


Spring 2012

The Social and Economic Impact of MPESA on the Lives of Women in the Fishing Industry on Lake Victoria

Danielle White

SIT Study Abroad, dwhite@students.stonehill.edu

Follow this and additional works at: http://digitalcollections.sit.edu/isp_collection

 Part of the [African Studies Commons](#), [Community-based Research Commons](#), [Family, Life Course, and Society Commons](#), [Finance and Financial Management Commons](#), [Gender and Sexuality Commons](#), [Growth and Development Commons](#), and the [Women's Studies Commons](#)

Recommended Citation

White, Danielle, "The Social and Economic Impact of MPESA on the Lives of Women in the Fishing Industry on Lake Victoria" (2012). *Independent Study Project (ISP) Collection*. Paper 1246.
http://digitalcollections.sit.edu/isp_collection/1246

This Unpublished Paper is brought to you for free and open access by the SIT Study Abroad at SIT Digital Collections. It has been accepted for inclusion in Independent Study Project (ISP) Collection by an authorized administrator of SIT Digital Collections. For more information, please contact digitalcollections@sit.edu.

The Social and Economic Impact of MPESA on the Lives of
Women in the Fishing Industry on Lake Victoria

By: Danielle White

SIT Spring 2012: Health and Community Development

Academic Directors: Jamal Omar and Odoch Pido

Advisor: Donna Pido

Acknowledgments

First, I would like to thank my Academic Advisors, Jamal and Odoch. Your guidance throughout the semester, both inside the classroom and out, has been priceless. I would not have been able to survive here in Kenya without your positive energy, patience, and willingness to help your students. Secondly, I would like to thank Donna, my advisor for the ISP period. Your vast knowledge about Kenyan culture and your ability to make sense out of my ramblings during our meetings helped me to decide on an ISP topic that I thoroughly enjoyed studying.

I would also like to thank Grace, my contact in Sori. This project would never have been possible without your help. I cannot thank you enough for taking me into your home and making me feel at home in Sori. I would like to thank my translator, Juliet, who without I would never have received an adequate number of interviews. We were able to conduct far more interviews than I had hoped and this is entirely due to your tireless energy and ability to convince even the most stubborn of interviewees. Lastly, I would like to thank all of my interviewees for their willingness to participate in my study. My study would not exist without you and I am forever grateful for the community of Sori and surrounding areas for making this project possible.

Table of Contents

Abstract.....	Page 4
Introduction.....	Page 4
Setting.....	Page 9
Methodology.....	Page 11
Discussion and Analysis.....	Page 12
Sori – Women.....	Page 12
Bongo – Women.....	Page 20
Jeriko and Agiro – Women.....	Page 23
Sori – Men.....	Page 26
Bongo and Kademba – Men.....	Page 27
Conclusion.....	Page 29
Recommendations.....	Page 30
Appendix 1.....	Page 32
Appendix 2.....	Page 33
Appendix 3.....	Page 34
Appendix 4.....	Page 35
Appendix 5.....	Page 36
Bibliography.....	Page 44

ABSTRACT

This study will examine the social and economic impact of the mobile banking system, MPESA, in the lives of women in the fishing industry on Lake Victoria in Kenya. The study aims to discover what MPESA is being used for and how its use is affecting the lives of its female users. It will not only study the immediate impact on women, but also the impact on the interactions with their families and communities, as well as the fishing industry. The study aims to determine whether or not MPESA is beneficial to these women and if it is, how the women are benefiting.

INTRODUCTION

As the forces of globalization continue to permeate even the most remote of locations, populations everywhere have access to new technology, ideas, goods, and services. The political, economic, and social affect of these forces have transformed societies and changed the way people live their lives. In particular, the globalization of technology and the financial markets have played a substantial role in international development. Whether or not this change is for the better, globalization cannot be reversed; governments and populations must learn how their cultural, economic, and political identities interplay with these new additions to their societies. The changes that come along with globalization do not affect all countries or individuals in the same ways. In the global capitalist system there are those who are economically successful and those who are not due to the competitive nature of the capitalist markets.

For example, while banks and automated teller machines are plentiful in most developed nations (DCs), the World Bank has reported that 75% of the world's poor

population does not have access to the formal banking sector. In addition to economic status, gender also plays a role: in developing nations (LDCs) only 37% of women have a bank account compared with 46% of men.¹ While the global financial markets have permeated most nations, access to the formal banking sector remains limited.

However, certain technological advancements are no longer exclusive to the populations of DCs. A technological revolution is occurring across Africa and while the internet is not yet widely spread, the cell phone is widely accessible. The countries leading new innovations in Information Technology, especially with cell phone use, are Kenya, South Africa, and Nigeria.² According to the International Telecommunications Union (ITU), as of 2010 90% of the global population is covered by cellular signal.³ Usage has grown particularly quickly in Africa, where usage grew 400% from 2005 to 2010. This is largely due to the low cost of establishment and maintenance of cell phone towers and declining costs of phones.⁴ This increase in usage has not just been beneficial to the cell phone companies themselves. According to economist Jeffrey Sachs, “the cell phone is the single most transformative technology for development.”⁵ However, it is not simply the introduction of the cell phone that is altering societies. Rather, it is the ability to communicate that cell phones bring as well as the numerous additional technological advancements that have emerged out of the cell phone.

¹ Anne Renzenbrink, “World Bank: 75% of poor don’t have bank accounts,” CNN.com, Last modified April 19, 2012, <http://edition.cnn.com/2012/04/19/business/poor-bank-accounts/index.html?iref=allsearch>.

² Eric Osiakwan and Juliana Rotich, Al Jazeera, *African Innovations*, video, 37:14, March 20, 2011, <http://stream.aljazeera.com/story/african-innovations-0022111>.

³ “ITU Statistics,” *International Telecommunications Union*, accessed April 27, 2012, <http://www.itu.int/ITU-D/ict/statistics/>.

⁴ Kevin Voigt, “Mobile phone: Weapon against global poverty,” *CNN*, October 9, 2011, accessed March 16, 2012, <http://www.cnn.com/2011/10/09/tech/mobile/mobile-phone-poverty/index.html>.

⁵ Ibid.

One of the most influential advancements is mobile banking. By using mobile banking, customers can save money in their phones, send or receive money via SMA, and also pay bills. This is vastly important in LDCs where access to formal banking is limited and road access is not always available. One of the most successful mobile banking systems is Safaricom's MPESA. It was introduced to Kenya in 2007 under the company Vodafone and rapidly grew in popularity. After only two years on the market, 10% of Kenya's GDP was circulating through MPESA and today Kenyan's make \$1 billion per month in transactions through MPESA.⁶ In a nation that relies heavily on an informal economy, MPESA has proved incredibly popular among men and women in business. Even if formal banking institutions are available, many individuals make so little money that they do not have enough money to save in a bank which most often require a minimum balance. The minimum balance requirement for MPESA is extremely low and there are agents available throughout Kenya. According to Safaricom, 7 out of 10 adults in Kenya have access to mobile money.⁷

Through their services, MPESA is challenging western concepts and research on the very nature of globalization and development. The Global South has been struggling with economic development since their initial involvement in the international economy. As a result, much of the discourse on globalization and development has portrayed LDCs as helpless in a rapidly expanding world. Nagar, et al. states that "Southern places are constructed...as mere recipients of globalization, rather than as being able to act on and transform the global complex."⁸ Many view the South as a passive recipient instead of an active agent of globalization and the same can be said for women and other minorities.

⁶ Ibid.

⁷ Anne Renzenbrink, "World Bank: 75% of poor..." CNN.com.

⁸ Richa Nagar, Victoria Lawson, Linda McDowell and Susan Hanson, "Locating Globalization: Feminist (Re)readings of the Subjects and Spaces of Globalization," *Economic Geography*, 78, no. 3 (2002): 257-284.

In response to the World Bank's findings on access to the formal banking sector in LDCs, Princess Máxima, UN Secretary General's Special Advocate for Inclusive Finance for Development stated, "I hope policy makers will use this research to help make sure everyone, everywhere, has access to financial services."⁹ While a solution was found, it was not international experts or policy makers who found it. Rather, it was local cell phone companies who created a system of mobile banking which has since revolutionized both the companies themselves and the individuals who use their services. MPESA is a Kenyan solution to a Kenyan problem; it is an example that LDCs can be agents of change in a highly globalized world.

Similarly to LDCs, women also serve as marginalized minorities. According to Acker, "Gender is a basic organizing principle in social life, a principle for allocation of duties, rights, rewards, and power..., a factor in organizing daily life for individuals, families, communities, and societies as large structures."¹⁰ A person's gender identity determines a host of factors that will shape their lives from their conception until their death. Unfortunately, the female gender has been, and continues to be a historically marginalized group both internationally and within Kenya.¹¹ Since women have less access to the formal banking sector than do men, MPESA may create an even bigger impact in their lives than their male counterparts.

While individuals are often vastly important agents of change, they are not always considered to be important in the global picture. Nagar et al. states that, "The actors of economic globalization are frequently conceptualized as formal political and economic

⁹ Anne Renzenbrink, "World Bank: 75% of poor...", CNN.com.

¹⁰ Joan Acker, "Gender, Capitalism, and Globalization," *Critical Sociology*, 30, no. 1 (2004): 17-41, doi: 10.1163/156916304322981668.

¹¹ Winston Burton and Roger Winsor, *Kenya: The Land, the People, and the Nation*, trans. Mario Azevedo (Durham, NC: Carolina Academic Press, 1993), 23-25.

institutions, such as corporations and multilateral and financial institutions (World Bank, IMF, WTO), and national governments. Broadly speaking, people as subjects are absent of from globalization research.”¹² In order to understand the impact of globalization and development, it is imperative to understand the changes that they create in the lives of people. This requires researching the lives of those individuals, who are not always considered in development discourse, such as women or those people living in LDCs.

While it is apparent that the phenomenon of mobile banking is widespread, I was unable to find any literature or research studying the effects of these services on their users. Thus, this study will focus on the social and economic impact of MPESA in the lives of its users, in particular women. I will concentrate on use within the fishing industry on Lake Victoria as this constitutes the informal economy which typically deals with small amounts of money and thus may be more receptive to MPESA as opposed to other groups. I focus on women because historically in Kenya, women have had very limited access to property ownership. In an area where agriculture and fishing are a very popular income generating activity, the fishing industry has served the best option for many women. Since the fishing industry has expanded in the 1980's to an international trade, disparities between the income of men and women in the industry have grown with women often earning significantly less than their male counterparts.¹³ As a marginalized group internationally, nationally, and within the fishing industry, MPESA and the opportunities it offers its users are especially important for women.

¹² Richa Nagar, et al., “Locating Globalization...,” 268.

¹³ Modesta Médard and Douglas C. Wilson, “Changing Economic Problems for Women in the Nile Perch Fishing Communities on Lake Victoria,” *Anthropologica* 38 (1996): 151-152, accessed March 14, 2012.

SETTING

The focus of my study is on fishing communities within Kenya along Lake Victoria. It is the largest fresh water lake in Africa and is bordered by Kenya, Tanzania, and Uganda. Kenya controls the smallest portion of the lake: only 4100 km² of a total of the 68,000 km² surface area of the lake.¹⁴ Nonetheless, the lake is a huge economic resource for the communities along the water. According to the United Nations Environment Programme, Lake Victoria supports the most productive freshwater fisheries in the world.¹⁵ The vast majority of the industry consists of small scale business in which fishermen bring in their catch on wooden canoes to the women on the shores who process and trade the fish elsewhere. Often the fish is transported to larger cities like Nairobi and Kisumu for further processing and sale. Fishermen and women flock to its shores in search of economic opportunities, but in past years, the Lake has seen vast environmental degradation much of which has been a result of overfishing. Both an influx of fishermen in the Lake and the advancement of fishing technology have largely been to blame.¹⁶ Regardless, fishing continues to be a popular industry along the lake.

I conducted my study in a town called Sori as well as four other trading centers called Bongo, Jeriko, Agiro, and Kademba. All of these communities are located in Kenya on Lake Victoria and rely mostly on fishing in the lake for their source of income. While I was unable to find the population of each community, Sori is by far the largest area and has the largest population. There are numerous shops, a market, numerous bank agents, and many MPESA

¹⁴ Kim Geheb and Tony Binns, "Fishing Farmers' or 'Farming Fishermen'? The Quest for Household Income and Nutritional Security on the Kenyan Shores of Lake Victoria," *African Affairs*, 96 (1997), accessed March 14, 2012.

¹⁵ "Lake Victoria Basin Environment Outlook," *United Nations Environment Programme*, accessed April 27, 2012, http://www.unep.org/dewa/africa/docs/en/lvicbasin_brochure.pdf.

¹⁶ Eric O. Odado, et al., "Mitigation on Environmental Problems in Lake Victoria, East Africa: Causal Chain and Policy Options Analyses," *Ambio* 33 (2004), accessed March 14, 2012.

agents available throughout the town. Children attend eleven different schools: ten private and one public, most of which are primary schools. There is also a public hospital, private health center, and a private mission hospital all within town. The majority of the population in town center is involved in the fishing industry although there are some individuals who are employed in the agricultural sector in the outskirts of town. Both industries are done on the small scale, however, a fish processing plant has been constructed by an NGO but has not yet opened for use.

The four remaining trading centers are a short distance from Sori with the farthest being Bongo which is about a fifteen minute walk from the center of Sori. All four are significantly smaller than Sori in both population and land mass. While they have one or two shops available for small purchases, such as bread or sugar, Sori remains the closest place for them to utilize bank and MPESA agents, schools, health care facilities, and larger or diversified shops. The majority their populations are involved in the fishing industry as well. All five areas are located in Migori County, which has a population of 1,028,579, and are a part of the Nyatike Constituency.¹⁷ The most popular fish that come from the lake are Nile Perch, Tilapia, Daga (or Omena as it is called locally in the Dholuo language), and Fulu. Of those, the Nile Perch and Tilapia are mostly exported as they are too expensive for the average local population. However, Omena and Fulu, which are both eaten by the local population and exported, are the most popular for business in these areas.

¹⁷ “Kenya: 2009 Population and Housing Census Highlights,” *Kenya National Bureau of Statistics*, accessed April 27, 2012, <http://www.tisa.or.ke/2009-knbs-census-highlights/>.

METHODOLOGY

Over a three week period during the month of April, I conducted my study in the form of observations as well as both formal and informal interviews in the town of Sori as well as in the neighboring Trade Centers of Bongo, Jeriko, Agiro, and Kademba. As most of my interviewees speak Dholuo as their first language, I utilized an eighteen year-old female translator who is fluent in Dholuo, Kiswahili, and English to assist me in all but one of my interviews.

In total, I conducted 152 formal interviews with individuals in the fishing industry: 116 of which were with women and the remaining 36 of which were with men. Of these individuals, all but two were from the Luo tribe. The majority of interviews took place in Sori where I interviewed 78 women and 24 men. In Bongo, I was able to interview 28 women and eleven men. I conducted five interviews with women in Jeriko and another five in Agiro. Finally, I interviewed one man in Kademba. I interviewed many men and women while they were resting in their homes or outside. However, I also conducted interviews with women who were selling fish by the roadside, some who were packing fish for shipment, and others who were frying fish to sell in the local market. Some men were also working on constructing canoes, packing omena for shipment, and fixing their fishing equipment.

I also formally interviewed three bank agents and one employee at the Kenya Women Financial Trust (KWFT) unit office all of whom were located in Sori. Of those three bank agents, one was an agent for Equity Bank and another was an agent for Co-operative Bank. The last was an agent for Postbank but was also in the process of becoming a local agent for KCB Bank as well. Finally, I conducted several informal interviews with a local healthcare worker, a primary school teacher, and an omena trader, all of whom lived in Sori.

DISCUSSION AND ANALYSIS

In all areas I studied, the processes within the fishing industry are the same. Fishing is considered a job solely for men. Women may own their own boats but will never partake in fishing. Processing and trading are done mostly by women, but men are also allowed to partake in this business. The men leave in the evening on long wooden canoes to do their fishing at night. The majority of the men catch omena and fulu in nets and bring their catch to shore in the early morning. The women who process the fish then take the fish from the men and separate the fish into three groups: fulu, omena, and those small enough to be used for chicken feed. They then dry the fish on large nets on the ground by the lake. If the weather is sunny, the fish will dry by the afternoon and the women will be able to sell the fish to other traders or sell it themselves. Some of the women sell the fish roadside while others take it to the market for sale. The remaining women export the fish to neighboring areas, such as Kisumu and Nairobi. I have broken my results down into several groups. Firstly, I have chosen to separate my findings by gender as I had two separate sets of questions for the male and female genders. Second, I chose to divide my interviewees by their location. All of the interviewees are from the Luo tribe, with the exception of two individuals, a man and a woman. Since they did not provide any outstanding information, I will omit them from my discussion.

Sori - Women

I interviewed 77 women in Sori who are Luo and range in age from 18-58. All of the women I interviewed are in the fishing industry and the majority of them, 92%, both process the fish off of the boat and trade the fish either in Sori or in surrounding areas. Of the remaining women, 6% only trade, 1% only process, and finally, 1% packs the fish for transport and carries it from the field to the buses. Only five of the 77 women described Sori

as their hometown; the remaining 72 women came from as far as Kisumu. 82% of those who described their hometown as a place other than Sori came looking to do business in the fishing industry. The remaining women were either married in Sori or followed their husbands to Sori.

The vast majority of women have families to support. 71% of women are married, 25% are widowed, two are divorced, and only woman is not married. Only four women have no children and the majority of women have numerous children. 77% of women keep their earnings separate from their husbands. When asked what they spent the majority of their money on, the top three answers were basic needs, school fees, and their business. When asked what their husbands spend the majority of their money on, the top three answers were the same. However, four women stated that their husbands do not work and do not bring in any income for the family. Two women reported that their husbands spend their money buying alcohol and another three women did not know what their husbands spend their money on.

Of the 77 women interviewed, 62% reported that they used MPESA and the remaining 38% did not. MPESA is mostly used for sending and receiving money and also for saving money. 71% of women stated that they believed that they benefited from using the services offered by MPESA. The majority of women who stated that they did not benefit believed it was because they did not receive interest as they would if they were saving in a formal bank. However, regardless of their perceptions, upon further explanation of their usage of MPESA it became very clear that the services have benefited the majority of women.

Firstly, many women now have the ability to save their money in a safe place. Nearly half of women stated that they were much less likely to use their money when they saved it in

MPESA rather than in their homes. The remaining half stated that when they save their money with MPESA, it is safe from others. Five of the women stated that their husbands no longer have access to their money. These women stated that their husbands often used their money to buy alcohol or other personal items and left them with no money to be able to process fish the following day.

Although I did not specifically ask about theft, eight women reported that they had money stolen from them. Four women had money ranging from Kshs 12,000 – 50,000 stolen from their homes; 2 women had money stolen from them in transit. All of these theft cases occurred before MPESA was available and one woman stated that it is the reason that she began using MPESA. Interviewee 75, who was using her friend's account before she got her own, stated that her friend stole Kshs 500 from her. However, two women, Interviewees 10 and 70, did report that money was stolen from their MPESA accounts.

The ability to have a safe place to save is very important as formal banking institutions are often out of reach for many people for numerous reasons. Many of the women stated that they did not earn enough money to be able to save in a bank since they were not able to maintain the minimum balance that is required by most banks. I visited four bank agents or employees in Sori for Post Bank, KWFT, Equity Bank, and Co-operative Bank. For Post Bank the minimum balance required is Kshs 1200; for Equity Bank it is 150; for KWFT it is Kshs 500; and for Co-operative Bank it is Kshs 100. MPESA only requires that a customer have Ksh 1 in their account to keep it open. In addition to this, while there are four functioning bank agents in Sori, the nearest actual banks are in Migori town, or about a one-hour matatu ride away which would cost about Kshs 250. MPESA agents are very plentiful in Sori so access is rarely a problem.

The result of having access to a means of saving has led to numerous changes in the lives of these women. The first is that women now have the ability to save for more costly activities and purchases. When asked what they spend their savings on, all but one woman stated that they spent it on their helping their families or expanding their business. Many women stated that they now have the money to send their children to school, whereas before they struggled to obtain enough money to pay the fees at the time of payment. This has been especially important as of late, as several private schools have recently increased the number of days children attend school, thus increasing the price of tuition. Three women reported that they were able to save enough to construct their own homes. During the two rainy seasons in Kenya, many of the temporary homes become flooded and need repairs several times. By constructing a durable home, these women no longer have to pay for repairs or spend time reconstructing the homes themselves.

In addition to saving, the ability to send and receive money through MPESA has also been largely beneficial for a number of reasons. Some women had family members who remained behind in their hometowns while they left to trade in Sori. Interviewee 5 had recently moved to Sori and left four of her five children as well as her disabled husband at her home. Since her husband could not work due to his disability, she sent home money to support her family. She stated that it would cost her Kshs 1000 each way to return home to send this money; if she sent her money through MPESA she was only charged Kshs 75. Since she makes this transaction once per month, over a one year period she would spend Kshs 23,100 more if she weren't using MPESA for this process. This accounts for transportation costs only and does not even factor in the money she would lose since she would have to stop working for a period of time to physically transport the money herself.

In addition to this, women are able to send school fees for their children through MPESA. Since there are very few secondary schools in Sori, most of the women I spoke to

had children who attended school as far as Kisumu. Instead of travelling to bring school fees to their children, women can now simply send these fees via MPESA. Again, this saves transportation costs and time. The ability to receive money is also very important. Family members or friends can send money via MPESA without either the sender or the receiver having to travel. Since the majority of people in the area are living in poverty, it is very beneficial for them to have easier access to money from others should they need it.

Prior to MPESA, women would travel with the fish to trade it outside of Sori going as far as Kisumu and Nairobi. This means that they would not only have to pay to send the fish, but would also have to pay for their own bus ticket as well as a place to stay and food while they were selling their fish. Since the majority of women also have children they would also need to arrange for someone to take care of their children's needs while they were gone which often requires payment as well. The process would take several days depending on the amount of fish being traded so traders would only send fish once a week at most.

However, since women can now receive payment through their phones, they no longer need to travel with their fish to sell it. Traders can now send their fish to customers outside of Sori on public transportation and receive money immediately from their customers. Not only do women save money because they no longer have to pay travel costs, but they have far more time available. Where it may have taken a woman a week to sell two bags of fish in Nairobi, she now spends one morning buying and sending the fish on a bus to Nairobi for sale by her customers. Since the price for fish rises as it gets farther from its source, fish outside of Sori most often yields higher prices than if it were sold in areas around the lake. There are also more customers elsewhere so women have a larger customer base and are able to sell more fish and make more money.

Both the ability to save money and the ability to send or receive money has created a host of other benefits for these women. 30 of the 48 women who use MPESA stated that by saving, they were able to use their money and free time to expand their business and make a greater profit. This most often meant women being able to process more fish to sell, but two women also stated that they were able to construct their own fishing boats and yield an even greater profit. Numerous other women also reported that they were able to start other businesses outside of the fishing industry. These include farming, tailoring, selling second hand clothing, and running a small shop. From these extra income generating activities, these women have been able to better their own lives as well as the lives of their families.

Interviewee 78 is college educated and very involved in her community. She only traded omena and, similar to the other women, reported having much more free time and making much more money since she began using MPESA. However, since she was well educated and fluent in Kiswahili, Dholuo, and English, she was able to attend different conferences, meetings, and trainings in the area. Not only did she often make a small profit by attending these events, but she was able to use the knowledge she gained there in her own community. As a local leader, she is experienced in topics from maternal health, to female empowerment, to business strategies and shares her knowledge with the local community. Without MPESA, she would have far less time to spend on these activities and would be unable to further her own education as well as the education of her community. 81% of women stated that MPESA has made them more independent since they no longer have to rely on others for money.

The majority of women also stated that MPESA has changed relations between men and women in the industry for the better. Since the women are able to save their money, they have money to process fish very often, if not daily. Nineteen women stated that before MPESA, they would often take fish even though they could not pay for it. This new

consistency within the business has built trust between the fishermen and the processors, and four women noted that there have been fewer quarrels between them. Six women noted that this trust has allowed them to take fish before paying because the fishermen believe that they will pay it back. Women stated that they often did not have cash for the fishermen because they did not have time to go to an MPESA agent or the agents were closed. Another two women stated that the men are encouraged to fish more because the women are so consistent with their payments and business has grown.

While MPESA has greatly benefited the lives of many women, it is also apparent that many women who use MPESA often desire access to even more financial services. Five women specifically stated that they either planned to open a bank account or desired to do so. Many other women mentioned the lack of interest that MPESA offers. Interviewee 19 has a loan with Silk, and wants to save her money in a bank account rather than in MPESA so she can earn interest on her loan. Two of these women stated that they would like to continue using MPESA for sending and receiving money, but would like to use a bank account to save in as well.

Although MPESA is widespread, a number of women do not use it. Of the 30 women I interviewed in Sori who do not use MPESA, 52% stated that they did not have enough money to save as their reason for not using it. Other popular reasons included not having an identification card, which is required to create an account, not having a phone, or being illiterate and thus unable to understand the process of opening an account. When asked whether or not they would like to use either MPESA or a bank account, 44.5% of them stated that that would like to use MPESA, 44.5% chose a bank, 7% did not want to use either, and 4% would like to use MPESA as well as a bank account. The majority of women who said they would prefer to use MPESA stated that they think it is the easiest way and it is common. Half of the women who chose a bank stated that they did so because they would save more

money because it is more difficult to retrieve money from a bank. Another four women believed that their money would be most secure in a bank account. However, 59% of all of these women stated that their money would be safe in MPESA.

All but one of these women, Interviewee 25, traded in Sori only. She stated that she had to travel very far distances to sell her fish or the customers would have to travel to her. 32% of these women reported having been stolen from. However, unlike the women who use MPESA, I specifically asked this group of women whether or not they had been stolen from. Seven women had money stolen from their homes, ranging from Kshs 1400 to Kshs 20,000 along with her phone. Two women also had money stolen from them while they were working in the field. One woman had Kshs 600 stolen and the other had Kshs 1000 stolen. Since I did not ask both groups the same questions about theft, I cannot make assumptions about theft in the area. However, I was told by several women that theft cases have significantly reduced since members of the community began using MPESA.

Women who do not use MPESA are also more likely to not use any other financial services. 97% of women did not use any financial services at all. In contrast, of the women who used MPESA, 42% of them use other financial services, such as bank accounts or loans. As numerous women mentioned, MPESA has taught the community how to save. This suggests that MPESA serves as a stepping stone which allows women to eventually access the formal banking sector. While they may have not had enough money to maintain the minimum balance in a bank account or pay back a loan before, MPESA has made it possible for women to save enough to be able to do so. It does not appear that MPESA has replaced the formal banking sector; rather, it is working alongside it and helping the women of Sori at the same time.

Bongo - Women

In Bongo, a total of 28 women were interviewed, all of whom are Luo. They range in age from 17-40. Only nine of the women are originally from Bongo and the remaining 21 are from neighboring areas. 89% of the women moved to Bongo in search of business opportunities and another 11% moved because they married men from the area. 100% of the women I interviewed both processed fish and traded. Similar to the women in Sori, the majority of these women are supporting families. 75% of the interviewees are married, 21% are widowed, and only 4% are not married. Only one woman reported not having any children, and the majority of the rest of the women had numerous children. Of the 28 women with husbands, 81% kept their earnings separate from their husband's. All of the women stated that they used their money for basic needs, school fees, and for business purposes. The majority of women stated that their husbands spend their money in the same way. However, two women stated that they do not know what their husbands spend their money on and another woman stated that her husband spends his money on alcohol.

64% of the women I interviewed used MPESA while the remaining 36% did not. The women reported that they use MPESA for saving as well and sending and receiving money. 89% of these women reported that they believe that they benefit from using MPESA. Those women who do not believe that they benefit from using MPESA stated that this was because MPESA does not offer loans or give interest. However, as with the women from Sori, I found that these women greatly benefit as well. The main benefit is having access to a means of saving. Five women also stated that they now have customers outside of Bongo since they could receive payment with MPESA. This means that these women can yield a greater profit with a greater customer base as well as a higher price for fish. These women also noted that work was much easier and they had more time to spend on other activities.

72% of women are able to process more fish with their savings and further their business. Numerous women were able to open second businesses. Their business includes selling fruit and sugar cane as well as growing beans and maize for sale. These income generating activities help women to save even more money for the future. 22% of women stated that they could better take care of their children and could now afford their school fees. Two women stated that their husbands have less access to their money. Interviewee 107 noted that this is very important to her because before MPESA, her husband would steal her money for alcohol, but now that he doesn't have access to her money she can pay for her children's education and health care. Interviewee 108 stated that she is now able to send money home to her parents without her husband knowing. She stated that she thought her husband would take the money if he found out but she felt that it was her role as a daughter to take care of her parents. MPESA has allotted these women more control over their own money and also more control over their lives.

95% of women feel that their money is more secure when it is in MPESA. 56% of women stated that they are less likely to spend the money themselves when it is in MPESA as opposed to cash form. Since the closest MPESA agents are in Sori, the women must walk for about fifteen minutes to reach Sori to withdraw. Most women stated that this deterred them from spending money when they do not have to because they may not have the time or energy to spend on the walk. Another 23% of women stated that others do not have access to their money so it is safe from theft. While I did not specifically ask this group about theft, Interviewee 123 that she was involved in an MPESA scam in which she sent Kshs 800 to claim a prize to a fraudster. 80% of women felt that MPESA has made them more independent because they no longer have to rely on others when they need money. MPESA has allowed them to save enough money for times when they are in need. This is especially

important for widows as a two of them stated that with their husbands gone, they had no one to rely on but themselves.

The majority of women stated that they now have a good relationship with the fishermen. Half of the women are now able to pay the fishermen consistently whereas before they frequently missed payments. Two women noted that they no longer had to take the fish before paying; in contrast, another two women stated that the fishermen now trust them to take the fish before they pay. Taking fish before paying has shifted from a necessity to a convenience within the Bongo community. Like in Sori, women noted that the fishermen are encouraged to work more because the women are now paying. This has benefited the industry as a whole as men and women alike are encouraged to work harder and also to cooperate with each other.

The remaining 36% of women I interviewed in Bongo do not use MPESA. 70% of these women stated that they do not use MPESA because they do not make enough money to save. However, 60% of women stated that they would like to use MPESA as opposed to a bank. Numerous women stated that MPESA is reliable and is the easiest and fastest way to save. Several women stated that they felt that MPESA does not look down upon or discriminate against people with little money in the same way that banks do. It is clear that these women felt their marginalization as members of a low income bracket. However, the remaining 40% of women stated that they preferred using a bank either because it was a safe means of saving or they felt that their money would accumulate more since they could not easily withdraw it.

90% of women stated that they felt that their money would be more secure in MPESA. Half of the women reported that they had money stolen from them either at home or while they were working in the field. Again, while I did not ask the women who use MPESA

specific questions about theft, several of those women specifically stated that no one could steal from them any longer. It is a common trend in Bongo that money is safer when kept in MPESA. In addition to this, 90% of the women who do not use MPESA trade only in Bongo. The remaining 10% use a friend's MPESA account to receive payment from her customers. This reflects the trend in Sori as women are less likely to trade outside of their home areas when they do not use MPESA. This also means that they are excluded from a larger customer base and higher selling prices.

Only 17% of the women I interviewed who use MPESA in Bongo have either a bank account or have received a loan from a formal banking institution. Of those women I interviewed who do not use MPESA, 25% of them use loans or have bank accounts. This is in contrast to the women in Sori, as those women who use MPESA are more likely to use other financial services than those who do not use MPESA. This may be occurring because these women are farther from the bank agents in Sori, or because this sample size is smaller than in Sori and may not represent the average usage. In addition to this, their educational levels may affect which form of banking they use, if any at all.

Jeriko and Agiro – Women

I chose to combine the interviewees from Jeriko and Agiro because they are in very close proximity to one another and by my observations are smaller than both Bongo and Sori. I interviewed five women from each trading center for a total of ten interviews combined. They range in age from 18-65 and have all moved to Jeriko or Agiro from other places. 70% of the women moved for better business opportunities; 20% were either married to a man from the area or moved with their husbands; interviewee 147 stated that she was forced from her original home when her husband died and her co-wife refused to share the land with her.

50% of the women are married and the remaining 50% are widowed. All of the interviewees have children and the majority of them have four or more. All of the women stated that they spend the majority of their money on basic needs, school fees, or their business. 100% of the married women keep their money separate from their husbands. 60% of the women stated that their husbands spend the majority of their money on basic needs; 20% said school fees and another 20% said their business. Another 20% stated that they do not know what their husband spends their money on and the last 20% said that their husbands do not make enough money to contribute.

All of the women work as processors and traders and 50% of them use MPESA. Four women stated that they use MPESA for saving and another two stated that they use it to send and receive money. 60% of the women believe that they benefit from using MPESA. Similarly to Sori and Bongo, I found that these women also benefit from using MPESA. 40% of the interviewees stated that they are able to spend less time on their work since MPESA eliminates the need for them to travel to give or receive money. All of the women are now able to save their money. With these savings, 60% of these women stated that they are now able to process more fish, expand their business, and make more money. 20% stated that they were able to pay for school fees through saving whereas before they were unable to do so. Interviewee 143 stated that she was able to save enough to take her child to an optician which she noted was a problem for most people who live in tin houses. While none of these women reported opening alternative businesses, all of the women appear to be saving and spending their money in ways that will better themselves and their families.

60% of these interviewees stated that they are now able to pay the fishermen on a daily basis and no longer miss payments. 20% of the women noted that business is prospering as a result. The majority of women believed that their money was safer in MPESA. 40% of them stated that their money was safe because they would not use it themselves as they would

cash. Another 20% stated that it was safe from theft. Those women who did not feel that their money was safe with MPESA either stated that they believe that banks are more secure or that they are unable to save a significant amount in MPESA so the security of their money is not affected. Finally, 60% of these women stated that MPESA has made them more independent.

The remaining 50% of women I interviewed in Jeriko and Agiro do not use MPESA. 100% of the women stated that they do not do so because they do not earn enough income to save their money. Interviewee 147 added that she was illiterate and did not have anyone to help her with the process of opening an account. When asked if they would like to use either MPESA or a bank account, 40% of the women chose MPESA, 40% chose a bank account, and 20% stated that they would use either because they believe that MPESA and banks serve the same purpose. The women who chose MPESA did so because they feel that it is the easiest way to manage their money. Those who chose the bank did so because they either felt that they would spend less money with their money in a bank because it is more difficult to withdraw, or because they only trusted the formal banking sector with their money.

60% of these women stated that they felt that their money would be more secure in MPESA because other people would not have access to it. The remaining 40% stated that they did not feel that their money would be safe in MPESA and they stated once again that they feel that their money is only safe in a bank account. 40% of the interviewees reported that they had been stolen from. The most notable case came from Interviewee 149. She stated that her husband was a fisherman and owned four boats. However, in the middle of the night several thieves came into her home, killed her husband, and stole all the money in their house which amounted to Kshs 200,000. At the age of 65, Interviewee 149 was left a widow and stated that she struggles to process and trade enough fish to make a living. She was one of the women who stated that they would like to use MPESA but made too little to save.

None of the ten women interviewed used alternative banking methods or loans. Similarly to the interviews in Bongo, this is in contrast to the large number of women in Sori who stated that they utilized the formal banking sector. The sample size in Jeriko and Agiro is significantly smaller than that of Sori so these results may not represent the average woman's response. The educational level of these women may also have affected whether or not they used the formal banking sector.

Sori – Men

I interviewed 24 fishermen in Sori ranging in age from 18 to 56. Only three of the men are originally from Sori. 95% of the 21 men who moved to Sori from elsewhere did so for business opportunities; the remaining 5% came to attend school. 75% of these men are married and the majority of them have at least one child. 66% of them stated that they keep their earning separate from their wife's. Most of the men reported that they spend the majority of their money on basic needs, school fees, and their business. When asked what their wives spend their money on most men replied business and basic needs.

66% of these men use MPESA but 96% of them do not receive payment from the women in the industry through MPESA. The majority of men stated that they are paid with cash and the remaining 4% stated that they are paid with both cash and MPESA. However, 70% of the men stated that the women who buy from them use MPESA themselves. I suspect that the women do not pay the men with MPESA since there are numerous men per boat and there is a transaction fee with each transfer of money when using MPESA. When using cash to pay, women only have to pay one fee to withdraw the money from the MPESA agent.

Regardless, 88% of men stated that they preferred being paid with cash. Most men reported that they liked it because it was the trend but some men also stated that they liked to see their money with their own eyes after a hard night's work and wanted to be able to decide

what to save and what to spend. While MPESA is not used in the majority of transactions between men and women in the industry, the majority of fishermen reported that MPESA has changed the way that men and women in the industry interact. Their answers are consistent with those given by the women in Sori. Since the women are able to pay the fishermen in a regular and timely fashion, due to their ability to save their money, the relationship between the men and women is good. Numerous men stated that there were no longer quarrels as there had been before MPESA and that they now trust the women. This has translated into men allowing women to take the fish before paying because the men trust that they will get their payment.

Men also stated that the ability to save with MPESA has helped the industry to expand and more boats have been constructed, thus employing more men. Some of the men also stated that they are now encouraged to work harder because they are profiting. Others noted that it makes work easier for those trading fish, especially the women, since money can be transferred through MPESA. The vast majority of men believe that MPESA has been beneficial to the industry mostly due to the ability to save and plan for the future. Numerous men stated that it has taught the community how to save their money. Men also noted that MPESA has made the transfer of money much easier, both for business transactions and for sending or receiving money with family and friends. Of those men who feel that MPESA does not benefit the industry, 50% stated that this was because MPESA did not offer interest.

Bongo and Kademba – Men

I interviewed eleven fishermen in Bongo and one man in Kademba. I will combine their results because, as with the women from Jeriko and Agiro, their answers did not significantly vary and they are within close proximity of one another. The twelve men ranged in age from 20-36 and 75% of them moved to their current home from another area. 67% of

the men moved to Bongo or Kademba for business opportunities and the remaining 33% moved to go to school in the area. 92% of the men are married and all of these married men have at least one child. 80% stated that they keep their money separate from their wife's. All of the men reported that they, as well as their wives, spend the majority of their money on basic needs, school fees, and business.

64% of the men stated that they use MPESA and the majority of them stated that the women who buy fish from them also use MPESA. However, 82% of the men are paid using cash, and 9% are paid using both cash and MPESA. Only one man, Interviewee 152 from Kademba, stated that he was paid only with MPESA. The majority of men prefer being paid with cash; most of them stated that they preferred it this way because it is the trend. Interviewee 152 stated that he preferred to be paid with MPESA because he does not need to be present to get paid by the women.

These fishermen also had similar views on the status of the fishing industry since MPESA was introduced. The men reported that since women are able to reliably pay, there is a good relationship between men and women in the industry. They also stated that the business is expanding and people are able to save to construct more boats. In addition to this, since women can now process more fish, the men are making more money because they can sell more catch. However, when asked whether or not they felt that MPESA has been beneficial to the industry, only 58% of men stated that they felt MPESA has been beneficial. Again, these men stated that MPESA does not offer any interest. Similarly to the other men and women interviewed, there is an interest in the formal banking sector despite MPESA's benefits.

CONCLUSION

The impact that MPESA has had in the lives of women in the fishing industry is immense and hugely beneficial. The formal banking sector has long been unavailable to many women in LDCs and this has been a very large impediment to women's status within society as well as to the development of communities. With the introduction of MPESA, women now have a safe means of saving their money. This has enabled many women to expand their business or create a new business and make a more substantial income. In addition to saving, the ability to send and receive money through MPESA has revolutionized the way that women trade fish. The time and money spent trading has been drastically reduced and this has enabled women to make much more money in much less time.

MPESA has changed the fishing industry for the better. Not only are women benefiting economically, but the relationship between women and men has gotten better as well. Work has become more convenient and has also widely expanded. Since the fishermen are now paid regularly, many of them are encouraged to work harder and save their money to expand their business by constructing more boats. The ability easily transfer money as well as to better manage money has been beneficial to the entire industry and has created a prosperous business for many people.

This development is not solely economic, however. With their increased earnings, women are bettering the lives of their families as well as their communities. The ability to keep their children healthy and send them to school to gain skill sets they would not get at home is largely beneficial to the community as a whole. The development that is occurring in these communities on Lake Victoria is both economic and social in nature and is contributing to the wider development of Kenya as well.

While the use of MPESA is very widespread, it is not replacing the formal banking sector. Very many interviewees, men and women alike, expressed an interest in utilizing the formal banking sector in the form of bank accounts and loans. Numerous women stated that they are planning to open a bank account when they acquire enough money to do so. MPESA is working alongside the formal banking sector as a stepping stone which women can use to gain access to more formal institutions. Once access is gained to the formal banking sector, MPESA is not dismissed as displayed in Sori. Rather, women are able to keep the bulk of their savings in a bank account while MPESA is used for transactions and keeping small amounts of money. The ability to use MPESA and a bank account in conjunction with each other is made even simpler as many formal banks now allow their customers to link their MPESA accounts with their bank accounts.

Since Kenya is still in the process of development, MPESA will remain of great importance for a significant amount of time. Reliance on the informal economy, underdeveloped road system, and simple lack of funding are just some of the reasons that formal banking is not available and these are not aspects of Kenya that can be changed easily or quickly. In addition to this, MPESA is largely convenient. Even if Kenya were to rapidly develop, the convenience of MPESA will likely be enough to keep it popular. I suspect that the forces of globalization will soon drive the concept of mobile banking to the developed world where it may become a popular additional banking method.

RECOMMENDATIONS

This study could have included the educational level of the interviewees to determine what affect this has on the use of MPESA as well as formal banking institutions. A woman's education level may have affected whether or not she used MPESA and also whether or not

she continued on to the formal banking sector once she has enough money saved in MPESA to do so. The study could also be expanded to research the impact of MPESA in industries other than the fishing industry. The location of the research could be changed as the use of MPESA most likely changes according to a rural or urban setting as well as the tribe or culture that is using the service. In addition to this, marital relationships could also be studied as women's increased economic autonomy may have altered gendered roles or interactions within the family. A long term study would be beneficial as MPESA is somewhat new and I was only able to study its immediate impact. A future study that focused on the long term impact of MPESA in the lives of women would be important in studying the development of these communities and more broadly, of Kenya.

APPENDIX 1

Interview Questions: Women who use MPESA

I. Background Information

1. Name
2. Age
3. Tribe
4. What is your hometown/city? If other than Sori/Bongo/Jeriko/Agiro, when did you move to Sori/Bongo/Jeriko/Agiro? Why did you move here?
5. Job Title
6. Are you married?
7. Do you have children? If so, how many? How old are they?
8. If married, do you combine your earnings or keep them separate from one another's?
9. What do you spend the majority of your money on?
10. What does your husband spend the majority of his money on?

II. MPESA

11. Do you use MPESA?
12. What do you use it for?
13. Do you use other banking methods in addition to MPESA? Are they linked to your MPESA account?
14. Why do you choose to handle your money this way?
15. How long have you used MPESA for?
16. Why did you decide to begin using it?
17. Do you feel that you benefit from using this service? How so?
18. Has it changed the way you do business?
19. Has it changed the ways in which you interact with the fishermen?
20. Has MPESA changed the relationship between men and women in the industry?
21. Has the amount of time you spend doing your work increased, decreased, or stayed the same since you began using MPESA? Why is this?
22. If it has decreased, what do you spend your time doing now?
23. Has the amount of money you increased, decreased, or stayed the same since you began using MPESA?
24. If it has increased, what do you spend it on?
25. Do you feel more secure using MPESA rather than money for transactions?
26. Do others have more access, less access, or the same amount of access to your money since you began using MPESA?
27. Do you think that MPESA has made you more independent? How so?
28. Have you noticed any other changes in your life since you began using MPESA?

APPENDIX 2

Interview Questions: Women who do not use MPESA

I. Background Information

1. Name
2. Age
3. Tribe
4. What is your hometown/city? If other than Sori/Bongo/Jeriko/Agiro, when did you move to Sori/Bongo/Jeriko/Agiro? Why did you move here?
5. Job Title
6. Are you married?
7. Do you have children? If so, how many? How old are they?
8. If married, do you combine your earnings or keep them separate from one another's?
9. What do you spend the majority of your money on?
10. What does your husband spend the majority of his money on?

II. MPESA

11. Do you use MPESA?
12. Do you use other banking methods in addition to MPESA? Are they linked to your MPESA account?
13. Why do you choose to handle your money this way?
14. Would you like to use either a bank account or MPESA? Why?
15. Do you think your money would be more secure in MPESA?
16. Have you ever had money stolen from you? If so, how much and from where?
17. Where do you trade fish?

APPENDIX 3

Interview Questions: Men

I. Background Information

1. Name
2. Age
3. Tribe
4. Job Title
5. What is your hometown/city? If other than Sori/Bongo/Kademba, when did you move to Sori/Bongo/Kademba? Why?
6. Are you married?
7. Do you have children? If so, how many and how old are they?
8. Do you combine your earnings with your wife's or keep them separate?
9. What do you spend the majority of your money on?
10. What does your wife spend the majority of her money on?

II. MPESA

11. Do you use MPESA?
12. How long have you used it for?
13. What do you use it for?
14. Do you use other banking methods in addition to MPESA?
15. Do the women who buy from you use MPESA?
16. How do they pay you?
17. Do you prefer to be paid this way? Why?
18. Has business changed since people started using MPESA? How so?
19. Has the way you interact with the women who buy from you changed? How so?
20. Has the way that men and women in the industry interact changed? How so?
21. Do you think MPESA has been beneficial to in the industry? How so?
22. Have you noticed any other changes since the community began using MPESA?

APPENDIX 4

Interview Questions: Bank Agents and Employees

1. How long have you operated in Sori?
2. What services do you offer here?
3. Where do your customers have to go for alternative services?
4. What is the maximum one can withdraw at one time?
5. What is the minimum one can withdraw at one time?
6. What is the maximum one can deposit at one time?
7. What is the minimum one can deposit at one time?
8. What is the minimum account balance?

APPENDIX 5

Formal Fishing Industry Interviews

1. Interviewee 1, female, age 30, married, five children, does not use MPESA, Processor. Interviewed by author. Sori, Kenya, April 10, 2012.
2. Interviewee 2, female, age 36, married, four children, uses MPESA, Trader. Interviewed by author. Sori, Kenya, April 10, 2012.
3. Interviewee 3, female, age 40, married, two children, uses MPESA, Processor and Trader. Interviewed by author. Sori, Kenya, April 10, 2012.
4. Interviewee 4, female, age 43, married, six children, uses MPESA, Processor and Trader. Interviewed by author. Sori, Kenya, April 10, 2012.
5. Interviewee 5, female, age 28, married, four children, uses MPESA, Packer and Transporter. Interviewed by author. Sori, Kenya, April 10, 2012.
6. Interviewee 6, female, age 58, widow, three children, uses MPESA, Processor and Trader. Interviewed by author. Sori, Kenya, April 10, 2012.
7. Interviewee 7, female, age 40, married, one child, uses MPESA, Processor and Trader. Interviewed by author. Sori, Kenya, April 10, 2012.
8. Interviewee 8, female, age 45, married, seven children, uses MPESA, Processor and Trader. Interviewed by author. Sori, Kenya, April 10, 2012.
9. Interviewee 9, female, age 28, widow, five children, uses MPESA, Processor and Trader. Interviewed by author. Sori, Kenya, April 10, 2012.
10. Interviewee 10, female, age 36, married, four children, uses MPESA, Processor and Trader. Interviewed by author. Sori, Kenya, April 10, 2012.
11. Interviewee 11, female, age 30, married, one child, does not use MPESA, Processor and Trader. Interviewed by author. Sori, Kenya, April 11, 2012.
12. Interviewee 12, female, age 40, married, nine children, does not use MPESA, Processor and Trader. Interviewed by author. Sori, Kenya, April 11, 2012.
13. Interviewee 13, female, age 35, married, no children, does not use MPESA, Processor and Trader. Interviewed by author. Sori, Kenya, April 11, 2012.
14. Interviewee 14, female, age 35, widow, four children, does not use MPESA, Processor and Trader. Interviewed by author. Sori, Kenya, April 11, 2012.
15. Interviewee 15, female, age 30, married, six children, does not use MPESA, Processor and Trader. Interviewed by author. Sori, Kenya, April 11, 2012.
16. Interviewee 16, female, age 24, married, three children, uses MPESA, Processor and Trader. Interviewed by author. Sori, Kenya, April 11, 2012.
17. Interviewee 17, female, age 26, married, three children, uses MPESA, Processor and Trader. Interviewed by author. Sori, Kenya, April 11, 2012.
18. Interviewee 18, female, age 32, widow, four children, uses MPESA, Processor and Trader. Interviewed by author. Sori, Kenya, April 11, 2012.
19. Interviewee 19, female, age 29, married, three children, uses MPESA, Processor and Trader. Interviewed by author. Sori, Kenya, April 11, 2012.

20. Interviewee 20, female, age 40, widow, two children, uses MPESA, Processor and Trader. Interviewed by author. Sori, Kenya, April 11, 2012.
21. Interviewee 21, female, age 28, married, three children, uses MPESA, Processor and Trader. Interviewed by author. Sori, Kenya, April 11, 2012.
22. Interviewee 22, female, age 38, widow, five children, uses MPESA, Processor and Trader. Interviewed by author. Sori, Kenya, April 11, 2012.
23. Interviewee 23, female, age 40, married, five children, uses MPESA, Processor and Trader. Interviewed by author. Sori, Kenya, April 11, 2012.
24. Interviewee 24, female, age 40, widow, four children, uses MPESA, Processor and Trader. Interviewed by author. Sori, Kenya, April 11, 2012.
25. Interviewee 25, female, age 37, married, seven children, does not use MPESA, Processor and Trader. Interviewed by author. Sori, Kenya, April 12, 2012.
26. Interviewee 26, female, age 30, married, five children, does not use MPESA, Processor and Trader. Interviewed by author. Sori, Kenya, April 12, 2012.
27. Interviewee 27, female, age 29, married, four children, uses MPESA, Processor and Trader. Interviewed by author. Sori, Kenya, April 12, 2012.
28. Interviewee 28, female, age 38, widow, five children, uses MPESA, Processor and Trader. Interviewed by author. Sori, Kenya, April 12, 2012.
29. Interviewee 29, female, age 30, married, five children, does not use MPESA, Trader. Interviewed by author. Sori, Kenya, April 13, 2012.
30. Interviewee 30, female, age 24, married, no children, does not use MPESA, Processor and Trader. Interviewed by author. Sori, Kenya, April 16, 2012.
31. Interviewee 31, female, age 50, widow, twelve children, does not use MPESA, Processor and Trader. Interviewed by author. Sori, Kenya, April 16, 2012.
32. Interviewee 32, female, age 40, widow, seven children, does not use MPESA, Processor and Trader. Interviewed by author. Sori, Kenya, April 16, 2012.
33. Interviewee 33, female, age 38, widow, twelve children, does not use MPESA, Processor and Trader. Interviewed by author. Sori, Kenya, April 16, 2012.
34. Interviewee 34, female, age 40, married, five children, uses MPESA, Processor and Trader. Interviewed by author. Sori, Kenya, April 16, 2012.
35. Interviewee 35, female, age 25, married, six children, uses MPESA, Processor and Trader. Interviewed by author. Sori, Kenya, April 16, 2012.
36. Interviewee 36, female, age 38, married, three children, does not use MPESA, Processor and Trader. Interviewed by author. Sori, Kenya, April 17, 2012.
37. Interviewee 37, female, age 25, not married, no children, does not use MPESA, Processor and Trader. Interviewed by author. Sori, Kenya, April 17, 2012.
38. Interviewee 38, female, age 37, married, three children, does not use MPESA, Processor and Trader. Interviewed by author. Sori, Kenya, April 17, 2012.*
39. Interviewee 39, female, age 28, married, two children, uses MPESA, Processor and Trader. Interviewed by author. Sori, Kenya, April 17, 2012.
40. Interviewee 40, female, age 40, married, three children, uses MPESA, Processor and Trader. Interviewed by author. Sori, Kenya, April 17, 2012.
41. Interviewee 41, female, age 35, married, seven children, uses MPESA, Processor and Trader. Interviewed by author. Sori, Kenya, April 17, 2012.

42. Interviewee 42, female, age 18, married, three children, uses MPESA, Processor and Trader. Interviewed by author. Sori, Kenya, April 17, 2012.
43. Interviewee 43, female, age 46, married, six children, uses MPESA, Processor and Trader. Interviewed by author. Sori, Kenya, April 17, 2012.
44. Interviewee 44, female, age 28, married, two children, does not use MPESA, Processor and Trader. Interviewed by author. Sori, Kenya, April 18, 2012.
45. Interviewee 45, female, age 45, widow, six children, does not use MPESA, Trader. Interviewed by author. Sori, Kenya, April 18, 2012.
46. Interviewee 46, female, age 44, married, five children, does not use MPESA, Processor and Trader. Interviewed by author. Sori, Kenya, April 18, 2012.
47. Interviewee 47, female, age 22, married, two children, does not use MPESA, Processor and Trader. Interviewed by author. Sori, Kenya, April 18, 2012.
48. Interviewee 48, female, age 21, married, one child, does not use MPESA, Processor and Trader. Interviewed by author. Sori, Kenya, April 18, 2012.
49. Interviewee 49, female, age 32, widow, five children, does not use MPESA, Processor and Trader. Interviewed by author. Sori, Kenya, April 18, 2012.
50. Interviewee 50, female, age 25, married, five children, does not use MPESA, Processor and Trader. Interviewed by author. Sori, Kenya, April 18, 2012.
51. Interviewee 51, female, age 50, widow, six children, does not use MPESA, Processor and Trader. Interviewed by author. Sori, Kenya, April 18, 2012.
52. Interviewee 52, female, age 20, married, two children, does not use MPESA, Processor and Trader. Interviewed by author. Sori, Kenya, April 18, 2012.
53. Interviewee 53, female, age 23, married, four children, does not use MPESA, Processor and Trader. Interviewed by author. Sori, Kenya, April 18, 2012.
54. Interviewee 54, female, age 56, widow, seven children, uses MPESA, Processor and Trader. Interviewed by author. Sori, Kenya, April 18, 2012.
55. Interviewee 55, female, age 48, married, seven children, uses MPESA, Processor and Trader. Interviewed by author. Sori, Kenya, April 18, 2012.
56. Interviewee 56, female, age 40, widow, four children, uses MPESA, Processor and Trader. Interviewed by author. Sori, Kenya, April 18, 2012.
57. Interviewee 57, female, age 35, married, two children, uses MPESA, Processor and Trader. Interviewed by author. Sori, Kenya, April 18, 2012.
58. Interviewee 58, female, age 60, married, seven children, does not use MPESA, Processor and Trader. Interviewed by author. Sori, Kenya, April 19, 2012.
59. Interviewee 59, female, age 23, married, three children, does not use MPESA, Processor and Trader. Interviewed by author. Sori, Kenya, April 19, 2012.
60. Interviewee 60, female, age 50, widow, four children, does not use MPESA, Trader. Interviewed by author. Sori, Kenya, April 19, 2012.
61. Interviewee 61, female, age 35, married, four children, does not use MPESA, Processor and Trader. Interviewed by author. Sori, Kenya, April 19, 2012.
62. Interviewee 62, female, age 35, married, five children, uses MPESA, Processor and Trader. Interviewed by author. Sori, Kenya, April 19, 2012.
63. Interviewee 63, female, age 20, married, two children, uses MPESA, Processor and Trader. Interviewed by author. Sori, Kenya, April 19, 2012.

64. Interviewee 64, female, age 18, married, three children, uses MPESA, Processor and Trader. Interviewed by author. Sori, Kenya, April 19, 2012.
65. Interviewee 65, female, age 34, married, five children, uses MPESA, Processor and Trader. Interviewed by author. Sori, Kenya, April 19, 2012.
66. Interviewee 66, female, age 30, married, two children, uses MPESA, Processor and Trader. Interviewed by author. Sori, Kenya, April 19, 2012.
67. Interviewee 67, female, age 29, married, one child, uses MPESA, Processor and Trader. Interviewed by author. Sori, Kenya, April 19, 2012.
68. Interviewee 68, female, age 20, married, three children, uses MPESA, Processor and Trader. Interviewed by author. Sori, Kenya, April 19, 2012.
69. Interviewee 69, female, age 55, married, four children, uses MPESA, Processor and Trader. Interviewed by author. Sori, Kenya, April 19, 2012.
70. Interviewee 70, female, age 42, widow, seven children, uses MPESA, Processor and Trader. Interviewed by author. Sori, Kenya, April 19, 2012.
71. Interviewee 71, female, age 28, married, three children, uses MPESA, Processor and Trader. Interviewed by author. Sori, Kenya, April 19, 2012.
72. Interviewee 72, female, age 47, married, no children, uses MPESA, Processor and Trader. Interviewed by author. Sori, Kenya, April 19, 2012.
73. Interviewee 73, female, age 39, married, four children, uses MPESA, Processor and Trader. Interviewed by author. Sori, Kenya, April 19, 2012.
74. Interviewee 74, female, age 30, married, three children, uses MPESA, Processor and Trader. Interviewed by author. Sori, Kenya, April 19, 2012.
75. Interviewee 75, female, age 55, widow, five children, uses MPESA, Processor and Trader. Interviewed by author. Sori, Kenya, April 19, 2012.
76. Interviewee 76, female, age 36, divorced, three children, uses MPESA, Processor and Trader. Interviewed by author. Sori, Kenya, April 19, 2012.
77. Interviewee 77, female, age 28, married, four children, uses MPESA, Processor and Trader. Interviewed by author. Sori, Kenya, April 19, 2012.
78. Interviewee 78, female, age 38, married, four children, uses MPESA, Trader. Interviewed by author. Sori, Kenya, April 22, 2012.
79. Interviewee 79, male, age 28, married, six children, uses MPESA, Fisherman. Interviewed by author. Sori, Kenya, April 20, 2012.
80. Interviewee 80, male, age 33, married, two children, uses MPESA, Fisherman. Interviewed by author. Sori, Kenya, April 20, 2012.
81. Interviewee 81, male, age 31, married, two children, uses MPESA, Fisherman. Interviewed by author. Sori, Kenya, April 20, 2012.
82. Interviewee 82, male, age 25, married, one child, uses MPESA, Carpenter (former fisherman). Interviewed by author. Sori, Kenya, April 20, 2012.
83. Interviewee 83, male, age 32, married, four children, uses MPESA, Fisherman. Interviewed by author. Sori, Kenya, April 20, 2012.
84. Interviewee 84, male, age 27, not married, no children, does not use MPESA, Fisherman. Interviewed by author. Sori, Kenya, April 20, 2012.
85. Interviewee 85, male, age 56, married, six children, does not use MPESA, Fisherman. Interviewed by author. Sori, Kenya, April 20, 2012.

86. Interviewee 86, male, age 30, married, one child, uses MPESA, Fisherman. Interviewed by author. Sori, Kenya, April 20, 2012.
87. Interviewee 87, male, age 32, married, two children, does not use MPESA, Fisherman. Interviewed by author. Sori, Kenya, April 20, 2012.
88. Interviewee 88, male, age 32, married, three children, uses MPESA, Fisherman. Interviewed by author. Sori, Kenya, April 22, 2012.
89. Interviewee 89, male, age 26, not married, no children, uses MPESA, Fisherman. Interviewed by author. Sori, Kenya, April 22, 2012.
90. Interviewee 90, male, age 25, married, three children, does not use MPESA, Fisherman. Interviewed by author. Sori, Kenya, April 22, 2012.
91. Interviewee 91, male, age 29, married, two children, does not use MPESA, Fisherman. Interviewed by author. Sori, Kenya, April 22, 2012.
92. Interviewee 92, male, age 18, married, one child, uses MPESA, Fisherman. Interviewed by author. Sori, Kenya, April 22, 2012.
93. Interviewee 93, male, age 25, married, three children, uses MPESA, Fisherman. Interviewed by author. Sori, Kenya, April 22, 2012.
94. Interviewee 94, male, age 22, married, three children, does not use MPESA, Fisherman. Interviewed by author. Sori, Kenya, April 22, 2012.
95. Interviewee 95, male, age 19, not married, no children, uses MPESA, Fisherman. Interviewed by author. Sori, Kenya, April 22, 2012.
96. Interviewee 96, male, age 27, married, five children, uses MPESA, Fisherman. Interviewed by author. Sori, Kenya, April 22, 2012.
97. Interviewee 97, male, age 18, married, four children, does not use MPESA, Fisherman. Interviewed by author. Sori, Kenya, April 22, 2012.
98. Interviewee 98, male, age 43, married, five children, uses MPESA, Fisherman. Interviewed by author. Sori, Kenya, April 22, 2012.
99. Interviewee 99, male, age 17, not married, no children, does not use MPESA, Fisherman. Interviewed by author. Sori, Kenya, April 22, 2012.
100. Interviewee 100, male, age 23, not married, no children, does not use MPESA, Fisherman. Interviewed by author. Sori, Kenya, April 22, 2012.
101. Interviewee 101, male, age 34, married, five children, uses MPESA, Fisherman. Interviewed by author. Sori, Kenya, April 22, 2012.
102. Interviewee 102, male, age 30, not married, no children, uses MPESA, Fisherman. Interviewed by author. Sori, Kenya, April 22, 2012.
103. Interviewee 103, female, age 25, married, three children, does not use MPESA, Processor and Trader. Interviewed by author. Bongo, Kenya, April 12, 2012.
104. Interviewee 103, female, age 35, widow, one child, does not use MPESA, Processor and Trader. Interviewed by author. Bongo, Kenya, April 12, 2012.
105. Interviewee 105, female, age 33, married, four children, does not use MPESA, Processor and Trader. Interviewed by author. Bongo, Kenya, April 12, 2012.
106. Interviewee 106, female, age 23, married, three children, does not use MPESA, Processor and Trader. Interviewed by author. Bongo, Kenya, April 12, 2012.
107. Interviewee 107, female, age 23, married, three children, uses MPESA, Processor and Trader. Interviewed by author. Bongo, Kenya, April 12, 2012.

108. Interviewee 108, female, age 23, married, three children, uses MPESA, Processor and Trader. Interviewed by author. Bongo, Kenya, April 12, 2012.
109. Interviewee 109, female, age 28, married, five children, uses MPESA, Processor and Trader. Interviewed by author. Bongo, Kenya, April 12, 2012.
110. Interviewee 110, female, age 32, married, ten children, uses MPESA, Processor and Trader. Interviewed by author. Bongo, Kenya, April 12, 2012.
111. Interviewee 111, female, age 36, widow, three children, uses MPESA, Processor and Trader. Interviewed by author. Bongo, Kenya, April 12, 2012.
112. Interviewee 112, female, age 32, widow, four children, uses MPESA, Processor and Trader. Interviewed by author. Bongo, Kenya, April 12, 2012.
113. Interviewee 113, female, age 28, married, four children, uses MPESA, Processor and Trader. Interviewed by author. Bongo, Kenya, April 12, 2012.
114. Interviewee 114, female, age 30, married, five children, does not use MPESA, Processor and Trader. Interviewed by author. Bongo, Kenya, April 13, 2012.
115. Interviewee 115, female, age 19, married, four children, does not use MPESA, Processor and Trader. Interviewed by author. Bongo, Kenya, April 13, 2012.
116. Interviewee 116, female, age 18, married, one child, does not use MPESA, Processor and Trader. Interviewed by author. Bongo, Kenya, April 13, 2012.
117. Interviewee 117, female, age 30, widow, four children, does not use MPESA, Processor and Trader. Interviewed by author. Bongo, Kenya, April 13, 2012.
118. Interviewee 118, female, age 30, widow, three children, does not use MPESA, Processor and Trader. Interviewed by author. Bongo, Kenya, April 13, 2012.
119. Interviewee 119, female, age 28, married, four children, uses MPESA, Processor and Trader. Interviewed by author. Bongo, Kenya, April 13, 2012.
120. Interviewee 120, female, age 27, widow, two children, uses MPESA, Processor and Trader. Interviewed by author. Bongo, Kenya, April 13, 2012.
121. Interviewee 121, female, age 18, married, three children, uses MPESA, Processor and Trader. Interviewed by author. Bongo, Kenya, April 13, 2012.
122. Interviewee 122, female, age 30, married, two children, uses MPESA, Processor and Trader. Interviewed by author. Bongo, Kenya, April 13, 2012.
123. Interviewee 123, female, age 27, married, two children, uses MPESA, Processor and Trader. Interviewed by author. Bongo, Kenya, April 13, 2012.
124. Interviewee 124, female, age 26, married, four children, does not use MPESA, Processor and Trader. Interviewed by author. Bongo, Kenya, April 16, 2012.
125. Interviewee 115, female, age 21, married, four children, uses MPESA, Processor and Trader. Interviewed by author. Bongo, Kenya, April 16, 2012.
126. Interviewee 126, female, age 20, married, three children, uses MPESA, Processor and Trader. Interviewed by author. Bongo, Kenya, April 16, 2012.
127. Interviewee 127, female, age 40, married, five children, uses MPESA, Processor and Trader. Interviewed by author. Bongo, Kenya, April 16, 2012.
128. Interviewee 128, female, age 20, married, two children, uses MPESA, Processor and Trader. Interviewed by author. Bongo, Kenya, April 16, 2012.
129. Interviewee 129, female, age 20, married, two children, uses MPESA, Processor and Trader. Interviewed by author. Bongo, Kenya, April 16, 2012.

130. Interviewee 130, female, age 17, not married, no children, uses MPESA, Processor and Trader. Interviewed by author. Bongo, Kenya, April 16, 2012.
131. Interviewee 131, male, age 20, not married, no children, does not use MPESA, Fisherman. Interviewed by author. Bongo, Kenya, April 20, 2012.
132. Interviewee 132, male, age 25, married, two children, uses MPESA, Fisherman. Interviewed by author. Bongo, Kenya, April 20, 2012.
133. Interviewee 133, male, age 22, married, two children, uses MPESA, Fisherman. Interviewed by author. Bongo, Kenya, April 20, 2012.
134. Interviewee 134, male, age 32, married, two children, uses MPESA, Fisherman. Interviewed by author. Bongo, Kenya, April 20, 2012.
135. Interviewee 135, male, age 31, married, three children, does not use MPESA, Fisherman. Interviewed by author. Bongo, Kenya, April 20, 2012.
136. Interviewee 136, male, age 24, married, four children, does not use MPESA, Fisherman. Interviewed by author. Bongo, Kenya, April 20, 2012.
137. Interviewee 137, male, age 27, married, two children, uses MPESA, Fisherman. Interviewed by author. Bongo, Kenya, April 22, 2012.
138. Interviewee 138, male, age 22, married, one child, uses MPESA, Fisherman. Interviewed by author. Bongo, Kenya, April 22, 2012.
139. Interviewee 139, male, age 26, married, two children, does not use MPESA, Fisherman. Interviewed by author. Bongo, Kenya, April 22, 2012.*
140. Interviewee 140, male, age 28, married, three children, does not use MPESA, Fisherman. Interviewed by author. Bongo, Kenya, April 22, 2012.
141. Interviewee 141, male, age 30, married, three children, uses MPESA, Fisherman. Interviewed by author. Bongo, Kenya, April 22, 2012.
142. Interviewee 142, female, age 30, widow, eight children, does not use MPESA, Processor and Trader. Interviewed by author. Jeriko, Kenya, April 18, 2012.
143. Interviewee 143, female, age 18, married, three children, uses MPESA, Processor and Trader. Interviewed by author. Jeriko, Kenya, April 18, 2012.
144. Interviewee 144, female, age 40, married, eight children, uses MPESA, Processor and Trader. Interviewed by author. Jeriko, Kenya, April 18, 2012.
145. Interviewee 145, female, age 40, widow, nine children, uses MPESA, Processor and Trader. Interviewed by author. Jeriko, Kenya, April 18, 2012.
146. Interviewee 146, female, age 28, married, six children, uses MPESA, Processor and Trader. Interviewed by author. Jeriko, Kenya, April 18, 2012.
147. Interviewee 147, female, age 40, married, one child, does not use MPESA, Processor and Trader. Interviewed by author. Agiro, Kenya, April 16, 2012.
148. Interviewee 148, female, age 37, widow, six children, does not use MPESA, Processor and Trader. Interviewed by author. Agiro, Kenya, April 17, 2012.
149. Interviewee 149, female, age 65, widow, two children, does not use MPESA, Processor and Trader. Interviewed by author. Agiro, Kenya, April 17, 2012.
150. Interviewee 150, female, age 33, married, five children, does not use MPESA, Processor and Trader. Interviewed by author. Agiro, Kenya, April 17, 2012.
151. Interviewee 151, female, age 30, married, four child, uses MPESA, Processor and Trader. Interviewed by author. Agiro, Kenya, April 17, 2012.

152. Interviewee 152, male, age 36, married, two children, uses MPESA, Fisherman. Interviewed by author. Kademba, Kenya, April 20, 2012.
153. Interviewee 153, male, bank agent. Interviewed by author. Sori, Kenya. April 23, 2012.
154. Interviewee 154, male, bank agent. Interviewed by author. Sori, Kenya. April 23, 2012.
155. Interviewee 155, male, bank agent. Interviewed by author. Sori, Kenya. April 23, 2012.
156. Interviewee 155, male, bank agent. Interviewed by author. Sori, Kenya. April 23, 2012.
157. Interviewee 156, female, bank employee. Interviewed by author. Sori, Kenya. April 23, 2012.

Note: All interviewees 1-157 are of the Luo Tribe if a * does not appear next to their entry.

Bibliography

Acker, Joan. "Gender Capitalism, and Globalization." *Critical Sociology* 30, no. 1 (2004): 17-41. doi: 10.1163/156916304322981668.

Burton, Vinston and Roger Winsor. *Kenya: The Land, the People, and the Nation*. Translated by Mario Azevedo. Durham, NC: Carolina Academic Press, 1993.

Geheb, Kim and Tony Binns. "Fishing Farmers' or 'Farming Fishermen'? The Quest for Household Income and Nutritional Security on the Kenyan Shores of Lake Victoria." *African Affairs* 96, no. 382 (1997): 73-93.

"ITU Statistics." International Telecommunications Union. Accessed April 27, 2012. <http://www.itu.int/ITU-D/ict/statistics/>.

"Kenya: 2009 Population and Housing Census Highlights." *Kenya National Bureau of Statistics*. Accessed April 27, 2012, <http://www.tisa.or.ke/2009-knbs-census-highlights/>.

"Lake Victoria Basin Environment Outlook." *United Nations Environment Programme*. Accessed April 27, 2012, http://www.unep.org/dewa/africa/docs/en/lvicbasin_brochure.pdf.

Médard, Modesta and Douglas C. Wilson. "Changing Economic Problems for Women in the Nile Perch Fishing Communities on Lake Victoria." *Anthropologica* 38, no. 2 (1996): 149-172.

Odado, Eric O, Daniel O. Olago, Kassim Kulindwa, Micheni Ntiba, and Shem Wandiga. "Mitigation of Environmental Problems in Lake Victoria, East Africa: Casual Chain and Policy Options Analyses." *Ambio* 33, no. 1/2 (2004): 13-23.

Nagar, Richa, Victoria Lawson, Linda McDowell and Susan Hanson. "Locating Globalization: Feminist (Re)readings of the Subjects and Spaces of Globalization." *Economic Geography* 78, no.3 (2002): 257-284.

Osiakwan, Eric and Juliana Rotich. Al Jazeera. *African Innovations*. Video. 37:14. March 20, 2011. <http://stream.aljazeera.com/story/african-innovations-0022111>.

Rezenbrink, Anne. "World Bank: 75% of poor don't have bank accounts." CNN.com. Last modified April 19, 2012, <http://www.cnn.com/2012/04/19/business/poor-bank-accounts/index.html>.

Voigt, Kevin. "Mobile phone: Weapon against global poverty." CNN.com. Last modified October 9, 2011, <http://www.cnn.com/2011/10/09/tech/mobile/mobile-phone-poverty/index.html>.