W17. B | e inyalo? (ket ranyisi e duto mowacho) riwo (+) golo (-) goyo (x) pogo (/)  |
|--------|---|
| 18. D  | <pre>pid your father work in the fishery? 1= no 2= yes&gt; For how many years was fishing his main occupation? years</pre>  |
| W18. B | le wuoru ne otiyo tij lupo?  1= ooyo  2= eeeh> Be nitie ndalomoko ma lupo emane tich ne maduong?  1= ooyo  2= eeeh> Higni adi ka lupo emane tich ne maduong?  |
| 19. W  | as your mother involved in the fishery?  1= no 2= yes> În what ways was she involved in the fishery? (mark all that apply)  1= owning fishing boats 2= managing fishing boats 3= processing fish 4= selling fish 5= other                       |
| W19. B | le minu ne tiyo tij rech?  1= ooyo  2= eeeh> Ne otiyo tij rech e yo mane (Ndik duto ma owacho)  1= ne en kod yie lupo  2= be orito yie lupo  3= ne oloso rech  4= ne oloko rech  5= mamoko (kaka)   |
|        | <pre>IN FISHERY - GO TO #22 at was your first involvement in the fishery?     1= going out in my parent's boat     2= working on someone else's boat     3= buying a boat of my own     4= never involved&gt;(go to #22)     5= Other&gt;</pre> |

| (spec | cify)  |
|-------|--|
|       | How old were you at that time?   |
| W20.  | Ne ichako lupo mokuongo kar ang'o?  1= ne adhi lupo gi jonyuolga gi yie 2= ne atiyo eyie ng'ato 3= ne ang'i ewo yieya 4= pok alupo nyaka nene>(dhi apenjo #22) 5= mamoko (kaka) Ne in ja higa adi ndalono?                                   |
| 21.   | Since that time, has there been a year that you were not involved in the fishery?  1= no;  2= yes -> Which year was that?  What did you do during that time?   |
| W21.  | Chakre higno be ise bedo ka ok ilupi a higa moro?  1= ooyo 2= eeeh> Ne en higa mane?  Ang'o mane itimo ndalono?  |
| 22.   | When you are actively involved with your work where do you live?  How many kilometers away from here/this beach?  kms  Is this place located inland or on Lake Victoria?  1= inland 2= on the Lake   |
| W22.  | Sama idich e tijeni idak ga kanye?  Kilo adi koa ka/dho wath?  Be ka nie but Lake Victoria kaso en ei piny?  1= inland; 2= e dho nam   |
| 23.   | During the past 12 months, did you stay at this beach/place all year round?  1= no>; 2= yes (go to next question) if NO> How many months did you stay at this beach/place? months  Did you stay at any other beaches/places?  1= no; 2= yes> |

Why did you stay there?

|      | How long?  |
|------|--|
| W23. | <pre>Kuom dueche apargariyo mose kadho ne idak e dho wethe/kanyo seche duto? 1= ooyo&gt;; 2= eeeh (dhi e penjo machielo) Ka OOYO&gt; Ne idak ka dweche adi? Ne idak e dho wethe/kuonde mage kendo?</pre>                             |
| 24.  | Ne idak kuro nang'o?   |
| W24. | <pre>Kama idakieno ikombo koso en mari? 1= mara 2= akombo 3= mamoko (kaka)</pre>   |
| 25.  | About how much do you pay per month?   |
| W25. | Ichulo pesa adi edwe?  |
| 26.  | Do you have anyone other than your own children, (or your wife), to help with the housework or cook for you?  1= no 2= yes  a. Do you pay for that?  1= no 2= yes> a. about how much do you pay per month for that?  (Exch=45/1 USD) |
| W26. | Be in gi ng'ama konyi (ma ok chiegi/nyithindi) gi tedo<br>kata ritoni ot?<br>1= ooyo<br>2= eeeh<br>(w)a. Be Ichulo ma?<br>1= ooyo  |

| 2= eeeh> (w)a. I chule pesa adi edwKsh (Exch= 45/1 US         |     |
|---|-----|
| <pre>27. Do you send money to parents or relatives at h</pre> |     |
| W27. Bende ioro ne jodala kata wedeni pesa?  1= ooyo 2= eeeh  |     |
| (w)a Toronesa adi   | dwe |

#### Nutrition Section

Household Membership Questions [Think of your household as the people who regularly eat food provided by you or your husband as well as the people who usually sleep in the same house or compound as you.]

Penjo mar Oganda Joot (Kaw odi kaka joma pile chamo chiemo ma in kata wuon paru ochiwo to gi joma pile nindo eodi kodi kata e aluora dalani.)

| kata         | e aluora dalani.)  |
|--------------|--|
| 28.          | How many people regularly eat food provided by you (including yourself and your wife/husband)?                                       |
| W28.         | Ji adi mapile chamo chiemo ma in kata wuon paru ochiwo? (ka oriwo in togi jaodi/woun paru)   |
| 29.          | How many of these people are less than 12 years old?   |
| W29.         | Kuomjo gi adi mahikgi thin ne 12?  |
| 30.          | Does your husband/wife usually contribute food or money to feed the household?  1= no 2= yes   |
| <b>W</b> 30. | Bende wounparu/jaodi kelo chiemo kata golo pesa mar<br>chiemo mondo okony joodi?<br>1= Ooyo<br>2= Eeeh                               |
| 31.          | Does anyone else regularly contribute money or food to your household?  1= no 2= yes What is the relationship of that person to you? |
| W31.         | Bende nitie ng'at machielo mabende golo pesa kata chiemo ne joodi?  1= Ooyo 2= Eeeh Ng'atno en watni koso?                           |
| 32.          | What is the number of people who are 12 years old or   |

older, in your household, who are:

|      | <pre>a. students: b. not able to work all day, e.g. elderly, handicapped: c. able to work all day:</pre>  |
|------|---|
| W32. | Ji adi mahikgi 12 kata moloyo manie odi to:  (w) a= Nythi school  (w) b= Maok nyal tiyo odiochieng' te (kaka jomaoti kata ma ong'ol)?  (w) c= Manyalo tiyo odiochieng te?   |
| 33.  | What is the number of people who depend on you financially but are sometimes living in another place, e.g. boarding school?   |
| W33. | Ji adi mayudo kony kuomi moloyo kony mar pesa to seche moko ok odak kodi to dak kuonde moko kaka boding skul?   |
|      | OT IN FISHERY - GO TO #35  How much of the fish which is intended to be your product for the market do you take home to feed your family?  1= none 2= less than one-quarter 3= one-quarter to one-half 4= more than one-half  |
| W34. | Rech marom nade mar ohala ma ikawo itero ot mondo jogi okonyre godo?  1= oonge 2= matin ne achiel kuom ang'wen 3= achiel kuom ang'wen nyaka nus 4= moloyo nus   |
| 35.  | In an average week, on how many days does your family eat fish in any form? days What type of fish does yor family eat most?  1= Lates Niloticus - mbuta 2= Oreochromis species or Talapia species - ngege 3= Rastrineobola argentea - omena 4= Caradina (fresh water prawn) - ochong'a 5= Haplochromines species - fulu 6= other |
| W35. | Ka ipimo, I chamo rech di di ejuma? Di  |

|      | Rech mane ma uhero chamo ahinya?  1= Lates Niloticus - mbuta  2= Oreochromis species or Talapia species - ngege  3= Rastrineobola argentea - omena  4= Caradina (fresh water prawn) - ochong'a  5= Haplochromines species - fulu  6= mamoko (kaka) |
|------|--|
| 36.  | Compared with 5 years ago, would you say that your family is eating less, the same, or more fish  1= less than 5 years ago 2= same as 5 years ago 3= more than 5 years ago   |
| W36. | Ka ipimo kod higni abich mose kadho, inyalo wacho ni<br>joodi chamo rech matin, machalre, koso mang'eny<br>1= matin moloyo higni 5 mokadho<br>2= machalre gi higni 5 mokadho<br>3= mang'eny moloyo higni 5 mokadho                                 |
| 37.  | Compared with 5 years ago, how much of the following types of fish does your family eat now:  1= less than 5 years ago 2= the same as 5 years ago 3= more than 5 years ago mubta ngege omena ochong'a other (specify type) amount amount           |
| W37. | Ka ipimo kod higni abich ma osekadho, rech mane matinde uchamo gi jogi sani?  1= mathin moloyo higni 5 mokadho 2= machalre gi higni 5 mokadho 3= mang'eny moloyo higni 5 mokadho mubta ngege omena ochong'a fulu mamoko (ler ane) romonadi         |
| 38.  | Compared with 5 years ago, would you say that your family is eating worse, the same, or better 1= worse than 5 years ago 2= same as 5 years ago 3= better than 5 years ago   |
| W38. | Ka ipimo kod higni abich mokadho inyalo wacho ni jogi  |

| chiemo | maber. | marach. | machalre | . koso | maber |
|--------|--------|---------|----------|--------|-------|
|        |        |         |          |        |       |

- 1= marach moloyo higni abich mokadho
- 2= machalre qi higni abich mokadho
- 3= maber moloyo higni abich mokadho
- 39. Compared with 5 years ago, would you say that your family is obtaining a smaller, the same, or a larger proportion of what you eat from food your family grows
  - 1= smaller than 5 years ago
  - 2= same as 5 years ago
  - 3= larger than 5 years ago
- W39. Ka ipimo gi higni abich (5) mose kadho inyalo wacho ni joodi yudo matin, machalre, koso meng'eny kuom chiemo ma uchamo mo a epuothu
  - 1= matin moloyo higni 5 mokadho
  - 2= machalre gi higni 5 mokadho
  - 3= mang'eny moloyo higni 5 mokadho
- 40. Compared with 5 years ago, would you say that your family is obtaining a smaller, the same, or a larger proportion of what you eat from food your family buys at a duka or market
  - 1= smaller than 5 years ago
  - 2= same as 5 years ago
  - 3= larger than 5 years ago
- W40. Ka ipimo gi higni abich (5) mose kadho inyalo wacho ni joodi ng'iewo e duka kata e chiro\_\_\_\_\_
  - 1= matin moloyo higni 5 mokadho
  - 2= machalre qi higni 5 mokadho
  - 3= mang'eny moloyo higni 5 mokadho

| 41.     | Please tell me how oft  | ten you and your family eat the  |
|---------|---|--|
|         | following food items:   | -  |
|         | a. How often?   |  |
|         | 1= never  |  |
|         | 2= ocassionally   |  |
|         | 3= once a month   |  |
|         | 4= once in three  | weeks  |
|         | 5= once a week  |  |
|         | 6= daily  |  |
|         | a. maize/maize food   | j. meat  |
|         | a.  | <b>a.</b>  |
|         | b. rice   | k. chicken   |
|         | a.  | a.   |
|         | c. wheat  | 1. fish  |
|         | a.  | a.   |
|         | d. sorghum  | m. milk  |
|         | a.  | a.   |
|         | e. legumes  | n. sugar   |
|         | a.  | a.   |
|         | f. casava   | o. oils/ <del>fat</del>  |
|         | a.  | a.   |
|         | <del></del>   | p. vegetables  |
|         | g. potatoes   |  |
|         | a.  | a  |
|         | h. bananas  | q. fruits  |
|         | a   | a.   |
|         | i. eggs   | r. tinned food   |
|         | a   | a  |
| 7.7 A 1 | Minister ni in to gi io   | adi abama abiama ai mila maram   |
| W41.    |   | odi chamo chiemo gi pile marom   |
|         | nade?   |  |
|         | (w) a. Marom nade?  |  |
|         | 1= pok wachamo  |  |
|         |   |  |
|         |   | dender and the   |
|         |   | jumbe adek   |
|         |   |  |
|         |   |  |
|         | a. bando/oduma  | j. ring'o  |
|         | a   | a  |
|         | b. michele  | k. gueno   |
|         | a   | a  |
|         | c. ngano  | 1. rech  |
|         | a   | a  |
|         | d. kal  | m. chak  |
|         | a   | a  |
|         | e. oganda/njugu   | n. sukari  |
|         | a   | a  |
|         | 2= ka dichiel<br>3= dichiel e dwe<br>4= dichiel bang'<br>5= dichiel ejuma<br>6= pile pile |  |
|         |   |  |
|         |   |  |
|         |   | i ring!o   |
|         |   |  |
|         |   |  |
|         |   | k. gueno   |
|         |   | Control of the Contro |
|         | _   |  |
|         |   |  |
|         |   |  |
|         |   | alpha barana da mara d   |
|         |   |  |
|         | a   | a  |

|       | f. mariwa   | o. mo  |
|-------|---|--|
|       | a   | ,a   |
|       | g. rabuon   | p. alot  |
|       | a.<br>h. rabolo   | a  |
|       |   | q. olembe  |
|       | ai. tong gueno  | a<br>r. chiemo mkebe   |
|       |   |  |
|       | a   | a  |
| 42.   | family have ending the second | st year, how much of the time did your hough food to eat? of the time  Y  The time |
| W42.  | chamo?  | mothoth  |
| 43.   |   | during the past year did your family not eat?                                      |
|       | What foods we:  | e not available to you?  |
|       |   | cause of this, e.g. too expensive, you see money, shortage of that partcular food? |
| W43.  | Saa/seche mage<br>chiemo moro me  | e e higa mokadho ma jogi ok nyal yudoe<br>ogi chamo?                               |
|       | Chiemo mage mage  | ne ok o nyal yudo?   |
|       | Ang'o mane ke   | o ma e.g nengo tek, pesa onge chiemo no  |
| IF NO | OT IN BUSINESS  | - GO TO #93  |

# IF NOT IN BUSINESS - GO TO # 93 Questionaire Section 3 = Economics

| 44.   | Who decides how the money you earn will be spent?    |
|-------|--|
|       | 1= husband   |
|       | do you give all the money to him?                    |
|       | 1= yes; 2= no  |
|       | 2= wife  |
|       | do you give all the money to her?                    |
|       | 1= yes; 2= no<br>3= husband and wife                 |
|       | 4= you and someone else; Who is that person?         |
|       | 4- you and someone else, who is that person:         |
|       |  |
| W44.  | Ng'ama chiko ni pesa ma iyudo tiyo nade?             |
|       | 1= dichuo  |
|       | be imiye pesa go duto?                               |
|       | 1= eeeh; 2= ooyo                                     |
|       | 2= dhako   |
|       | be imiye chiegi pesa go duto?                        |
|       | 1= eeeh; 2= ooyo                                     |
|       | 3= dichuo gi dhako                                   |
|       | 4= An kod nga ma chielo; En ng'a?                    |
|       |  |
| 45.   | Do you belong to a nyoluoro?                         |
| 10.   | 1= no  |
|       | 2= yes>  |
|       | a. How many members are there?                       |
|       | b. How often do you put money in?                    |
|       | c. How much money do you put in?                     |
|       | d. Who runs this savings society?                    |
|       |  |
| W45.  | Be in e Nyluoro moro?                                |
|       | 1= Ooyo  |
|       | 2= Eeeh>   |
|       | wa. Un ji adi kanyo?                                 |
|       | wb. Uchulo pesa didi?                                |
|       | wc. I chulo pesa adi kanyo?                          |
|       | wd. Ng'a ma ochung' ne Nyoluoroni?                   |
| TF NO | OT IN FISHERY - GO TO # 50                           |
| 46.   | What was the most recent day (before today) that you |
|       | were involved in the fishery?                        |
|       | 1= yesterday   |
|       | 2= other (specify)                                   |
|       |  |

| W46. En odiochieng' mane machiegni (motele ne kawuono) manyocha itiyo tij rech? 1= nyoro 2= mamoko (ler ane)                 |
|--|
| <pre>IF FISHER - GO TO #49 47. On that day, at how many landings and locations did yo    buy    fish?</pre>                  |
| a. What landings or locations were these?  |
| b. At each place, how many boats or other sellers did you buy from?  Boats: Other  |
| Sellers:   |
| c. Were any of the boat owners, managers, or crew<br>relatives or friends of yours?<br>1= no                                 |
| 2= yes> if yes, do they give you better fish or a better price for fish?  1= no 2= yes                                       |
| <pre>d. Were any of the sellers or traders, you bought fish from, relatives or friends of yours? 1= no</pre>                 |
| 2= yes   |
| W47. Chieng'no ne ing'iewo rech e dho wethe kata kuond e adi?  |
| (w) a. Ma ne en dho wath kata kuonde mage?   |
| (w)b. Kuonde mane idhi ye go ne ing'iewo e yiedhi<br>adi kata jo uso adi mane ing'iewo kuomgi?<br>Yiedhi<br>Joma ose ng'iewo |
| <pre>(w)c. Bende achiel kuom weg jorit, kata joriemb yiedhigi ne wat ni?</pre>   |
| <pre>1= ooyo 2= eeeh&gt; ka eeh, be gimiye rech mabeyo kata gi bei mayot?</pre>  |
| <pre>(w)d. Be ne achiel kuom jo uso kata jo ohala mane ing'ewo rech kuomgi go wede ni?</pre>                                 |

| 48.  | On that day, how many/much fish did you buy?       |
|------|--|
|      | a. How much did you pay per species?               |
|      | 1= mbutaksh  |
|      | 2= ngegeksh  |
|      | 3= omenaksh  |
|      | 4= ochong'aksh_                                    |
|      | 5= fuluksh   |
|      | 6= otherksh  |
|      | b. Did you buy only fresh fish?                    |
|      | <pre>1= no&gt;; 2= yes (go to next question)</pre> |
|      | Of your total purchase on that day,                |
|      | about how much of each type did you                |
|      | purchase? (%)                                      |
|      | 1= fresh   |
|      | 2= smoke   |
|      | 3= sundried  |
| W48. | Chieg'no ne ingiewo rech maromo nade               |
|      | (w)a. Ne ichulo pesa adi kuom?                     |
|      | 1= mbuta ksh                                       |
|      | 2= ngegeksh  |
|      | 3= omena ksh                                       |
|      | 4= ochong'a ksh                                    |
|      | 5= fulu ksh  |
|      | 6= mamako (ler ane) ksh                            |
|      | (w)b. Ne ing'iewo mana rech manumu kende?          |
|      | 1= ooyo>; 2= eeeh (dhi e penjo machielo)           |
|      | KA OOYO>   |
|      | Kuom rech mane ingiewo duto ne                     |
|      | ingiewo achiel kuom 100 adi mar:                   |
|      | 1= rech manuma                                     |
|      | 2= rech mothol                                     |
|      | 3= rech motuo                                      |
| 49.  | On that day, at how many places did you sell fish? |
| W49. | Chieng'o ne iuso rech kuonde adi?                  |
| 50.  | What type of buyers were these?                    |
|      | 1= consumers                                       |
|      | 2= small scale processors                          |
|      | 3= small scale fishmongers or traders              |
|      | 4= large commercial fish traders or sellers        |
|      | 5= fish processing factories or plants             |

| <b>w</b> 50. | Jo ng'iewo ne gin joma chal nade?  1= kastemba ma pile 2= jo los rech matindo 3= jo ohala matindo 4= jo ohala madongo 5= jo ohala matero rech e factory 6= jo ndigini               |
|--------------|---|
| 51.          | How many of these buyers were relatives or friends of yours?  If relatives or friends, do you give them better fish or a price per fish? 1= no; 2= yes                              |
| <b>W</b> 51. | Adi kuom jong'iewo gi mane watni kata osiepeni?  Be ichiewo rech mabeyo kata nengo maber?  1= ooyo; 2=eeeh  |
|              | When you sold fish that day, how much did you charge for each species and each type (e.g. fresh, smoked, dried)  Fresh Smoked Dried  1= mbuta / / / / / / / / / / / / / / / / / / / |
| W52.         | Kane iuso rech gi ne ochuli pesa adi e kit rech ka rech to gi kaka olose (eg. marumu, othol, motuo)  MANUMU MOTHOL MOTUO  1= mbuta// 2= ngege// 3= omena// 4= ochong'a//            |
| 53.          | 5= fulu / / / / / / / / / / / / / / / / / /   |
|              | <pre>fish you bought and/or sold? (mark all that apply)     1= walked     2= bicycle</pre>  |

|              | 3= Bus, matatu 4= transport boat 5= lorry, van, pick-up truck 6= refrigerated lorry 7= none (sold at this beach) 8= other (specify) |
|--------------|---|
| <b>W</b> 53. | Chieng'no ne idhiye chiro nade mondo ius kata ng'iew rech? (ket duto mowacho)  1= ne awuotho  |
| 54.          | On that day, did other people work with you in buying, selling, or processing these fish?  1= no 2= yes a. How many:     females    |
|              | this business? 1= no  |

|      | 2= yes   |
|------|--|
| W54. | Chieng'o, be jomoko ne okonyi ng'iewo, uso kataloso    |
|      | rech gi?   |
|      | 1= ooyo  |
|      | 2= eeeh  |
|      | (w)a. Ji adi?  |
|      | mamon  |
|      | machuo   |
|      | nythindo   |
|      | (w)b. Gitiyo seche te koso man samatin?                |
|      | 1= seche matin   |
|      | ji adi?  |
|      | 2= seche te  |
|      | ji adi?  |
|      | (w)c. Kuom jogi adi ma wedeni                          |
|      | Gin wedeni/watni nade?                                 |
|      | Be ne ichulogi?  |
|      | 1= ooyo  |
|      | 2= eeeh  |
|      | I chulo gi nade?                                       |
|      | pile?  |
|      | juma ka juma?  |
|      | edwe?  |
|      | (w)d. Kuom jogi ji a di mane itiyo go ma ok            |
|      | watni?   |
|      | Be ne i chulo gi?                                      |
|      | 1= ooyo; 2= eeeh                                       |
|      | Ne ichulogi nade?                                      |
|      | <pre>pile pile?</pre>                                  |
|      | juma ka juma?  |
|      | edwe?  |
|      |  |
|      | (w)e. Be a chiel kuom jogi uriworu godo o hala ni?     |
|      | 1= ooyo; 2= eeeh                                       |
| EE   | During the most ween (12 months) at how many landings  |
| 55.  | During the past year (12 months) at how many landings  |
|      | or other places did you buy fish?places                |
| พรร  | E high mokadha (dwagha 12) na ingliawa ragh adha watha |
| wss. | E higa mokadho (dweche 12) ne ing'iewo rech edho wethe |
|      | adi  |
| 56.  | During the past year (12 months) whic of the following |
| 50.  | species have you bought (Ksh)?                         |
|      | Ksh.   |
|      | 1= mbuta   |
|      |  |
|      | 2= ngege<br>3= omena                                   |
|      | 3- UMENA   |

|              | 4= ochong'a<br>5= fulu<br>6= other\ Ksh   |    |
|--------------|---|----|
| <b>W</b> 56. | E higa ma okadho (dweche 12) ne ing'iewo rech gi maro nade (Ksh)?  Ksh.  1= mbuta 2= ngege 3= omena 4= ochong'a 5= fulu 6= other Kgs  | mo |
| 57.          | How has the price for this species changed in the past year (12 months)?  1= decreased 2= no change 3= increased  a= mbuta b= ngege c= omena d= ochong'a e= fulu f= other       | t  |
| <b>W</b> 57. | Bech rech gi ose lokore ma chal nade bang' dweche 12 mokadho?  1= odok chien 2= onge lokruok moro 3= ose medore a= mbuta b= ngege c= omena d= ochong'a e= fulu f= mamako (kaka) |    |

| 58.          | Why has the price changed in this way?  1= less fish available  2= more fish available  3= fewer buyers of this species of fish  4= more buyers of this species of fish  5= other (specify)  a= mbuta b= ngege  c= omena d= ochong'a  e= fulu f= other |
|--------------|--|
| <b>W</b> 58. | Ang'o ma omiyo nengo oselokore kama?  1= rech tin 2= rech ngeny 3= jongiew rech ni tin ahinya 4= jongiew rech ni ngeny 5= momako (ler ane)   |
|              | a= mbuta b= ngege<br>c= omena d= ochong'a<br>e= fulu f= mamako (kaka)  |
| 59.          | During the past year (12 months) at how many places have you sold fish?  |
| <b>W</b> 59. | E dweche 12 mokadho ne iuso rech kuonde adi?   |
| 60.          | On the days when you are actively trading fish, about how many hours do you spend at your work?hours   |
|              | Odiochienge ma idich iloko rech ikowo seche adi ka   |

| 61.  | On average, how many days per week do you work in the       |
|------|---|
|      | fishery?days  |
|      | a. Which time of the month do you work more often           |
|      | than usual? Why?  |
|      | 1= no   |
|      | 2= yes> (mark all that apply)                               |
|      | 1= boats go out fishing more often                          |
|      | 2= more boats go out fishing                                |
|      | 3= fish catches per boat (per trip) are                     |
|      | larger  |
|      | 4= demand for fish from your buyers is                      |
|      | greater   |
|      | 5= few traders are working                                  |
|      | 6= consumer prices for fish are higher                      |
|      | 7= nothing else to do                                       |
|      | 8= other (specify)  |
|      |   |
|      | h Tibet de con de domine the time observes one not          |
|      | b. What do you do during the time when you are not          |
|      | working much?   |
|      | (mark all that apply)                                       |
|      | 1= nothing  |
|      | 2= farming  |
|      | 3= wage labor   |
|      | 4= run another business of mine (specify                    |
|      | type)   |
|      | 5= other  |
| W61. | Ka ipimo, ikawo ndalo a di ejuma ka iloko rech?             |
|      | (ndalo)   |
|      | (w) a. Seche mage edwe ma itiyo mang'eny moloyo?            |
|      | (, 2.   |
|      | Ang'o ma omiyo (ket riny isi e duto mowacho)                |
|      |   |
|      | 1= yiedhi dhi lupo pile pile                                |
|      | 2= yiedhi lupo mang'eny                                     |
|      | 3= yiedhi mako rech mang'eny                                |
|      | 4= dwaro mar rech omedore                                   |
|      | 5= jo ohala ok ngeny  |
|      | 6= nengo rech ni mala                                       |
|      | 7= onge gimora machielo ma anyalo timo<br>8= moko (ler ane) |
|      | o- moro (let que)   |
|      | (w)b. Ang'o ma itimo e seche ma ok iti mang'eny?            |
|      |   |

|      | 1= oonge   |
|------|--|
|      | 2= apuro   |
|      | 3= atiyo tij andika  |
|      | 4= aloko ohala machielo (ler ane)  |
|      | 1 diono ondia maonifero (fer ane)  |
|      | 5= mamako (kaka)   |
|      |  |
|      |  |
| 62.  | On average, how many days per month do you work actively trading fish?  DAYS |
|      | a. What time of the year do you work more than                               |
|      | usual? Why?  |
|      | For what reasons? (mark all that apply)                                      |
|      | 1= boats go out fishing more often   |
|      | 2= more boats go out fishing   |
|      | 3= fish catches per boat (per trip) are                                      |
|      | larger   |
|      | 4= demand for fish from your buyers is                                       |
|      | greater  |
|      | 5= few traders are working   |
|      | 6= consumer prices for fish are higher                                       |
|      | 7= other (specify)   |
|      | (open  |
|      |  |
|      | b. What do you do during the time when there is                              |
|      | no work or less work?  |
|      |  |
|      | 1= nothing   |
|      | 2= farming   |
|      | 3= wage labor  |
|      | 4= run another business of mine (specif                                      |
|      | type)  |
|      |  |
|      | 5= other (explain)   |
|      |  |
|      |  |
| W62. | Ka ipimo, itiyo ndalo adi e dwe k a idich iloko rech? Ndalo                  |
|      | (w) a. Seche mage e higa maityo mang'eny moloyo?                             |
|      | Ang'o ma omiyo?  |
|      | 1= yiedhi dhi lupo pile  |
|      | 2= yiedhi dhi lupo mathoth   |
|      | 3= rech mayie ka yie mako ugeny  |
|      | 4= rech an jongiewo dwaro ng'eny   |
|      | 5= jo lok rech tin   |
|      | 2- JO TON TECH CILL  |

|       | 6= nengo rech mi uso ni malo<br>7= mamoko (ler ane)  |
|-------|--|
|       | Ang'o ma itimo e seche ma in kod tich matin kata ka tich onge kabisa?  |
|       | 1= oonge<br>2= apuro<br>3= tij andika<br>4= aloko ohala machielo (kaka)  |
|       | 5= mamoko (ler ane)  |
| 63. A | TRADERS OR PROCESSORS - GO TO #64  Are there times when you want to buy fish but cannot find fish for sale or the fish are not affordable?  1= no 2= yes> When does this happen?   |
|       | What causes it?  |
|       | Sende nitie seche moko ma idwaro ng'iewo rech to ok<br>nyal yudo kata nengo gi tek?<br>1= ooyo<br>2= eeeh> ma timore seche mage?   |
|       | Ma timore ni rech ang'o?   |
|       | That was the source of your total investment funds when you started your business? (Check all that apply)  1. own savings/started it  2. friends and relatives  3. private loans  4. government assistance  5. inherited  6. as gift  7. partnership  8. other (specify) |
|       | <ul><li>a. if currently partnership, how many people are interest/shareholders?</li><li>b. if partnership, who are your partners?</li><li>1= family members</li></ul>  |

|              | <pre>2= friends 3= other investors 4= an institution 5= others (specify)</pre>   |
|--------------|--|
| <b>W</b> 64. | Pesa gi duto mane ichako godo ohala ne owruok kanye?  1. pesana mane akano/ne achake  2. osiepe gi wede  3. hola mopondo  4. kony moa ka sirikal  5= neowena  6= mich  7= wariwore  8= mamoko (ler ane)                            |
|              | (w)a. ka en mar riwruok, ji adi ma uriworugo?  |
|              | <pre>(w)b. ka en riwruok, jomage ma jokanyono 1= jodalawa 2= osiepe 3= jo ohala mamoko 4= riwruok moro mamoko (ler ane)</pre>  |
| 65.          | What was the single most important issue that motivated you to go into this business?  1= none 2= availability of funds 3= family and friends 4= seek employment/income 5= market availability 6= seeing others 7= other (specify) |
| <b>W</b> 65. | En ango mane omiyo i chako ohalani ahinya?  1= onge 2= pese ne nitie 3= jodalawa gosiepe 4= dwaro tich/yuto 5= chiro ne nitie 6= aneno jomoko 7= mamoko (ler ane)  |
| 66.          | Did you face any problems when you first started (acquired) your SSE?  1= no   |

| 2= yes> If yes, name and rank the major two: 1.   |
|---|
| 2.  |
| W66. Ka ne ichako ohalani, bende ne nitie chandruok?  1= eeeh 2= ooyo> Ka eeeh, to wach nyingi ka luore gi kony  1. 2.  |
| 67. What is the source for your working capital/operational expenses?  a. own savings b. savings society c. private loans d. government assistance e. other (specify) |
| W67. Pesa mar ohala ma itiyo go/garama ne iyuodo nade? a. pesana mane akano b. nyoluoro c. hola mopondo d. kony moa ka sirikal e. mamoko                              |
| <pre>IF FISHERS - GO TO #69 68. Do you own or rent your business site?     1= own     2= rent</pre>   |
| W68. Ka ma ilokoe ni mari?<br>1= mara awuon; 2= achulo/akombo   |
| 69. Are you able to save any money from your business?  1= no 2= yes  a. About how much do you save per month?KSH   |
| W69. Bende lkano pesa ma owouk e ohandi ni?  1= Ooyo; 2= Eeeh  (w)a. Inyalo kano pesa adi e  dwe?KSH  |

| 70.  | you usually ask for advice?                             |
|------|---|
|      | <pre>1= relative 2= friend</pre>                        |
|      | 3= neighbor   |
|      | 4= spouse   |
|      | 5= other  |
| (spe |   |
| •    | cify) Why do you ask this person?                       |
|      |   |
| W70. | Ka idhi marach gi tichni ng'ano ma i penjo mondo        |
|      | opuonji?  |
|      | 1= Watna  |
|      | 2= Osiepna  |
|      | <pre>3= Ja batha/ja dala machielo 4= Chuora/Dhako</pre> |
|      |   |
|      | 5= Mamoko (ler wachni)Ang'o momiyo en ng'atni?          |
|      | ring o montyo on ng dent.                               |
| 71.  | Do you face any business competition?                   |
|      | 1= no   |
|      | 2= yes>   |
|      | a. If yes, from whom?                                   |
|      | 1= other MSE's  |
|      | 2= the LSE's  |
|      | 3= illegal competition                                  |
|      | 4= other (specify)                                      |
| W71. | Be nitie jomoko maloko ohandi ni ma upiemgo?            |
|      | 1= eeeh>  |
|      | 2= ooyo   |
|      | a. Ka eeeh, gin jomage?                                 |
|      | 1= jo ohala mamoko kaka in                              |
|      | 2= jo ohala mamoko madongo                              |
|      | 3= jpma loko rech eyor kuo                              |
|      | 4= mamoko (ler ane)                                     |
| 72.  | What steps do you take to expand your market or to sell |
|      | more?   |
|      | 1= business sign  |
|      | 2= word of mouth  |
|      | 3= quality of product                                   |
|      | 4= quality of service                                   |
|      | 5= treatment of customers                               |
|      | 6= sell on credit                                       |
|      | 7= other (specify)                                      |

| W72. | Ang'o ma itimo mondo omi ohandi omedre kata mondo ius rech mang'eny?  1= ndiko nying ohala 2= wa che ne gidhoga 3= los gik mabeyo 4= los kar tich maber 5= loso jo ngiewo aber 6= uso gik moko gowi 7= mamoko (ler ane) |
|------|---|
| 73.  | Are you facing any problems in the acquisition of raw materials/merchandise?  1= too expensive 2= unavailable 3= poor quality 4= lack of foreign currency (FX)  |
| W73. | Be iyudo chandruok yudo gik ma idhi uso?  1= nengo tek  |
| 74.  | Who is the primary buyer of your products/merchandise?  1= rural consumers  2= urban consumers  3= retailers  4= wholesalers  5= bicycle traders  6= other MSE's  7= other (specify)                                    |
| W74. | Ng'ano ma iusone ahinya?  1= joma odak e gweng 2= joma odak e boma/taon 3= jo ohala matindo 4= jo ohala madongo 5= jo ndigni/jo oringi 6= joma nigi ohala matindo tindo 7= mamoko (ler ane)                             |
| 75.  | How do you decide what price to charge?   |
|      | Does this include a charge for your labor or time?  1= no 2= yes  How much do you add in to account for your labor and time?  |
|      | Do you have a set amount of profit you want to get per fish?  |

| W75. Nengo to iloso nade?  | _  |
|--|----|
| Seche gi mag tich bende imedo ei bech rech? 1= Ooyo  | •  |
| 2= Eeeh  |    |
| Pesa adi ma imedo mondo orom kod seche gi?<br>Ksh  |    |
| Bende nitie pesa ma iketo ni nyaka iyudie rech   | ka |
| rech?  |    |
| 76. Have you received any business   |    |
| training?  |    |
| When was that?   |    |
| 1. Management training   |    |
| source:  |    |
| 2. Technical assistance/training:  |    |
| source:  |    |
| 3. book keeping/accounting   |    |
| source:  |    |
| 4. marketing   |    |
| GA119GA 1  |    |
| 5. other (specify)   |    |
| W76. Be ise yudo puonj mar ohala moro? Ne kar ang'o?  1. Puonj mar rito ohala koa kanye: 2. kony mar tiegrouk koa kanye: 3. rito buge mag akaont koa kanye: 4. medo ohala koa kanye: 5= mamoko (ler ane) |    |
| 77. Do you keep any written business records?  |    |
| 1= no  |    |
| 2= yes> If yes, what type?   |    |
| 1= complete records  |    |
| 2= purchase records/receipts   |    |
| 3= sales records<br>4= credit sales  |    |
|  |    |
| 5= credit purchases<br>6= utility expenses   |    |
| 7= others (specify)  |    |
| /- Others (specify)  |    |
| W77. Be indiko piny kaka ohandi dhi?   |    |
| 1= ooyo  |    |
| 2= eeeh> Ka eeeh, chal:  |    |
| 1= rekod mongith 2= ruide mag nyiepo   |    |
| 3= rekod mag uso 4= gowi   |    |
| 5= nyiepomohola 6= gik ma atiyo godo   |    |

|              | 200  |
|--------------|--|
|              | 7= mamoko (ler ane)  |
| 78.          | Do you keep bank accounts?  1= yes, saving 2= yes, checking 3= no  |
| <b>W</b> 78. | Be in kod akaunt e bengi?  1= eeeh, saving 2= eeeh, karent 3= ooyo   |
| 79.          | Which financial assistance sources, if any, are you aware of which might assist you with your business?  (Tick as many as appropriate)  1= cooperative bank  2= national bank/Bank of kenya  3= savings society (other than beach) nyoluoro  4= Beach-site nyoluoro  5= moneylender  6= nyoluoro for church or church organization  7= other (specify) |
| W79.         | Bende nitiere kama iparo ni inyalo yudoe kony korka pesa ma inyalo medogodo ohandini? (Ket ranyisi emangeny kaka nyalore)  1= bengi mar riwruok mar jolupo 2= bengi mar piny owacho/National Bank of Kenya 3= nyoluoro moro machielo ma ok dho wathka 4= nyoluoro mar dho wathni 5= jaholji pesa 6= nyoluoro mar kanisa 7= mamoko (kaka)               |
| 80.          | Have you ever applied for financial assistance?  1= yes - applied and received  2= yes - applied and refused  3= yes - applied and pending  4= no  |

- W80. Bende ise oroe baruwamoro mondo iyudie hola moro?
  - 1= eeeh ne andiko kendo ne ayudo

  - 2= eeeh ne andiko kendo ne okayudo 3= eeeh ne andiko kendo pod arito
  - 4= ooyo
- If you could receive financial assistance, what would you use it for?

|        | <pre>1= buy tools and machinery</pre>                  |
|--------|--|
|        | 2= buy additional stock                                |
|        | <pre>3= payment for workers</pre>                      |
|        | <pre>4= repair/rent/buy premises or shop</pre>         |
|        | 5= purchase transportation                             |
|        | 6= open a new business                                 |
|        | 7= other (specify)                                     |
|        | (0)  |
| W81.   | Kaponi iyudo hola moro sani to di itim godo ango?      |
|        | 1= amed godo stok                                      |
|        | 2= angiew god gik tinogo rech                          |
|        | 3= anglew godo ndiga                                   |
|        |  |
|        | 4= ayaw ohala ma chielo                                |
|        | 5= alos godo/akom/anyiew godo ka ohala                 |
|        | 6= anyuomgo dhako machielo 7= mamoko (ler ane)         |
|        |  |
|        | When you have a problem at the market or the beach -   |
| 7      | who do you ask for help?                               |
|        | Why do you ask that person?                            |
| W82. I | Ka in kod chandruok e chiro kata e dho wath - ngano ma |
| :      | idhi ire mondo okonyi? Ang'o                           |
| I      | nomimyo?   |
|        |  |
| 83. 1  | Do you work with a group of others in your trading or  |
|        | selling?   |
|        | 1= no> If <b>NO</b> , go to #86                        |
|        | 2= yes   |
|        | Are these others: (check all that apply)               |
|        | 1= relatives   |
|        | 2= friends   |
|        |  |
|        | 3= neighbors   |
|        | 4= other (specify)                                     |
|        |  |
| W83. I | Be itiyo gi jomoko kata ogando moro ka iloko kata uso? |
|        | 1= Ooyo> OOYO, dhi apenjo #W86                         |
|        | 2= Eeeh  |
|        | Be jogo (ket ranyisi e duto mowacho)                   |
|        | 1. Wedeni  |
|        | 2. Osiepe  |
|        | 3. Jabathi   |
|        | 6. Mamoko (ler wachni)                                 |
|        |  |
| 84.    | How long have you been working with that group?        |
|        | Jon woom norming minut dince group.                    |
| W84.   | Se tiyo kod jogo marom nade?                           |
|        |  |
| IF NOT | IN FISHERY - GO TO #87                                 |

| 85.          | How much do you pay for transport to and from the beaches each day?Ksh  |
|--------------|---|
| W85.         | I chulo pesa adi edho wath?Ksh  |
| 86.          | How much do you pay for transport to and from where you sell your fish each day?  |
| W86.         | I chulo pesa adi dhi gi dwuogo e chiro?ksh  |
| 87.          | How long does it take to get from your home to this beach?  |
| <b>W</b> 87. | Kawi seche marom nade kia dala nyaka dho wath ka?   |
| 88.          | How long does it take you to get to the place where you sell your fish?   |
| W88.         | Kawi seche marom nade ka idhi e chiro ma iusoe?   |
| 89.          | At what time of day do you leave your home to begin your work/business?   |
| W89.         | Saa mane ma iwuokie ka ibiro chako tichni/ohandi?   |
| 90.          | At what time of day do you end your work/business and go home?  |
| <b>w</b> 90. | I weyo tich/ohandi saa adi mondo idhi dala?   |
|              | ISHER - GO TO #92  If you are selling on a particular day and have to leave your stand, who sells for you?  1= relative 2= friend 3= neighbor 4= anyone selling close by 5= no one, I close my stand 6= other (specify) |
| W91.         | <pre>Ka en chieng' chiro to chuno ni nyaka idhi wuoth, ng'ano ma iweyo mondo oritni ohandi? 1= Watna</pre>  |

|      | 2= Osiepna 3= Jadala machielo 4= Ng'at man buta 5= Oonge (A loro) 6= Moko (ler)   |
|------|---|
| 92.  | How many customers would you say you have on an average day?  |
|      | <pre>Is this more, less than, or the same as others who sell around you?     1= less     2= the same     3= more (if 1 or 3): What do you think explains that difference?</pre> |
| W92. | Jo ng'iewo/kastembe adi ma inyalo wacho ni in godo e odiochieng'?   |
|      | Mang'eny, tin koso chalre gi mag joma uso bathi?  1= tin  2= chalre  3= mang'eny  (ka 1 kata 3): Ang'o ma kelo ma?  |

| 93.    | of you        | our honesses<br>(1) =<br>(2) =                        | ousehos<br>or o<br>= No -<br>= Yes | old wor<br>crafts<br>> Go<br>> | rk for<br>or so<br>D TO 1 | r pay<br>elling<br>Next Q | id you or other members or engage in any small activities? UESTION small business, crafts, |  |  |  |  |
|--------|---------------|---|------------------------------------|--------------------------------|---------------------------|---------------------------|--|--|--|--|--|
|        | or s          | ales v  | vould                              | this h                         | oe?                       |                           |  |  |  |  |  |
|        |               |   |                                    |                                |                           |                           | d did this work? (check ed in the activity)  |  |  |  |  |
|        | 3. W          | 3. Was this a new activity during the past 12 months? |                                    |                                |                           |                           |  |  |  |  |  |
|        |               |   |                                    | less t                         |                           | spent                     | on this activity when  |  |  |  |  |
| Code   |               |   |                                    |                                |                           |                           |  |  |  |  |  |
|        |               | ehold<br>(H) Hu                                       |                                    |                                |                           | 5                         | = (NA) New Activity  |  |  |  |  |
|        |               | •   |                                    |                                |                           |                           | in past 12 months  |  |  |  |  |
|        |               |   |                                    | or co-v                        |                           |                           | <pre>= (LT) Less Time than last year</pre>   |  |  |  |  |
|        | 4 =           | (OA) (  | ther                               | Adults                         |                           |                           | <pre>= (MT) More Time than</pre>   |  |  |  |  |
|        | the 1         | nousel  | nold                               |                                |                           |                           | last year  |  |  |  |  |
| H<br>1 | <b>W</b><br>2 | C<br>3  | OA<br>4                            | NA<br>5                        | LT<br>6                   | MT<br>7                   | RETAIL AND WHOLESALE   |  |  |  |  |
| SALES  | 5             |   |                                    |                                |                           |                           | RETAIL AND WHOLESALE   |  |  |  |  |
|        |               |   |                                    | <del></del>                    |                           |                           | A1. Small business/shop A2. Selling fish   |  |  |  |  |
|        |               |   |                                    |                                |                           |                           | A3. Selling animals or   |  |  |  |  |
|        |               |   |                                    |                                |                           |                           | other food A4. Other retail or   |  |  |  |  |
|        | <del></del>   |   |                                    | <del></del>                    |                           |                           | wholesale sales  |  |  |  |  |
|        |               |   |                                    |                                |                           |                           | (specify)  |  |  |  |  |
|        |               |   |                                    |                                |                           |                           |  |  |  |  |  |
| H<br>1 | <b>W</b><br>2 | C<br>3  | OA<br>4                            | <b>NA</b><br>5                 | LT<br>6                   | MT<br>7                   |  |  |  |  |  |
| -      | -             | J   | •                                  | J                              | Ü                         | ,                         | MANUFACTURING  |  |  |  |  |
| nets   |               |   |                                    |                                |                           |                           | B1. Making boats or  |  |  |  |  |
|        |               |   |                                    |                                |                           |                           | B2. Clay/Mats/Metalwork  |  |  |  |  |
|        |               |   |                                    |                                |                           |                           | B3. Other manufacturing (specify)  |  |  |  |  |
|        |               |   |                                    |                                |                           |                           | <del></del> _  |  |  |  |  |

| Н<br>1 | <b>W</b><br>2 | C<br>3 | 0A<br>4 | <b>NA</b><br>5 | LT<br>6 | MT<br>7        |  |
|--------|---------------|--------|---------|----------------|---------|----------------|--|
|        |               |        |         |                |         |                | SERVICE<br>C1. Any cleaning or<br>repair (nets, lamps, |
|        |               |        |         |                |         |                | engines) related to the fishery                        |
|        |               |        |         |                |         |                | C2. Fish processing or transporting                    |
| •      | -             | -      |         |                | •       |                | C3. Weaving, sewing or mending for cash                |
|        |               |        |         |                | ·       |                | C4. Maid or housekeeper C5. Music or art               |
|        |               |        |         |                |         |                | C6. Bicycle or auto                                    |
|        |               |        |         |                |         |                | repairs  |
|        |               |        |         |                |         |                | C7. Lending money C8. Other service                    |
|        | -             |        |         | -              | -       |                | (specify)  |
|        |               |        |         |                |         |                |  |
| Н<br>1 | <b>W</b><br>2 | C<br>3 | 0A<br>4 | NA<br>5        | LT<br>6 | <b>MT</b><br>7 |  |
|        |               |        |         |                |         |                | OTHER FISHERY  |
|        |               |        |         |                | •       |                | D1. Any fishery work on boats:                         |
|        |               |        |         |                |         |                | 1= own   |
|        |               |        |         |                |         |                | 2= manage  |
|        |               |        |         |                |         |                | 3= crew  |
| Н<br>1 | <b>W</b><br>2 | C<br>3 | OA<br>4 | <b>NA</b><br>5 | LT<br>6 | <b>MT</b><br>7 |  |
| 1      | 2             | J      | 3       | 3              | O       | ,              | FARMING OR HERDING                                     |
|        |               |        | _       |                |         |                | E1. Work on another's                                  |
|        |               |        |         |                |         |                | <pre>farm/garden E2. Herd another's</pre>              |
|        |               |        |         | -              |         |                | animals  |
| Н      | W             | С      | OA      | NA             | LT      | MT             |  |
| 1      | 2             | 3      | 4       | 5              | 6       | 7              |  |
|        |               |        |         |                |         |                | SALARIED JOB<br>F1. Government                         |
|        |               |        |         |                |         |                | II. Government   |
|        |               |        |         |                |         |                | F2. Private  |

| MECHE | KIIOM  | DONGRUOK  | MAD  | ΔT. | NC T | VIE  | KOD   | .TO  | ODE   |
|-------|--------|-----------|------|-----|------|------|-------|------|-------|
| MCCUC | TO CHA | コンいればたいいた | אמיו | UM  | INIT | III. | נונוח | 11() | UNIT. |

|        |               |                      |                        |                                      |                |                | .2 1.05 00 052   |
|--------|---------------|----------------------|------------------------|--------------------------------------|----------------|----------------|--|
| W93.   | e oh          | nala m<br>[1]<br>[2] | oro k<br>Ooyo-<br>Ee   | ata ti<br>-> DHI                     | j lwe<br>YE PE | edo k<br>NJO 1 | pende in kata jo odi notiyo<br>kata andika?<br>Machielo                            |
|        |               | _                    |                        | mane o<br>o tijn                     |                | tijn           | ni? (ket ranyisi kuom jo ot  |
|        | 3. N<br>moka  |                      | odi o                  | chako                                | tijni          | /oha           | alani edweche apar gariyo  |
|        | mang          | 'eny                 |                        | matin                                |                |                | jo odi ne kawo seche<br>ohalani e dweche apar                                      |
| House  | 1 = 2 = 3 =   | Ne ac                | imo m<br>hiel<br>ithin | a?/ hu<br>kuom m<br>de not<br>ngo ot | onde<br>imo m  | noti<br>na?    | .mo ma?/ wife or co-wives  |
| Code   | :             |                      |                        |                                      |                |                |  |
|        |               |                      | memb                   |                                      |                |                |  |
|        | 1 =           | ( <b>H</b> ) H       | usban                  | d                                    |                |                | 5 = (NA) New Activity in past 12 months  |
|        | 3 =<br>4 =    | (C) o                | ne or<br>Other         | or co-<br>more<br>Adult              | Child          | len            | 6 = (LT) Less Time than<br>last year<br>7 = (MT) More Time than<br>last year       |
| Н<br>1 | <b>W</b><br>2 | C<br>3               | OA<br>4                | <b>NA</b><br>5                       | LT<br>6        | <b>MT</b><br>7 | GIK MOTIMO<br>LOKO CHUMBU KOD JUMBLA   |
|        |               |                      |                        |                                      |                | -              | A1. Ohala matin/Duka A2. Loko rech A3. Loko jamni/chiemo moko A4. Loko moko (kaka) |

TIJE LWEDO MOKO

| Н<br>1 | <b>W</b><br>2 | C<br>3        | OA<br>4 | NA<br>5 | LT<br>6 | MT<br>7 |   |
|--------|---------------|---------------|---------|---------|---------|---------|---|
|        | <u> </u>      | · <del></del> |         |         |         | · ——    | B1. Gero yiedhi/tonde                                 |
|        |               |               |         |         |         |         | lupo<br>B2. Chweyo agulini, par                       |
|        | · <del></del> |               | ·       |         |         |         | kata  |
|        |               |               |         |         |         |         | theth   |
|        |               |               |         |         |         |         | B3. Tije moko   |
|        |               |               |         |         |         |         | TIJE MATINDO MAPOGORE                                 |
| H      | W             | С             | OA      | NA      | LT      | MT      |   |
| 1      | 2             | 3             | 4       | 5       | 6       | 7       | C1 lucks bats loss                                    |
|        |               |               | -       |         |         |         | <pre>C1. luoko kata loso   (tonde, taya,injini)</pre> |
| mag    |               |               |         |         |         |         | tij rech  |
|        | <del></del>   | . <u> </u>    |         |         |         |         | C2. Luoko rech gi sombo                               |
|        |               |               |         |         |         |         | rech C3. Kuocho/chwecho                               |
| mond   | .0            |               |         |         | -       |         | ochule  |
|        |               |               |         |         |         |         | C4. Tich ot   |
|        |               |               |         |         |         |         | C5. goro kata wer mondo                               |
|        |               |               |         |         |         |         | chule<br>C6. loso                                     |
| mato   | kini/         | ndigi         | ni      |         |         |         | CO. 1050  |
|        |               | . <u></u> -   |         |         |         |         | C7. holo ji pesa                                      |
|        |               |               |         |         |         |         | C8. Tije moko   |
|        |               |               |         |         |         |         | TICH LUPO MAMOKO                                      |
| Н      | W             | С             | OA      | NA      | LT      | MT      | 11011 2010 12110110                                   |
| 1      | 2             | 3             | 4       | 5       | 6       | 7       |   |
| lupo   |               |               |         |         |         |         | D1. Tiji mamoko kuom                                  |
| Tupo   |               |               |         |         |         |         | e yie:  |
|        |               |               |         |         |         |         | 1= wuon yie   |
|        |               |               |         |         |         |         | 2= rito yie   |
|        |               |               |         |         |         |         | 3= lupo e yie   |
|        |               |               |         |         |         |         | PUR/PITH  |
| H      | W             | С             | OA      | NA      | LT      | ΜT      |   |
| 1      | 2             | 3             | 4       | 5       | 6       | 7       | D1 Missa a mustb malata                               |
|        |               |               |         |         |         |         | E1. Tiyo e pwoth ng'ato E2. Kwayo ne ng'ato           |
| dhog   | e             |               |         |         |         |         | and the my deco                                       |
| _      |               |               |         |         |         |         |   |
| Н      | W             | С             | OA      | NA      | LT      | MT      | TIJ MISARA  |
| п<br>1 | w<br>2        | 3             | 0A<br>4 | NA<br>5 | 6       | 7 7     |   |
| -      |               | -             | -       | _       | _       |         |   |

|       | F1. Sirikal F2. Kambi   |
|-------|---|
| 94.   | During the past twelve months, how many acres were farmed by you and other members of your household?acres                    |
|       | Of these, how many were rented from someone outside your household? acres   |
| W94.  | Kuom dweche apa ga ariyo mokadho in kod jo odi ne puro eka adi? (hectares)  Kuom magi adi mane ikombo kuom ng'ato? (hectares) |
| 95.   | During the past twelve months, how many animals were kept by you and other members of your household?                         |
| Anima | als Number  |
|       | y cows Donkeys  |
|       |   |
| Goats |   |
|       |   |
| Sheep |   |
| Swine |   |
|       | Edweche apar ga ariyo mokadho in kata jo odi ne in gi jamni adi?  |
| Jamni | Kwan gi   |
| Dhok  | minyiedho Dho moko  |
| Diek  | Rombe   |
| Angui |   |
| Guen  |   |
|       |   |
| 96.   | Do you own a motor vehicle/bicycle? 1= No   |
|       | 2= Yes> What kind? (mark all that apply)  |
|       | [ ] Lorry   |
|       | [ ] Van   |
|       | [ ] Pick-up truck   |
|       | [ ] Automobile (including Land Rover)   |
|       | [ ] Motorcycle  |
|       | [ ] Bicycle   |
|       | [ ] Other (specify)   |
|       | ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( )   |
|       |   |

W96. Bende in kod mitoka/ndiga?

|      | 1= Ooyo   |
|------|---|
|      | 2= Ee> Machalo nade?  |
|      | [ ] Lori (chakla) [ ] Mitoka matin  |
|      | [ ] mitoka matin mar misigo [ ] Piki piki   |
|      | [] Ndiga  |
|      | [ ] Mamoko (kaka)   |
| 97.  | Do you own any buildings other than your house?  1= No  |
|      | 2= Yes> How many? BUILDINGS   |
| W97. | Be in kod Ot/Duka moro maok midake?  1= Ooyo; 2= Ee> Adi?   |
| 98.  | In general would you say that your standard of living is better or worse than five years ago?  1= Much better   |
| ₩98. | <pre>Ka ing'iyo sani ng'imani/dakni ber koso rach moloyo higni abich mokalo?     1= Ber ahinya 2= Ber moromo     3= Chalre     4= Rach mromo     5= Rach ahinya</pre> |

## Section 5: Women's Issues

99. Are you living together with your husband? 1= no; 2=yes--> (if yes, go to next question) if no --> Did you leave one another? 1= no; 2= yes For how long, have you and your husband been apart from each other? 1= 6 - 11 months 2 = 1 - 2 years 3= more than 2 years less than 5 years 4= 5 years or more W99. Be idak gi chuori? 1= Ooyo; 2= Eeeh --> (ka ee to dhi e penjo machielo) ka ooyo --> Ne uweru? 1=0oyo; 2= Eeeh Use dak ka upogoru gi chuori ndalo marom nade? 1= dweche 6-11 2= higa 1-2 3= moloyo higni 2 to matin ne higni 5 4= higni 5 kata moloyo 100. How many co-wives do you have? Do you or your co-wives work together to: a. cook: 1= no; 2= yes b. cultivate 1= no; 2= yes c. share childcare 1= no; 2= yes 100. Un mon a di? Be in kod mond nyiekeni tiyo kanyakla mondo: a. utedi: 1= ooyo; 2= eeeh b. upur 1= ooyo; 2= eeeh c. rito nyithindo 1= ooyo; 2= eeeh

101. To what extent does your husband approve of your work?

1= does not approve at all

2= he would prefer that you not be doing this work

|           | <pre>3= doesn't care one way or the other 4= approving 5= very approving</pre>  |
|-----------|---|
| W<br>101. | Be wuon paru oyie kod tijini?  1= Ok oyie godo kata matin  2= Ok doher mondo ati tijni  3= Ok odewo kata aloko kata ok aloki  4= Oyiegodo  5= Oyiegodo ahinya/Ohera ahinya  |
| 102.      | How are your children looked after when you are at your business or job?  1= no children requiring supervision 2= take them with you 3= leave them with a relative; Who? 4= husband provides care for them 5= other - explain |
| W<br>102. | Nythindi to ng'ano marito ka in e tich ka?  1= Onge nyithindo ma inyalo ng'i  2= A biro kodi e tich  3= Aweyo gi watna;  Ng'a?  4= Chuora rito gi  5= Mamako (ler ane)  |
| 103.      | What problems do woman who are maried have with their husbands when they are involved in business?  |
| W<br>103. | Ere chandruok ma mine yudo e tij ohala gi chuogi ka gi goyo ohala?  |
| 104.      | What problems do women doing business have whether they are married or not?   |
| W<br>104. | Chandruok mane ma mine yudo ka gi loko ohala kata gin joma osekendi kata podi?  |

## APPENDIX C

|       |        |                | Beac           | ch Ob      | servat         | tion Check                              | list        |               |
|-------|--------|----------------|----------------|------------|----------------|---|-------------|---------------|
|       | Day    | Mon            | th Y           | ear        |                |   |             |               |
| DATE: | :      |                | 1              | <u>995</u> | 1              | Time of D                               | ay:         | a.m./p.m.     |
| Beach | h Name | e              |                |            |                | Sub-                                    |             |               |
| locat | tion   |                |                |            |                |   |             |               |
| DISC  | LICL   |                |                |            |                |   |             |               |
| Prov  | ince   |                |                |            |                |   |             |               |
| Obse  | rver_  |                |                |            |                |   |             |               |
|       |        |                |                |            |                |   |             |               |
| To Ea |        | each L         |                |            | boats          | land at                                 | this be     | ach?          |
| CHECI | KT.TST | ITEMS          |                |            |                |   |             |               |
|       |        |                |                | ty:        | high;          | medium;                                 | low         |               |
| 2.    |        | 1= mb          | uta<br>ena     |            | 2= ng<br>4= oc | hat apply<br>ege<br>hong'a<br>moko (kak |             |               |
| 3.    | Domir  | nant G         | ear(s<br>netti | ) (cl      | neck a         | ll that a<br>osquito n                  | pply):      | _             |
|       | Propu  | ılsion         |                |            |                |   |             | ishing line   |
|       |        |                | _              |            |                | ts? 1= n<br>c. paddli                   |             | es            |
| 4.    | Estin  | Men            |                |            |                | e                                       |             |               |
|       |        | Women<br>Child | ren            |            |                |   |             |               |
| 5.    | Numbe  | er of          | house          | s at       | beach          | site                                    | <del></del> |               |
| 6.    | Numbe  | er of          | shops          | \duka      | as             | ·                                       |             |               |
| 7.    | _      | erativents of  |                |            | _              | : 1= no;                                | 2= yes      |               |
| 8.    | Toile  | et Fac         | iliti          | es:        |                | 1= no; 2=                               | yes         |               |
| 9.    | Road   |                | good/          | fair       |                | r: dirt/a                               | raded:      | dirt/ungraded |

|     | b. can matatus/autos get there? c. is the road maintained? l=no; 2= yes who maintains the road? |
|-----|---|
| 10. | General Condition of the Beach:   |
| 11. | Cooperation/Attitude of Beach Leaders/Officials (to researchers): good/bad/fair Comments        |
| 12. | Is there any market activity of fish directly to consumers? 1= no 2= yes Comments:              |

## APPENDIX D

| Household Observation Checklist  Day Month Year  DATE: 1995  Time of Day a.m./ p.m.  Study Participant Number  Beach Name  Sub-location                              |  |
|--|--|
| District   |  |
| Province   |  |
| CHECKLIST ITEMS  1. Type of house (construction) how many  |  |
| 2. Sheds: 1= no; 2= yes  cow shed; how many chicken coop; how many other sheds; how many   |  |
| Type:  cows; how many  chickens; how many  sheep; how many_  goats; how many_  donkeys; how many_  condens; how many  donkeys; how many  dog(s); how many  other;;;; |  |
| 4. Water Source:  catchment/pond bore hole/well dam river other  |  |
| 5. Latrinetype (shed, covered etc)   |  |
| 6. Utensil Rack  |  |

| 7.  | Electricity |
|-----|-------------|
| 8.  | Radio       |
| 9.  | Bicycle     |
| 10. | Carts       |
|     | COMMENTS    |
|     |             |

## APPENDIX E

Complete Data Tables
Table 21 - Age of Youngest Child Whom Respondent Supports or Birthed (1995, Total)

| Age            | Frequency | Percent   | Cum Percent |
|----------------|-----------|-----------|-------------|
| under one year | 13        | 13.1      | 14.4        |
| 1              | 7         | 7.1       | 22.2        |
| 2              | 17        | 17.2      | 41.1        |
| 3              | 8         | 8.1       | 50.0        |
| 4              | 11        | 11.1      | 62.2        |
| 5              | 5         | 5.1       | 67.8        |
| 6              | 4         | 4.0       | 72.2        |
| 7              | 5         | 5.1       | 77.8        |
| 8              | 5         | 5.1       | 83.3        |
| 9              | 2         | 2.0       | 85.6        |
| 10             | 3         | 3.0       | 88.9        |
| 11             | 2         | 2.0       | 91.1        |
| 13             | 1         | 1.0       | 92.2        |
| 15             | 2         | 2.0       | 94.4        |
| 19             | 1         | 1.0       | 95.6        |
| 20             | 1         | 1.0       | 96.7        |
| 22 - 32        | 3         | 3.0       | 100.0       |
| Doesn't know   | 9         | 9.1       |             |
|                | Mean 5.1: | 56 Median | 3.500       |

Table 22 - Age of Oldest Child For Whom Respondent Provides Care (1995, Total)

|             | Frequency     | Percent | Cum Percent |
|-------------|---------------|---------|-------------|
| Age         |               |         |             |
| 1 - 2       | 3             | 3.0     | 5.3         |
| 3           | 2             | 2.0     | 5.3         |
| 4           | 4             | 4.0     | 9.5         |
| 6           | 1             | 1.0     | 10.5        |
| 7           | 1             | 1.0     | 11.6        |
| 8           | 3             | 3.0     | 14.7        |
| 9           | 1             | 1.0     | 15.8        |
| 10          | 5             | 5.1     | 21.1        |
| 11          | 3             | 3.0     | 24.2        |
| 12          | 7             | 7.1     | 31.6        |
| 13          | 8             | 8.1     | 40.0        |
| 14          | 3             | 3.0     | 43.2        |
| 15          | 12            | 12.1    | 55.8        |
| 16          | 6             | 6.1     | 62.1        |
| 17          | 3             | 3.0     | 65.3        |
| 18          | 9             | 9.1     | 74.7        |
| 20          | 3             | 3.0     | 77.9        |
| 21          | 1             | 1.0     | 78.9        |
| 22-23       | 3             | 3.0     | 82.1        |
| 24          | 3             | 3.0     | 85.3        |
| 25-28       | 7             | 7.0     | 92.6        |
| 30-48       | 6             | 6.0     | 98.9        |
| Mean 16.716 | Median 15.000 |         |             |

Table 23 - Number of People Eating in Respondent's Household on a Daily Basis

| Number  | Frequency               | Percent | Cumulative Percent |  |
|---------|-------------------------|---------|--------------------|--|
| 1       | 2                       | 2.0     | 2.1                |  |
| 3       | 1                       | 1.0     | 3.1                |  |
| 4       | 5                       | 5.1     | 8.3                |  |
| 5       | 13                      | 13.1    | 21.9               |  |
| 6       | 12                      | 12.1    | 34.4               |  |
| 7       | 11                      | 11.1    | 45.8               |  |
| 8       | 12                      | 12.1    | 58.3               |  |
| 9       | 6                       | 6.1     | 64.6               |  |
| 10      | 14                      | 14.1    | 79.2               |  |
| 11      | 9                       | 9.1     | 88.5               |  |
| 12      | 5                       | 5.1     | 93.8               |  |
| 13      | 2                       | 2.0     | 95.8               |  |
| 16      | 3                       | 3.0     | 99.0               |  |
| 21      | 1                       | 1.0     | 100.0              |  |
| Missing | 3                       | 3.0     |                    |  |
| Total   | 99                      | 100.0   |                    |  |
|         | Mean 8.156 Median 8.000 |         |                    |  |

Table 24 - Number of Years Respondent Has Been Married (Expanded Data from Table 24)

| Years  | Frequency | Percent | Cumulative Percent |
|--------|-----------|---------|--------------------|
| 2-4    | 4         | 4.0     | 4.4                |
| 5-8    | 12        | 12.0    | 17.8               |
| 10-11  | 9         | 9.1     | 27.8               |
| 12     | 9         | 9.1     | 37.8               |
| 13-15  | 8         | 8.0     | 46.7               |
| 16     | 7         | 7.1     | 54.4               |
| 17     | 5         | 5.1     | 60.0               |
| 18     | 4         | 4.0     | 64.4               |
| 19-20  | 8         | 8.1     | 73.3               |
| 21-25  | 6         | 6.0     | 80.0               |
| 26-30  | 7         | 7.0     | 87.8               |
| 33-40  | 5         | 5.0     | 93.3               |
| 45-50  | 6         | 6.0     | 100.0              |
|        | 9         | 9.1     |                    |
| Total  | 99        | 100.0   |                    |
| Mean   | 17.978    |         |                    |
| Median | 16.000    |         |                    |

Table 24a - Years Married (Summary)

| Value Label        | Frequency | Percent | Cumulative<br>Percent |
|--------------------|-----------|---------|-----------------------|
| 1-2 years          | 2         | 2.0     | 2.1                   |
| 3-4 years          | 4         | 4.0     | 6.2                   |
| 5-9 years          | 17        | 17.2    | 23.7                  |
| 10-14 years        | 23        | 23.2    | 47.4                  |
| more than 15 years | 51        | 51.5    | 100.0                 |
| Total              | 99        | 100.0   |                       |

Table 25 Respondent (Woman) Considers Self to be Sharing Household with Spouse

|                    | Frequency | Percent | Cumulative Percent |
|--------------------|-----------|---------|--------------------|
| unmarried          | 1         | 1.0     | 1.1                |
| no                 | 7         | 7.1     | 8.4                |
| yes                | 62        | 62.6    | 73.7               |
| spouse<br>deceased | 25        | 25.3    | 100.0              |
| Missing            | 4         | 4.0     |                    |
| Total              | 99        | 100.0   |                    |

Table 26 - Women Respondent's Report of Husband's Age by Categories (Complete Data Set)

| Age    | Frequency | Percent | Cumulative Percent |
|--------|-----------|---------|--------------------|
| 25 -35 | 10        | 11.8    | 2.0                |
| 26-30  | 3         | 5.9     | 7.8                |
| 31-35  | 6         | 11.8    | 19.6               |
| 36-40  | 9         | 17.6    | 37.3               |
| 41-45  | 14        | 27.5    | 64.7               |
| 46-50  | 9         | 17.6    | 82.4               |
| 51-55  | 1         | 2.0     | 84.3               |
| 56-60  | 2         | 3.9     | 88.2               |
| 61-65  | 2         | 3.9     | 92.2               |
| 66-70  | 2         | 3.9     | 96.1               |
| 72     | 1         | 2.0     | 98.0               |
| 88     | 1         | 2.0     | 100.0              |
| Total  | 51        | 100.0   |                    |
|        | Mean      | 46.471  |                    |
|        | Median    | 45.000  |                    |
|        | Mode      | 45.000  |                    |

Table 27 - Women Respondent's Self -report of Age by Categories - Complete

| Age            | Frequency | Percent | Cumulative Percent |  |  |
|----------------|-----------|---------|--------------------|--|--|
| 16-20          | 3         | 3.2     | 3.2                |  |  |
| 21-25          | 11        | 11.8    | 15.1               |  |  |
| 26-30          | 24        | 25.8    | 40.9               |  |  |
| 31-35          | 14        | 15.1    | 55.9               |  |  |
| 36-40          | 17        | 18.3    | 74.2               |  |  |
| 41-45          | 10        | 10.8    | 84.9               |  |  |
| 46-50          | 6         | 6.5     | 91.4               |  |  |
| 51-55          | 2         | 2.2     | 93.5               |  |  |
| 56-60          | 2         | 2.2     | 95.7               |  |  |
| 61-65          | 3         | 3.2     | 98.9               |  |  |
| 66-70          | 1         | 1.1     | 100.0              |  |  |
| Don't know = 6 |           |         |                    |  |  |
| Total          | 93        | 100.0   |                    |  |  |
|                | Mean      | 37.312  |                    |  |  |
|                | Median    | 35.000  |                    |  |  |
|                | Mode      | 30.000  |                    |  |  |

Table 30 - Male Respondent's Report of Wife's Age - Complete (Data for First Wife only)

| Age   | Frequency | Percent     | Cumulative Percent |
|-------|-----------|-------------|--------------------|
| 20    | 5         | 12.2        | 12.2               |
| 21    | 2         | 4.9         | 17.1               |
| 22    | 4         | 9.8         | 26.8               |
| 24    | 2         | 4.9         | 31.7               |
| 25    | 1         | 2.4         | 34.1               |
| 26    | 1         | 2.4         | 36.6               |
| 28    | 3         | 7.3         | 43.9               |
| 29    | 4         | 9.8         | 53.7               |
| 30    | 2         | 4.9         | 58.5               |
| 31    | 1         | 2.4         | 61.0               |
| 32    | 1         | 2.4         | 63.4               |
| 34    | 1         | 2.4         | 65.9               |
| 35    | 2         | 4.9         | 70.7               |
| 36    | 3         | 7.3         | 78.0               |
| 41    | 1         | 2.4         | 80.5               |
| 42    | 1         | 2.4         | 82.9               |
| 43    | 1         | 2.4         | 85.4               |
| 52    | 1         | 2.4         | 87.8               |
| 53    | 1         | 2.4         | 90.2               |
| 56    | 1         | 2.4         | 92.7               |
| 57    | 1         | 2.4         | 95.1               |
| 62-70 | 2         | 4.8         | 100.0              |
| Total | 41        | 100.0       |                    |
| Mean  | 32.683    | Median 29.0 | 00 Mode 20.000     |

Table 31 - Husband's Report of First Wife's Number of Years of Education

| Years of Education | Frequency | Percent | Cumulative Percent |
|--------------------|-----------|---------|--------------------|
| 0                  | 2         | 4.2     | 4.3                |
| 2                  | 2         | 4.2     | 8.7                |
| 3                  | 2         | 4.2     | 13.0               |
| 4                  | 2         | 4.2     | 17.4               |
| 5                  | 3         | 6.3     | 23.9               |
| 6                  | 6         | 12.5    | 37.0               |
| 7                  | 7         | 14.6    | 52.2               |
| 8                  | 6         | 12.5    | 65.2               |
| 9                  | 1         | 2.1     | 67.4               |
| 10                 | 5         | 10.4    | 78.3               |
| 11                 | 1         | 2.1     | 80.4               |
| 12                 | 2         | 4.2     | 84.8               |
| don't<br>know      | 4         | 8.3     | 93.5               |
| deceased           | 3         | 6.3     | 100.0              |
| total              | 46        | 100.0   |                    |

Table 32 - Husband's Report of Second Wife's Number of Years of Education

| Years of Education | Frequency | Percent | Cumulative Percent |
|--------------------|-----------|---------|--------------------|
| 0                  | 2         | 8.7     | 8.7                |
| 2                  | 1         | 4.3     | 13.0               |
| 3                  | 1         | 4.3     | 17.4               |
| 4                  | 1         | 4.3     | 21.7               |
| 5                  | 2         | 8.7     | 30.4               |
| 6                  | 2         | 8.7     | 39.1               |
| 7                  | 5         | 21.7    | 60.9               |
| 8                  | 2         | 8.7     | 69.6               |
| 9                  | 2         | 8.7     | 78.3               |
| 10                 | 2         | 8.7     | 87.0               |
| Don't know         | 2         | 8.7     | 95.7               |
| Deceased           | 1         | 4.3     | 100.0              |
| Total              | 23*       |         |                    |

<sup>\*</sup> these data correspond to the 23 of the 45 respondents had more than 1 wife

Table 34 - Women's Report of Spouse's Number of Year of Education

| Value      | Frequency | Percent | Cumulative Percent |
|------------|-----------|---------|--------------------|
| 0          | 30        | 6.1     | 6.3                |
| 2          | 1         | 1.0     | 7.3                |
| 3          | 5         | 5.1     | 12.5               |
| 4          | 5         | 5.1     | 17.7               |
| 5          | 3         | 3.0     | 20.8               |
| 6          | 10        | 10.1    | 31.3               |
| 7          | 15        | 15.2    | 46.9               |
| 8          | 9         | 9.1     | 56.3               |
| 10         | 8         | 8.1     | 64.6               |
| 11         | 2         | 2.0     | 66.7               |
| 12         | 11        | 11.1    | 78.1               |
| 14         | 1         | 1.0     | 79.2               |
| Don't know | 20        | 20.2    | 100.0              |

Table 46 - Number of Hours Women Work In Their Fishery Practice Per Day

| Hours<br>Worked | Frequency | Percent | Cumulative Percent |
|-----------------|-----------|---------|--------------------|
| 2               | 1         | 1.0     | 1.1                |
| 3               | 5         | 5.1     | 6.9                |
| 4               | 4         | 4.0     | 11.5               |
| 5               | 6         | 6.1     | 18.4               |
| 6               | 12        | 12.1    | 32.2               |
| 7               | 7         | 7.1     | 40.2               |
| 8               | 9         | 9.1     | 50.6               |
| 9               | 7         | 7.1     | 58.6               |
| 10              | 10        | 10.1    | 70.1               |
| 11              | 6         | 6.1     | 77.0               |
| 12              | 7         | 7.1     | 85.1               |
| 13              | 1         | 1.0     | 86.2               |
| 14              | 4         | 4.0     | 90.8               |
| 15              | 2         | 2.0     | 93.1               |
| 16              | 1         | 1.0     | 94.3               |
| 18              | 4         | 4.0     | 98.9               |
| 24              | 1         | 1.0     | 100.0              |
| Missing*        | 12        | 12.1    |                    |
| Total           | 87        | 100.0   |                    |
| Mean            | 8.966     | . 1 1   |                    |

<sup>\*</sup>These respondents are not involved in direct fishery work

Table 47 - Time Women Respondents\* Leave Home

| Time Leave | Frequency | Percent | Cumulative Percent |
|------------|-----------|---------|--------------------|
| 1          | 3         | 3.0     | 3.5                |
| 2          | 7         | 8.2     | 11.8               |
| 3          | 2         | 2.0     | 14.1               |
| 4          | 3         | 3.0     | 17.6               |
| 5          | 3         | 3.0     | 21.2               |
| 6          | 28        | 28.3    | 54.1               |
| 7          | 16        | 16.2    | 72.9               |
| 8          | 11        | 11.1    | 85.9               |
| 9          | 3         | 3.0     | 89.4               |
| 12         | 2         | 2.0     | 91.8               |
| 13         | 4         | 4.0     | 96.5               |
| 14         | 2         | 2.0     | 98.8               |
| 22         | 1         | 1.0     | 100.0              |
| Missing    | 14        | 14.1    |                    |
| Total      | 99        | 100.0   |                    |
| Mean       |           | 6.718   |                    |

<sup>\*</sup>Data is for women working in the fishery only

Table 48 - Time Women Respondents\* Go Home At End of Day

| 24-hour clock | Frequency | Percent | Cumulative Percent |
|---------------|-----------|---------|--------------------|
| 4             | 1         | 1.0     | 1.2                |
| 7             | 1         | 1.0     | 2.4                |
| 9             | 1         | 1.0     | 3.5                |
| 10            | 5         | 5.1     | 9.4                |
| 11            | 4         | 4.0     | 14.1               |
| 12            | 2         | 2.0     | 16.5               |
| 13            | 11        | 11.1    | 29.4               |
| 14            | 1         | 1.0     | 30.6               |
| 15            | 4         | 4.0     | 35.3               |
| 16            | 11        | 11.1    | 48.2               |
| 17            | 2         | 2.0     | 50.6               |
| 18            | 17        | 17.2    | 70.6               |
| 19            | 7         | 7.1     | 78.8               |
| 20            | 4         | 4.0     | 83.5               |
| 21            | 3         | 3.0     | 87.1               |
| 22            | 5         | 5.1     | 92.9               |
| 23            | 4         | 4.0     | 97.6               |
| 24            | 2         | 2.0     | 100.0              |
| Missing       | 14        | 14.1    |                    |
| Total         | 99        | 100.0   |                    |
| Mean          | 16.435    |         |                    |

<sup>\*</sup>Data is for women in the fishery only

Table 49 - Number of hours Male Respondents Work

| Hours   | Frequency | Percent | Cumulative Percent |
|---------|-----------|---------|--------------------|
| 1       | 1         | 2.1     | 2.3                |
| 3       | 1         | 2.1     | 4.7                |
| 4       | 4         | 8.3     | 14.0               |
| 5       | 1         | 2.1     | 16.3               |
| 6       | 1         | 2.1     | 18.6               |
| 7       | 3         | 6.3     | 25.6               |
| 8       | 7         | 14.6    | 41.9               |
| 9       | 6         | 12.5    | 55.8               |
| 10      | 3         | 6.3     | 62.8               |
| 11      | 4         | 8.3     | 72.1               |
| 12      | 7         | 14.6    | 88.4               |
| 13      | 3         | 6.3     | 95.3               |
| 17      | 2         | 4.2     | 100.0              |
| Missing | 5         | 10.4    |                    |
| Total   | 48        | 100.0   |                    |
| Mean    | 9.140     |         |                    |

Table 50 - Time Male Respondent Leaves Home to Begin Work

| Number of Hours | Frequency | Percent | Cumulative Percent |
|-----------------|-----------|---------|--------------------|
| 2               | 1         | 2.1     | 2.3                |
| 3               | 1         | 2.1     | 4.7                |
| 4               | 4         | 8.3     | 14.0               |
| 5               | 2         | 4.2     | 18.6               |
| 6               | 13        | 27.1    | 48.8               |
| 7               | 5         | 10.4    | 60.5               |
| 10              | 1         | 2.1     | 62.8               |
| 17              | 1         | 2.1     | 65.1               |
| 18              | 2         | 4.2     | 69.8               |
| 19              | 3         | 6.3     | 76.7               |
| 20              | 4         | 8.3     | 86.0               |
| 21              | 2         | 4.2     | 90.7               |
| 22              | 2         | 4.2     | 95.3               |
| 23              | 2         | 4.2     | 100.0              |
| Missing         | 5         | 10.4    |                    |
| Total           |           | 100.0   |                    |
| Mean            | 11.070    |         |                    |

Table 51 - Time Male Respondents Go Home at End of Day

| 24 hour clock | Frequency | Percent | Cumulative Percent |
|---------------|-----------|---------|--------------------|
| 3             | 1         | 2.1     | 2.3                |
| 6             | 4         | 8.3     | 11.6               |
| 7             | 4         | 8.3     | 20.9               |
| 8             | 5         | 10.4    | 32.6               |
| 9             | 2         | 4.2     | 37.2               |
| 10            | 3         | 6.3     | 44.2               |
| 12            | 5         | 10.4    | 55.8               |
| 14            | 3         | 6.3     | 62.8               |
| 15            | 2         | 4.2     | 67.4               |
| 16            | 2         | 4.2     | 72.1               |
| 18            | 5         | 10.4    | 83.7               |
| 19            | 3         | 6.3     | 90.7               |
| 20            | 2         | 4.2     | 95.3               |
| 23            | 1         | 2.1     | 97.7               |
| 24            | 1         | 2.1     | 100.0              |
| Missing       | 5         | 10.4    |                    |
| Total         | 48        | 100.0   |                    |
| Mean          | 12.581    |         |                    |

### APPENDIX F

## Complete List of Variables

|               |   | onnaire    |
|---------------|---|------------|
| Number        | and the same of the                         | (4)        |
| 1. SUBJECT    | participant number                          | (A)        |
| 2. RECORDER   | who recorded subject responses              | (B)        |
| 3. BEACH      | Kenya Beach Location                        | (C)        |
| 4. DATE       | date of interview                           | (D)        |
| 5. PROVINCE   | Kenya Province                              | (E)        |
| 6. SUBLOC     | Kenya Sub-location                          | <b>(F)</b> |
| 7. INTERLOC   | Location of Interview                       | (G)        |
| 8. GENDER     | participant's gender                        | (H)        |
| 9. AGE1       | Participant's Age                           | (1)        |
| 10. ETHNIC2   | Participant's Ethnicity                     | (2)        |
| 11. SPOUSTH3  | Spouse's Ethnic Group                       | (3)        |
| 12. SPOSAGE4  | age of husband/wife                         | (4)        |
| 13.YEARMAR5   | Number of Years Married                     | (5)        |
| 14.CHLDLIV6   | Children Currently Living                   | (6a)       |
| 15. SPCHLD6A. | Supporting Currently: number of children    | (6b)       |
| 16. OLCHLD7A  | Age of Oldest Child (supported or produced) | (7a)       |
| 17.YNCHLD7B2  | Age of Youngest Child (supported or produc  | ced) (7b)  |
| 18. CHLDSCH8  | Children's School Attendance                | (8)        |
| 19. PAYFEES9  | who pays school fees                        | (9)        |
| 20. UNIFRM10  | who buys uniforms                           | (10)       |
| 21. BKSUP11   | who pays books and supplies                 | (11)       |
| 22. FDDEC12A  | food decisions                              | (12a)      |
| 23. BSDEC12B  | who decides your business                   | (12b)      |
| 24. PLANT12C  | who decides what to plant                   | (12c)      |
| 25.CHEDU12D   | who decides children's education            | (12d)      |
| 26. DISCH12E  | who disciplines children                    | (12e)      |
| 27. HEPRL12F  | who decides help for relatives              | (12f)      |
| 28. SUBJWK13  | subject's work                              | (13)       |
| 29. EDLEVL14  | highest completed educational level         | (14)       |
| 30.YRCOM14A   | year completed                              | (14a)      |
| 31. ED1SP15A  | Spouse's Educational Level                  | (15)       |
| 32. ED2SP15B  | Educational Level of Spouse #2              | (15a)      |
| 33.ED3SP15C   | Educational Level of Spouse #3              | (15b)      |
| 34. SPKDL16A  | speak Dholuo                                | (16 a1)    |
| 35. RDDHL16A  | read Dholuo (self-report)                   | (16 a2)    |

| 36. WRTDL16A        | ability to write Dholuo (self-report)        | (16 a3) |
|---------------------|--|---------|
| 37. SPKEN16B        | ability to speak English (self-report)       | (16 b1) |
| 38. RDENG16B        | ability to read English (self-report)        | (16 b2) |
| 39. WTENG16B        | ability to write English (self report)       | (16 b3) |
| 40. SPKIS16C        | ability to speak KiSwahili (self-report)     | (16 c1) |
| 41.RDKIS16C         | ability to read Kiswahili (self-report)      | (16 c2) |
| 42. WTKIS16C        | ability to write KiSwahili self-report)      | (16 c3) |
| 43. ADD17A          | ability to add (self-report)                 | (17a)   |
| 44. SBTRC17B        | ability to subtract (self-report)            | (17b)   |
| 45. MULTI17C        | ability to multiply (self-report)            | (17c)   |
| 46. DVIDE17D        | ability to divide (self-report)              | (17 d)  |
| 47. FAFISH18        | father in fishery                            | (18)    |
| 48. NUMYR18A        | father's number of years in fishery          | (18a)   |
| 49. MOFISH19        | mother in fishery                            | (19)    |
| 50. MFJOB19A        | mother's work in fishery                     | (19a)   |
| 51. FRSTME20        | first involvement in fishery                 | (20)    |
| 52. AG1ST20A        | age/year of first involvement                | (20a)   |
| 53. INTRPT21        | any interruption in fishery work             | (21)    |
| 54. YRINT21A        | years of fishery work interruption           | (21a)   |
| 55. ACTIV21B        | activity during fishery work interruption    | (21b)   |
| 56. LVWHER22        | name of living space when working            | (22)    |
| 57. HSLOC22A        | distance of house from beach (kms)           | (22a)   |
| 58. HSLOC22B        | house location: beach or inland              | (22b)   |
| 59. ALLYR23A        | stayed here the last 12 months               | (23a)   |
| 60. PRTYR23B        | lived here only part of last 12 months       | (23b)   |
| 61. STYAT23C        | stayed at other beaches/places               | (23c)   |
| 62. OTH123c1        | other beach or place stayed at               | (23c1)  |
| 63. TMAT23C2        | length of stay at first other beach          | (23c2)  |
| 64. OTH223D         | other places stayed at during the year       | (23d)   |
| 65. YOTH23D1        | reason stayed other place                    | (23d)   |
| 66. TMAT223E        | time stayed in other place                   | (23e)   |
| 67. OWNRNT24        | own or rent lodging                          | (24)    |
| 68. HSCOST25        | monthly cost for housing                     | (25)    |
| 69. MAIDCK26        | help in household or fields                  | (26)    |
| 70. PAMAI26A        | pay maid/cook or field workers               | (26a)   |
| 71. MAICT26B        | amount paid for household or field help      | (26b)   |
| 72. MONYRL27        | send money to parents or relatives           | (27)    |
| 73. AMTRL27A        | monthly amount sent to relatives or parents  | (27a)   |
| <b>74. NUMEAT28</b> | number of people eating in household daily   | (28)    |
| 75. LSTWLV29        | number of people eating who are less than 12 | (29)    |
| 76. SPSCNT30        | spouse usually contributes food or money     | (30)    |
| 77. OTHCNT31        | others usually contribute food or money      | (31)    |
| 78. RELAT31A        | relationship of other contributors           | (31a)   |
|                     | •  | ` '     |

| 79. STDNT32A         | number of students in household (>12yrs)           | (32a) |
|----------------------|--|-------|
| 80. CNTWK32B         | number of people in household who can't work       | (32b) |
| 81. CNWRK32C         | number of people in household who can work         | (32c) |
| <b>82. DPENWH33</b>  | number of dependents living elsewhere              | (33)  |
| 83. ETPROD34         | amount of R's fishery product used to feed family  | (34)  |
| 84. FRQET35A         | number of days per week family eats fish           | (35a) |
| 85. FETMS35B         | type of fish family eats most                      | (35b) |
| <b>86. FSHEAT36</b>  | consumption of fish currently versus 5 years ago   | (36)  |
| 87. MBUTA37A         | mbuta consumption compared to 5 years ago          | (37a) |
| 88. NGEGE37B         | ngege consumption compared to 5 years ago          | (37b) |
| 89. OMENA37C         | omena consumption compared to 5 years ago          | (37c) |
| 90. OCHON37D         | ochong'a consumption compared to 5 years ago       | (37d) |
| 91. FULU37E          | fulu consumption compared to 5 years ago           | (37e) |
| 92. OTHFH37F         | consumption of other types of fish vs. 5 years ago | (37f) |
| 93. NOWEAT38         | eating worse, same, or better than 5 years ago     | (38)  |
| 94. <b>GROWFD</b> 39 | amount of self-produced food eaten                 | (39)  |
| 95. DUKAFD40         | amount of food bought from store or market         | (40)  |
| 96. MAIZE41A         | frequency eat maize                                | (41a) |
| 97. RICE41B          | frequency of eating rice                           | (41b) |
| 98. WHEAT41C         | frequency of eating wheat                          | (41c) |
| 99. SRGHM41D         | frequency of eating sorghum                        | (41d) |
| 100. LEGUM41E        | frequency of eating legumes                        | (41e) |
| 101. CSAVA41F        | frequency of eating cassava                        | (41f) |
| 102. TATER41G        | frequency of eating potatoes                       | (41g) |
| 103. BNANA41H        | frequency of eating bananas                        | (41h) |
| 104. EGGS41i         | frequency of eating eggs                           | (41i) |
| 105. MEAT41J         | frequency of eating meat                           | (41j) |
| 106. CHICK41K        | frequency of eating chicken                        | (41k) |
| 107. FISET41L        | frequency of eating fish                           | (41L) |
| 108. ILK41M          | frequency of milk in diet                          | (41m) |
| 109. SUGAR41N        | frequency of sugar in diet - including use in tea  | (41n) |
| 110. OIL41O          | frequency of oil in diet                           | (41o) |
| 111. VEGET41P        | frequency of vegetables in diet                    | (41p) |
| 112. FRUIT41Q        | frequency of fruit in diet                         | (41q) |
| 113. TINFD41R        | frequency of eating tinned food                    | (41r) |
| 114. EATNUF42        | had enough to eat during the year                  | (42)  |
| 115. NOTNUF43        | when was there not enough food                     | (43)  |
| 116. FDLAK43A        | foods that were unavailable                        | (43a) |
| 117. LACK43B         | why foods not available                            | (43b) |
| 118. USEHOW44        | who decides how the money you earn will be spent   | (44)  |
| 119. GIVEH44A        | give all earnings to husband                       | (44a) |
| 120. GIVEW44B        | give all your earnings to your wife                | (44b) |
| 121. WHODE44C        | who decides with you how your earnings are spent   | (44c) |
| IZI. WIIODLTTO       | who decides with you now your carmings are spellt  | (170) |

| 122. SAVSOC45         | member of nyoluoro/ savings society                | (45)        |
|-----------------------|--|-------------|
| 123. NUMEM45A         | number of members in savings society               | (45a)       |
| 124. FCNTR45B         | frequency of nyoluoro contribution                 | (45b)       |
| 125. AMCTR45C         | amount of savings society contribution             | (45c)       |
| 126. SAVHD45D         | gender of savings society head                     | (45d)       |
| 127. LASFIS46         | last day working in fishery                        | (46)        |
| 128. NUMBCH47         | # of beaches where you bought fish last            | (47)        |
| 129. NAMB47A          | name(s) of beaches bought from                     | (47a)       |
| 130. NUMBT47B         | number of boats bought from last                   | (47b)       |
| 131. NMTR47B1         | number of traders or sellers bought from last      | (47b1)      |
| 132. BCREL47C         | any boat crew, owners etc related to you           | (47c)       |
| 133. BPRL47C1         | better price if relative                           | (47c1)      |
| 134. STDRL47D         | seller or traders you bought from related to you   | (47d)       |
| 135. BPRC47D1         | better price received because you are related      | (47d1)      |
| 136. AMTFSH48         | amount of fish purchased last day                  | (48)        |
| 137. SPEC\$48A        | cost per type of fish                              | (48a)       |
| 138. BYFRS48B         | bought only fresh fish                             | (48b)       |
| 139. TYPE48B1         | type of treatment of fish bought                   | (48b1)      |
| 140. NUMPLC49         | number of places sold fish                         | (49)        |
| 141. BUYERS50         | type of buyers                                     | <b>(50)</b> |
| 142. NUMREL51         | number of relatives or friends you sold to         | <b>(51)</b> |
| 143. GDPRC51A         | better price/ product to friends/ relatives        | (51a)       |
| 144. CHRGFS52         | charge/cost per species by type of processing      | (52)        |
| 145. TRNSPT53         | means to transport fish to sale site               | (53)        |
| 146. WRKOTH54         | work in a group with others                        | (54)        |
| 147. HWMNY54A         | number of others respondent works with             | (54a)       |
| 148. PTTM54B1         | number of R's part-time workers                    | (54b1)      |
| 149. FLTM54B2         | number of R's full-time workers                    | (54b2)      |
| 150. WKREL54C         | number of R's workers who are relatives            | (54c)       |
| 151. WTRL54C1         | what relation to respondent                        | (54c1)      |
| 152. PAY54C2          | pay relatives who work with respondent             | (54c2)      |
| 153. NREL54D1         | number of non-relatives wrking for respondent      | (54d1)      |
| 154. PAYN54D2         | does respondent pay non-relatives                  | (54d2)      |
| 155. PRTNR54E         | any of the people working with respondent partners | (54e)       |
| 156. PLBGHT55         | number of places bought fish in last 12 months     | (55)        |
| 157. <b>BGHTYR5</b> 6 | # fish bought/sold in last year (1USD= 45 Ksh)     | (56)        |
| 158. PRCHNG57         | price change by species within last 12 months      | (57)        |
| 159. YCHNG58          | why has price changed per species                  | (58)        |
| 160. PLSOLD59         | number of places sold at during the past 12 months | (59)        |
| 161. HRSDAY60         | number of hours work per day                       | (60)        |
| 162. DAYSWK61         | number of days work per week                       | (61)        |
| 163. WKMON61A         | time of month you work more than usual             | (61a)       |
| 164. YMTH61A1         | why R works more during the month                  | (61a1)      |

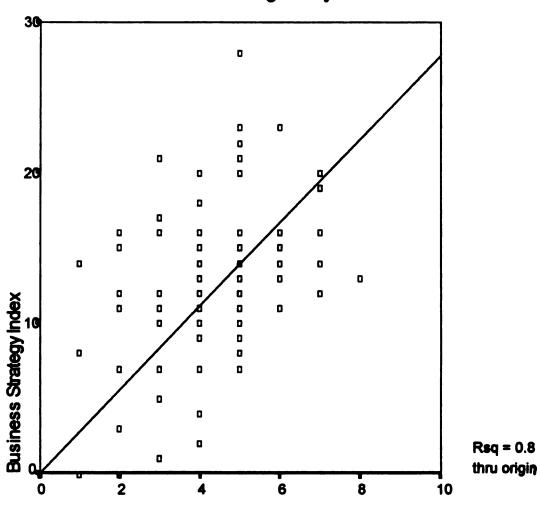
| 165. LSWRK61B        | activity during the time when R works less           | (61b)       |
|----------------------|--|-------------|
| 166. OBUS61B4        | other business when fishing business is slower       | (61b4)      |
| 167. DAYMTH62        | number of days you work per month                    | (62)        |
| 168. TMYRW62A        | time of year during which R works most in fishery    | (62a)       |
| 169. YMOR62A1        | why R has more work during the month                 | (62a1)      |
| 170. NFSWK62B        | work during slow time of month                       | (62b)       |
| 171. OTHB62B4        | other activity when not fishing                      | (62b#4)     |
| 172. NOFSH63         | no fish available for sale or not affordable         | <b>(63)</b> |
| 173. WHEN63A         | when is fish not available                           | (63a)       |
| 174. YNOF63A1        | why no fish for sale                                 | (63a1)      |
| 175. STRT\$64        | source of start-up funds                             | (64)        |
| 176. YBUS65          | why did you enter this business                      | (65)        |
| 177. PRBSTR66        | problems at start of business                        | (66)        |
| 178. DLYCAP67        | source of daily capital                              | (67)        |
| 179. OWNRTB68        | own or rent business site/own or rent boat           | (68)        |
| 180. SV\$BS69        | does R save money from business                      | (69)        |
| 181. SAVM69A         | savings from business per month                      | (69a)       |
| 182. HELP70          | who R asks for help with business problem            | (70)        |
| 183. YHELP70A        | why R asks this person for help                      | (70a)       |
| 184. BUSCMP71        | does R identify any business competition             | (71)        |
| 185. COMPW71A        | R's business competition                             | (71a)       |
| 186. SLMRE72         | steps to expand market                               | (72)        |
| 187. PRBGET731       | problems getting raw material/equipment/gear         | (73)        |
| 188. PRIBYR74        | R's primary buyers                                   | (74)        |
| 189. DECPRC75        | how R decides selling price of product               | (75)        |
| 190.YRLBR75A         | includes cost fo R's labor                           | (75a)       |
| 191. MUCH75A         | amount R includes for labor and time                 | (75a)       |
| 192. PROFI75B        | set amount of profit per fish                        | (75b)       |
| 193. <b>BSTRNG76</b> | business training or fishing training R has received | (76)        |
| 194. BSRCRD77        | R keeps business records                             | <b>(77)</b> |
| 195. TYPRD77A        | type of business records R keeps                     | (77a)       |
| 196. BNKACT78        | R has bank account                                   | (78)        |
| 197. KNW\$SR79       | R's awareness of loan sources                        | (79)        |
| 198. APLDAS80        | applied for financial assistance                     | (80)        |
| 199. USEHOW81        | R would use loan in what way                         | (81)        |
| 200. PROBMB82        | who do you ask if problem at beach or market         | (82)        |
| 201. WHY82A          | why do you ask that person at beach or market        | (82a)       |
| 202. WRKOTH83        | does R work with others in trading/selling/fishing   | (83)        |
| 203. IFYES83A        | R works with others who are                          | (83a)       |
| 204. TMWGRP84        | time working with group                              | (84)        |
| 205. TRNSPB85        | transport cost daily to and from beach               | (85)        |
| 206. TRNSPM86        | R's transportation cost to and from market           | (86)        |
| 207. TMFRH87         | time to travel to beach from R's lodging             | (87)        |

| 208 | . TMTOMK88 | R's travel time to selling market(s)  | (88)         |
|-----|------------|---|--------------|
|     | TMLVH89    | time R leaves home to begin work  | (87)         |
|     | . TMGOH90  | time R goes home at end of day  | (90)         |
|     | . SLFRU91  | who sells for R if R has to leave   | • •          |
|     | . CUST#92  | 1                                       | (91)<br>(92) |
|     | . SMDIF92A | R's average number of customers   | (92)         |
|     | . YDIF92B  | R's number of customers compared to other sellers                             | (92a)        |
|     | . SBWRK93A | R's explanation of customer difference  | (92b)        |
|     | . SBTYP93B | anyone in hh engage in SSE or wage labor                                      | (93a)        |
|     |            | type of small business or wage labor activity  R's household members who work | (93b)        |
|     | FAMEM93C   |   | (93c)        |
|     | . HWRK93C1 | husband's SSE or wage labor   | (93c1)       |
|     | . WWRK93C2 | wife's SSE or wage labor  | (93c2)       |
|     | . COWK93C3 | co-wives work or wage labor   | (93c3)       |
|     | . CHWK93C4 | children's SSE or wage labor  | (93c4)       |
|     | . OAWK93C5 | SSE or wage labor of other adults in R's household                            | (93c5)       |
|     | . NWACT93D | new activity within the last year   | (93d)        |
|     | MLSTM93E   | more or less time spent on this activity                                      | (93e)        |
|     | . ACFARM94 | number of acres R farms   | (94)         |
|     | . ACRNT94A | number of farms acres rented by R   | (94a)        |
|     | . ANIMAL95 | type and number of animals R keeps  | (95)         |
|     | . MTVHBK96 | does R own vehicle or bicycle/transportation                                  | (96)         |
|     | . TYPVH96A | type of transportation R owns   | (96a)        |
|     | . OWNBLG97 | other buildings owned by R  | (97)         |
|     | . BLDOWN97 | number and type of buildings owned by R                                       | (97a)        |
|     | . STRDLV98 | R's standard of living compared to 5 years ago                                | (98)         |
|     | . LVWSP99  | R considers self to be living with spouse                                     | (99)         |
| 234 | . DVSP99A  | R and spouse are divorced or separated  | (99a)        |
| 235 | . TMSP99B  | length of time separated or divorced  | (99b)        |
| 236 | . NUMWV100 | number of co-wives  | (100)        |
| 237 | . COOK100A | R cooks with co-wives   | (100a)       |
| 238 | . FARM100B | R farms with co-wives   | (100b)       |
| 239 | . CHLD100C | R shares childcare with co-wives  | (100c)       |
| 240 | . HUSAP101 | husband approves of R's working   | (101)        |
| 241 | . YRCHD102 | R's child care needs  | (102)        |
| 242 | . WHO1023A | which relative provides child care  | (102a)       |
| 243 | . OTH102B5 | other child care strategies   | (!02b5)      |
| 244 | . MPROB103 | married women's problems  | (103)        |
| 245 | . UMPRB104 | working women's problems in general   | (104)        |
|     |            | <del>-</del>  | -            |

### **APPENDIX G**

# Measure of Linear Association:

# **Business Strategies by Social Relations**



Social Relations Index



#### **BIBLIOGRAPHY**

Amadiume, I. (1987). Male Daughters, Female Husbands. London, UK: Zed Press.

Amott, T. L. & Matthaei, J. A. (1991). Race, Gender, and Work. Boston, MA: South End Press.

Andersen, M. L. (1988). Moving our minds: Women of color and reconstructing sociology. *Teaching Sociology*, April, vol. 16.

Awe, B. (1991). Writing women into history: The Nigerian experience. In K. Offen, R.R. Pierson & J. Rendall (Eds.), *Writing Women's History*. Bloomington, IN: Indiana University Press.

Babb, F. E. (1989). Between Field and Cooking Pot. Austin, TX: University of Texas Press.

Baca Zinn, M., Weber Cannon, L., Higginbotham, E., & Thornton Dill, B. (1986). The costs of exclusionary practices in women's studies. Signs: Journal of Women in Culture and Society, vol 11, no 21.

Barnard, J. (1987). The Female World from a Global Perspective. Bloomington, IN: Indiana University Press.

Bay, E. G. (Ed.). (1982). Women and Work in Africa. Boulder, CO: Westview Press.

Beneria, L. & Stimpson, C. R. (Eds.). Women, Households, and the Economy. New Brunswick, NJ: Rutgers University Press.

Berger, I. (1992). Threads of Solidarity. Bloomington, IN: Indiana University Press.

Berger, P.L. & Luckmann, T. (1966). The Social Construction of Reality. Garden City, NY: Doubleday Anchor Books.

Boserup, E. (1970). Women's Role in Economic Development. NY, NY: St. Martin's Press.

Bozzoli, B. with the assistance of M. Nkotsoe. (1991). Women of Phokeng. Portsmouth, NH: Heineman.

Brydon, L. & Chant, S. (1989). Women in the Third World. N.J.: Rutgers University Press.

Bruce, J. & Dwyer, D. (1988). Introduction. In D. Dwyer & J. Bruce (Eds.), A House Divided (pp. 1-19). Stanford, CA: Stanford University Press.

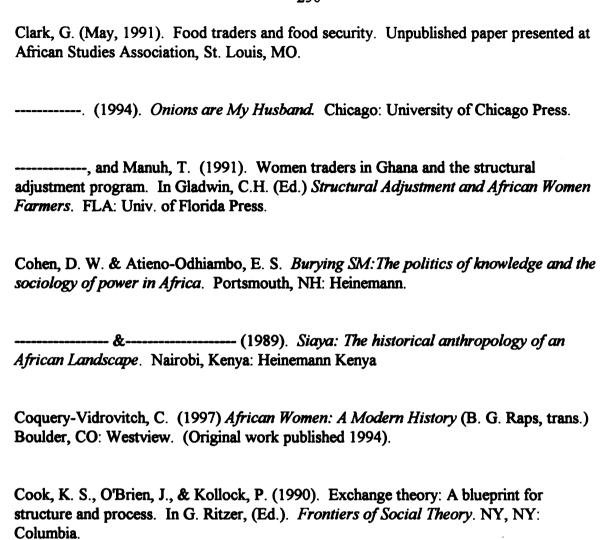
Bujra, J. M. (1986). Class, gender, and capitalist transformation in Africa. In C. Robertson & I. Berger. (Eds.). Women and Class in Africa. N.Y.: Africana Publishing House.

Central Bureau of Statistics. (June, 1981). Kenya Population Census 1979, Volume I. Republic of Kenya: Ministry of Finance and Planning.

Central Bureau of Statistics. Kenya Population Census 1979, Volume II. Republic of Kenya: Ministry of Finance and Planning.

Central Bureau of Statistics. (March, 1994). Kenya Population Census 1989, Volume I. Republic of Kenya: Office of the Vice-President and Ministry of Planning and National Development

Central Bureau of Statistics. (April, 1994). Kenya Population Census 1989, Volume II. Republic of Kenya: Office of the Vice-President and Ministry of Planning and National Development



Davison, J., with The Women of Mutira. (1989) Voices from Mutira: Lives of rural Gikuyu women. Boulder, CO: Lynne Reinner Publishers.

'Doily mamas' Africa's pure entrepreneurs: knitted scraps can mean survival. (1996, September 22). *The Chicago Tribune*, p. 9.

Donaldson, S. R. (1997). "Our women keep our skies from falling: Women's networks and survival imperatives in Tshunyane, South Africa." In G. Mikell, (Ed.) African Feminism. PA: University of Pennsylvania Press.

Downing, J. (1990). Gender and the Growth and Dynamics of Microenterprises. Washington, DC: GEMINI.

Dwyer, D. & Bruce, J. (1988) A Home Divided. Stanford, CA: Stanford University Press.

Eisenstein, Z. R., (Ed.). (1979). Capitalist Patricarchy and the Case for Socialist Feminism. NY, NY: Monthly Review Press.

Eldredge, E. A. (1993). South African Kingdom The Pursuit of Security. NY, NY: Cambridge University Press.

----... (1991). Women in production. SIGNS, v. 16, 4, 707-731.

Elson, D. (September, 1991). Gender analysis and economics in the context of Africa. Paper prepared for CODESRIA Workshop on Gender Analysis and African Social Science, Dakar, Senegal.

Ensminger, J. (1992). Making a Market: The institutional transformation of an African society. NY, NY: Cambridge University Press (reprinted 1996).

Eviota, E. U. (1992). The Political Economy of Gender. NJ: Zed.

Etzioni, A. & Lawrence, P. R. (1991). Socio-economics: A budding challenge. In A. Etzioni and P. R. Lawrence (Eds.), *Socio-Economics* (pp. 3-7). Armonk, NY: M. E. Sharpe.

Feldman, S. (1991). Still invisible: Women in the informal sector. In R. S. Gallin & A. Ferguson. *The Women in International Development Annual Vol. 2*. Boulder, CO: Westview Press.

Ferber, M. A. & Nelson, J. A. (1993). Introduction: The social construction of economics and the social construction of gender. In M. A. Ferber & J. A. Nelson (Eds.), *Beyond Economic Man* (pp. 1-22). Chicago, IL: University of Chicago Press.

Fiske, A. P. (1991). Structures of Social Life. NY, NY: The Free Press.

Fisseha, Y. (1982). Manufacturing characteristics, practices, and performance in the small scale manufacturing enterprises: Jamaican milieu. Unpublished doctoral dissertation, Michigan State University.

Gallin, R. S. & Ferguson, A. (Eds.). (1991). The Women and International Development Annual, Volume 2. Boulder, CO.: Westview Press.

Giddens, A. (1990). The Consequences of Modernity. Stanford, CA: Stanford University Press.

----- (1979, reprint 1990). Central Problems in Social Theory. Berkeley, CA: University of California Press.

----- (1984). The Constitution of Society. Berkeley, CA: University of California Press.

-----. (1987). A Contemporary Critique of Modern Historical Materialism. Berkeley, CA: University of California Press.

----- (1991). Modernity and Self-Identity. Stanford, CA: Stanford University Press.

Gilbert, A.& Gugler, J. (1992). Cities, Poverty, and Development: Urbanization in the Third World. N.Y.: Oxford University Press.

Gladwin, C.H., (Ed.). (1991). Structural Adjustment and African Women Farmers. Gainsville, FL: University of Florida Press.

Glazer Schuster, I. M. (1979). New Women of Lusaka. CA: Mayfield Publishing Co., 1979.

Gordon, A. A. (1992). Women and development. In A. A. Gordon & D. L. Gordon (Eds.), *Understanding Contemporary Africa*. CO: Lynne Reinner Publishers.

Gottlieb, B. H. (1981). Social Networks and Social Support. Thousand Oaks, CA: Sage Pub.

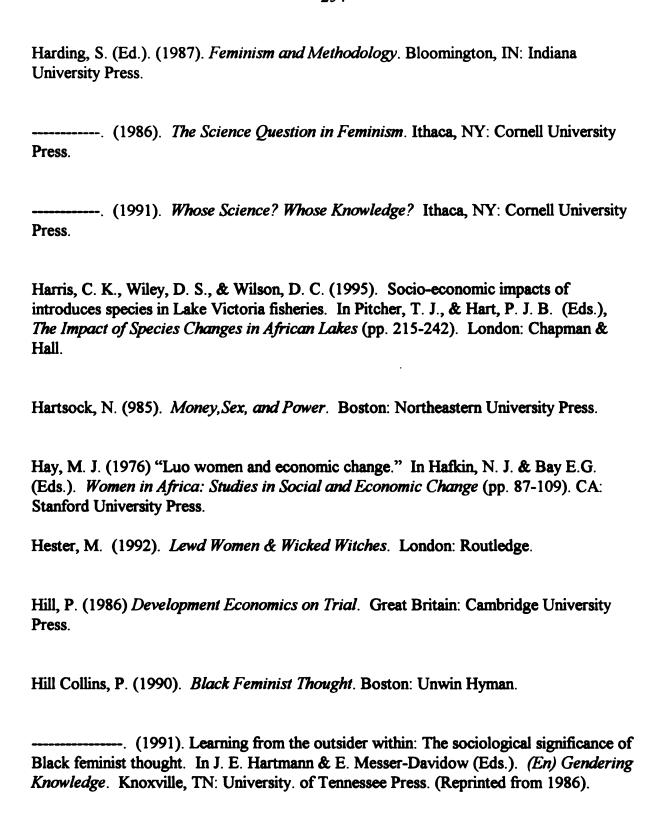
Goudy, W. J. (1990). Community in a rural region. Rural Sociology, 55 (2).

Gouldner, A. W. (1970) The Coming Crisis of Western Sociology. NY, NY: Basic Books.

Granovetter, M. (1992). Economic action and social structure: The problem of embeddedness (pp. 53-81). In M. Granovetter. & R. Swedberg (Eds.), *The Sociology of Economic Life*. Boulder, CO: Westview Press.

Guyer, J. (1988). Dynamic approaches to domestic budgeting: Cases and methods from Africa. In D. Dwyer & J. Bruce (Eds.), *A House Divided* (pp. 155-172). Stanford, CA: Stanford University Press.

Hafkin, N. J. & Bay E.G. (1976). Women in Africa: Studies in Social and Economic Change. CA: Stanford University Press.



Hiskes, R. P. (1982). Community without Coercion. DL: University of Delaware Press.

Hodgson, G. M. The return of institutional economics (pp. 58-76). In N. J. Smelser & R. Swedberg (Eds.), *The Handbook of Economic Sociology*. Princeton, N J: Princeton University Press.

Hoekstra, T. M. (1992). The Artisanal Capture Fisheries of the Lake Victoria, Kenya: major socioeconomic characteristics of its fisherman and their fishing units. (RAF/87/099 - TD/39/92 (En): 78 p.). Bujumbura, Burundi: UNDP/FAO Regional Project for Inland Fisheries Planning Development and Management in Eastern/Central/Southern Africa.

Hopkins, J. & Wallerstein, I. (1982). World-Systems Analysis. Thousand Oaks, CA: Sage Publications.

Horn, N. E. (1988). The culture, urban context, and economics of women's fresh market produce in Harare, Zimbabwe. Unpublished dissertation, Michigan State University.

------ (1995). Women's fresh produce marketing in Harare, Zimbabwe: Motivations for women's participation and implication for development. In B. House-Midamba & F. K. Ekechi (Eds.), *African Market Women and Economic Power* (pp. 141-155). Westport, CN: Greenwood Press.

House-Midamba, B. (1995). Kikuyu market women traders and the struggle for economic empowerment in Kenya. In B. House-Midamba & F. K. Ekechi (Eds.), African Market Women and Economic Power (pp. 81-97). Westport, CN: Greenwood Press.

Jacobsen, J. P. (1994). Economics and Gender. Cambridge, MA: Blackwell.

Jaggar, A. M. & Bordo, S. R. (Eds.). (1989). Gender/Body/Knowledge: Feminist Reconstructions of Being and Knowing. Rutgers, NJ: Rutgers University Press.

Jansen, E. G. (1973). The fishing population in the Kenyan part of Lake Victoria. Report of East African Freshwater Fisheries Research Organization.

Kilbride, P. L. & Kilbride, J. C. (1990). Changing Family Life in East Africa. PA: The Pennsylvania State University Press.

King, K. (1996). Jua Kali Kenya. Athens, Ohio: Ohio University Press.

Klitgaard, R. (1991). Adjusting to Reality. CA: ICS Press.

Kuiper, E. & Sap, J. (1995) Introduction (pp.1-13). In E. Kuiper & J. Sap (Eds.), Out of the Margin. NY, NY: Routledge.

Landa, J. T. (1994). Trust Ethnicity, and Identity. Ann Arbor, MI: University of Michigan Press.

Liedholm, C. (1990). The Dynamics of Small Scale Industry in Africa and the Role of Policy. East Lansing, MI.: Michigan State University, GEMINI Project.

----- & McPherson, M. A. (1991). Small Scale Enterprises in Mamelodi and Kwazakhele Townships South Africa. East Lansing, MI.: Michigan State University, GEMINI Project.

----- & Mead, D. (1990). Dynamics of Microenterprises: Research Issues and Approaches. East Lansing, MI: Michigan State University, GEMINI Project.

Lansing, MI.: Michigan State University, MSU International Development Paper No. 9.

Little, K. B. (1973). African Women in Town. London: Cambridge.

----- (1965) West African Urbanization. London: Cambridge.

Lorber, J. (1994). Paradoxes of Gender. New Haven, CN: Yale University Press.

Luhmann, N. (1982). The Differentiation of Society. NY, NY: Columbia University Press.

MacGaffey, J. (1986). In Robertson, C. & I. Berger, (Eds.). Women and Class in Africa. NY, NY: Africana Publishing.

----- (1988). A Home Divided, women and income in the third world. Stanford, CA: Stanford University Press.

Marks, S. (1991) Patriotism, patriarchy and purity: Natal and the politics of Zulu ethnic consciousness." In L. Vail (Ed.), *The Creation of Tribalism in Southern Africa*. CA: University of California Press.

Marris, P. (1962). Family and Social Change in an African City. Chicago, IL: Northwestern University Press.

McCloskey, D. N. (1985) *The Rhetoric of Economics*. Madison, WI: University of Wisconsin Press.

Mies, M. (1986). Patriarchy and Accumulation on a World Scale. NJ: Zed.

Miller, N. & Yeager, R. (2<sup>nd</sup> edition, 1994). Kenya: The Quest for Prosperity. Boulder, CO: Westview.

Mills, C. W. (1963). Power, Politics and People. NY, NY: Ballantine.

-----. (1967) The Sociological Imagination. NY, NY: Oxford University Press.

Minar, D. W.& Greer, S. (Eds.). (1969). The Concept of Community. Illinois: Aldine.

Mitchell, J. C. (Ed.). (1969). Societal Networks in Urban Situations. Manchester, United Kingdom: University Press.

----- (1987). Cities, Society, and Social Perception. NY, NY: Oxford University Press.

Momsen, J. H. & Townsend, J. (Eds.). (1987). Geography of Gender. NY, NY: State University of New York Press.

Moran, M. H. (1990). Civilized Women. Ithaca, NY: Cornell University Press.

Moreau, J. (1995). Analysis of species changes in Lake Victoria using ECOPATH, a multispecies trophic model. In Pitcher, T. J., & Hart, P. J. B. (Eds.), *The Impact of Species Changes in African Lakes* (pp. 137-161). London: Chapman & Hall.

Munachonga, M. Income allocation and marriage options in urban Zambia. In D. Dwyer & J. Bruce (Eds.), A House Divided (pp. 173-194). Stanford, CA: Stanford University Press.

Musisi, N. B. "Women, 'Elite Polygyny', and Buganda State Formation." SIGNS 16 (4) p. 757-786.

Mutiso, R. (1987). Poverty, Women, and Cooperatives in Kenya. East Lansing, Michigan: Michigan State University. Women in International Development (WID), Working Papers.

Nelson, J. A. (1996). Feminism, objectivity & economics. NY, NY: Routledge.

-----. (1993) The study of choice or the study of Provisioning? Gender and the definition of economics. In M. A. Ferber & J. A. Nelson (Eds.), *Beyond Economic Man* (pp. 23-36). Chicago: University of Chicago Press.

----- (1995). Economic theory and feminist theory. In E. Kuiper & J. Sap (Eds.), Out of the Margin (pp. 120-125). NY, NY: Routledge.

Nicholson, L. J. (1986). Gender and History: The Limits of Social History in the Age of the Family. NY, NY: Columbia University Press.

| Obbo, C. (1980). African Women. London: Zed Press.   |
|--|
| (1986). Stratification and the lives of women in Uganda. In C. Robertson & I. Berger (Eds.), Women and Class in Africa. NY, NY: Africana Publishers.   |
| Ochieng', W. R. (1974). An Outline History of Nyanza up to 1914. Nairobi, Kenya: East African Literature Bureau.   |
|  |
| Ogot, B. A. (1979). Ecology and History in East Africa. Nairobi, Kenya: Kenya Literature Bureau.   |
| & Ochieng', W. R. (1995). Decolonization & Independence in Kenya 1940-1993. London: James Currey.  |
| Papanek, H. & Schwede, L. (1988) Women are good with money: Earning and managing in an Indonesian city. In D. Dwyer & J. Bruce (Eds.), A House Divided (pp. 71-98). Stanford, CA: Stanford University Press.                         |
| Parpart, J. L. & Staudt, K. A. (Eds.). (1989). Women and the State in Africa. CO: Lynne Reinner Publishers.  |
| Perkins, D. H. & Roemer, M. (1991). Reforming Economic Systems in Developing Countries. Boston, MA: Harvard Institute for International Development.   |
| Pitcher, T. J. (1995). Species changes and fisheries in African lakes: outlines of the issues. In Pitcher, T. J., & Hart, P. J. B. (Eds.), <i>The Impact of Species Changes in African Lakes</i> (pp. 1-16). London: Chapman & Hall. |
| , & Hart, P. J. B. (Eds.). (1995). The Impact of Species Changes in African Lakes. London: Chapman & Hall.   |

Poewe, K. (1989) Religion, Kinship, and Economy in Luapula, Zambia. NY, NY: Edwin Mellen Press.

Porter, D. (Ed.). (1997). Internet Culture. NY, NY: Routledge.

Portes, A., Castells, M., & Benton, L.A. (1989). *The Informal Economy*. Baltimore, MD: The Johns Hopkins University Press.

Powell, W. W. & Smith-Doerr, L. (1994). Networks and economic life (pp. 368-402). In N. J. Smelser & R. Swedberg (Eds.), *The Handbook of Economic Sociology*. Princeton, N J: Princeton University Press.

Presley, C. A. (1986). Labor unrest among Kikuyu women in colonial Kenya. In C. Robertson & I. Berger (Eds.), Women and Class in Africa. NY, NY: Africana Publishing.

Pujol, M. (1995). Into the margin (17-34). In E. Kuiper & J. Sap (Eds.), Out of the Margin. NY, NY: Routledge.

Ramazanoglu, C. (1993). Up Against Foucault. London: Routledge.

Ranger, T. (1991). Missionaries, migrants and the Manyika: The invention of ethnicity in Zimbabwe. In L. Vail (Ed.), *The Creation of Tribalism in Southern Africa*. Berkeley, CA: University of California Press.

Remy, D. (1975). Underdevelopment and the experience of women: A Nigerian case study. In R. R. Reiter (Ed.), *Toward an Anthropology of Women*. NY, NY: Monthly Review Press.

Republic of Kenya and UNDP. (1991). Participatory Needs Assessment - Wawidhi "A" Awasi Location, Nyando Division. (Report No: 1).

Republic of Kenya and UNDP. (1991). Participatory Needs Assessment - Wawidhi "B": East Kano Location, Nyando Division. (Report No: 2).

Republic of Kenya and UNDP. (1991). Participatory Needs Assessment - North Kochogo: Nyando Division, Kisumu District. (Report No: 3).

Republic of Kenya and UNDP. (1991). Participatory Needs Assessment - Border II: Awasi Location, Nyando Division. (Report No: 4).

Republic of Kenya and UNDP. (1991). Participatory Needs Assessment - West Kabar, N. E. Kano, Muhororoni Division. (Report No. 5).

Republic of Kenya and UNDP. (1991). A Rapid Assessment of Gender and Girl Child Concerns in Kisumu District.

Republic of Kenya and UNDP. (1992). Participatory Needs Assessment: A Process for the Development of Child Survival and Development, Kisumu District. (Executive Summary).

Reynolds, J. E., & Greboval, D. F. (1988). Socio-economic effects of the evolution of Nile perch fisheries in Lake Victoria: a review. (CIFA Technical Pap., 17: 148 p.). Rome: Food and Agricultural Organization of the United Nations.

Ritzer, G. (Ed.). (1990). Frontiers of Social Theory. N.Y.: Columbia.

Robertson, A. F. (1979). Community of Strangers. London: Scolar Press.

Robertson, C. (1984). Sharing the Same Bowl: A socioeconomic history of women and Class in Accra, Ghana. Ann Arbor, MI: University of Michigan Press.

----- (1995). Comparative advantage: Women in trade in Acra, Ghana, and Nairobi, Kenya. In B. House-Midamba & F. K. Ekechi (Eds.), *African Market Women and Economic Power* (pp. 99-119). Westport, CN: Greenwood Press.

-----. & I. Berger, (Eds.). (1986). Women and Class in Africa. NY, NY: Africana Publishing.

----- and Martin A. Klein. (1983). Women and Slavery in Africa. Madison, WI: University of Wisconsin.

Roemer, M. & Jones, C. (1991). Markets in Developing Countries. CA.: ICS Press.

Rural Planning Department. (1994). Siaya: District Development Plan 1994-1996. Republic of Kenya: Office of the Vice-President and Ministry of Planning and National Development.

Rural Planning Department. (1994). Migori: District Development Plan 1994-1996. Republic of Kenya: Office of the Vice-President and Ministry of Planning and National Development

Rural Planning Department. (1994). Kisumu: District Development Plan 1994-1996. Republic of Kenya: Office of the Vice-President and Ministry of Planning and National Development

Rural Planning Department. (1994). Homa Bay: District Development Plan 1994-1996. Republic of Kenya: Office of the Vice-President and Ministry of Planning and National Development

Sachs, C. (1996). Gendered Fields. Boulder, CO: Westview Press.

Sacks, K. (1982). Sisters and Wives. Chicago, IL: University of Chicago Press.

Safa, H. I. (1982). Towards A Political Economy of Urbanization in Third World Countries. Delhi, India: Oxford University Press.

Sangari, K. & Vaid, S. (1989). Recasting women: An introduction. In K. Sangari & S. Vaid, (Eds.). Recasting Women: Essays in Indian Colonial History. Rutgers, NJ: Rutgers University Press.

Schoepf, B..G. (1992). Gender relations and development: Political economy and culture. In A. Seidman & F. Anang (Eds.). *Towards a New Vision of Self-Sustainable Development*. NJ: Africa World Press.

Seidman, A. & Anang, F. (Eds.). (1992). Towards a New Vision of Self-Sustainable Development. NJ: Africa World Press.

Sen, A. (1995). Varieties of deprivation. In E. Kuiper & J. Sap (Eds.), Out of the Margin (pp. 51-58). NY, NY: Routledge.

Sheldon, K. (1996). (Ed.) Courtyards, Markets, City Streets: Urban women in Africa. Boulder, CO: Westview Press.

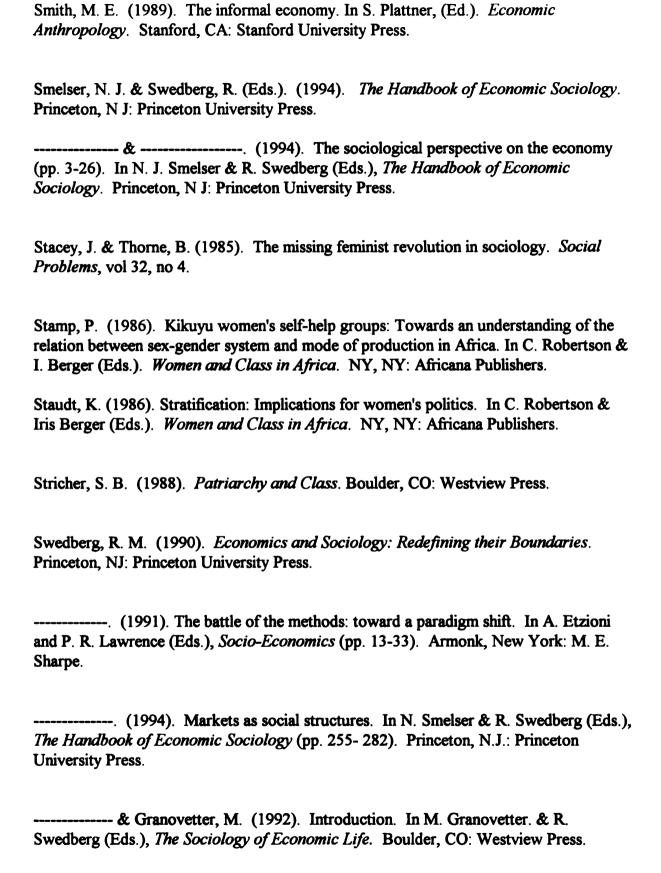
Silberschmidt, M. (1991) Rethinking Men and Gender Relations. Copenhagen, Denmark: Centre for Development Research.

Simmel, G. (1955). Conflict and the Web of Affiliations. NY, NY: The Free Press.

Smith, D. E. (1987) The Everyday as Problematic. Boston, MA: Northeastern University Press..

Smith, D. E. (1987). Women's perspective as a radical critique of sociology. Reprinted in S. Harding (Ed.), *Feminism and Methodology*. Bloomington, Ind.: Indiana University Press. (Reprinted from 1974).

Smith, J. & Wallerstein, I. (Eds.). (1992). Creating and Transforming Households. Great Britain: University Press, Cambridge.



Terborg-Penn, R., Harley, S., & Rushing, A. (Eds.). (1987). Women in Africa. Washington, D.C.: Howard University Press.

Twongo, T. (1995). Impact of fish species introductions on the tilapias of Lakes Victoria and Kyoga. In Pitcher, T. J., & Hart, P. J. B. (Eds.), *The Impact of Species Changes in African Lakes* (pp. 45-57). London: Chapman & Hall.

Uehara, E. Dual exchange theory, social networks, and informal social support. *American Journal of Sociology*. 96 (3): 521-557.

Vail, L., (Ed.). (1991). The Creation of Tribalism in Southern Africa. CA: University of California Press.

Walby, S. (1986). Patriarchy at Work. Minneapolis, MN: University of Minnesota Press.

Wallerstein, I. (1974). The Modern World System I. CA: Academic Press, Inc.

-----. (1988). The Politics of the World Economy. Great Britain: Cambridge University Press, reprinted.

----- & Smith, J. (1992). Households as an institution of the world-economy (pp. 3-23). In J. Smith & I. Wallerstein (Eds.), Creating and Transforming Households. Great Britain: University Press, Cambridge.

----- & ----- (1992) Core-periphery and household structures (pp. 253-262). In J. Smith & I. Wallerstein (Eds.), Creating and Transforming Households. Great Britain: University Press, Cambridge.

Waring, M. (1988). If Women Counted. California: Harper.

Wellman, B. & Berkowitz, S.D. (Eds.). (1988). Social Structures. Cambridge, United Kingdom: Cambridge University Press.

----- & Wortley, S. Different strokes from different folks: Community ties and support. American Journal of Sociology, 96 (3): 558-588.

Whitehead, A. (1994). Wives & mothers: Female farmers in Africa. In A. Adepoju & C. Oppong (Eds.) Gender, Work & Population in Sub-Saharan Africa (pp.35-53). London, England: James Currey.

Wiley, D. S. & Yongo, E. O. (1992). An overview of the socio-economic situation in Kenya on Lake Victoria. Unpublished manuscript.

Williamson, O. E. (1994). Transaction cost economics and organization theory (pp. 78-107). In N. J. Smelser & R. Swedberg (Eds.), *The Handbook of Economic Sociology*. Princeton, N J: Princeton University Press.

Wilson, D. & Medard, M. (March, 1996). Changing economic problems for women in the nile perch fishing communities on Lake Victoria. Paper presented at the Annual Meeting of the Society for Applied Anthropology, Baltimore, MD.

Witte, F. Goldschmidt, T., & Wanink, J. H. (1995). Dynamics of the haplochromine cichild fauna and other ecological changes in the Mwanza Gulf of Lake Victoria. In Pitcher, T. J., & Hart, P. J. B. (Eds.), *The Impact of Species Changes in African Lakes* (pp. 83-110). London, England: Chapman & Hall.

Young, M. & Wilmott, P. (1992). Family and Kinship in East London. Berkeley, CA: University of California Press.

Zelizer, V. A. (1994). The Social Meaning of Money. NY, NY: Basic Books.

