THE ROLE OF COMPLEMENTARY CURRENCY IN PROMOTING BUSINESS GROWTH IN AN INFORMAL ECONOMY: CASE OF BANGLA-PESA IN BANGLADESH SLUM, MOMBASA COUNTY

ROSELYNE OMANGA

MBA/76860/13

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STRATHMORE BUSINESS SCHOOL

MARCH, 2016
DECLARATION
This dissertation is my original work and has not been presented for an award of a degree in any other University.

Signed…………………………………………….. Date …………………………….

Name: Roselyne M. Omanga
Registration No: MBA/76860/13

SUPERVISOR’S APPROVAL
This dissertation has been submitted for examination with my approval as the University Supervisor:

Signed…………………………………………….. Date …………………………….

Supervisor: Dr. S. Wagura Ndiritu
DEDICATION

This thesis is dedicated to my Mother who has been a constant source of support and encouragement during the challenges of post graduate school and life. I am truly humbled for having you in my life. This work is also dedicated to my seven siblings, who have always loved me unconditionally and who have contributed to who I am today.
ACKNOWLEDGEMENT

Foremost, I would like to express my sincere gratitude to my supervisor Dr. Simon Ndiritu for the continuous support of my thesis, for his patience, motivation, enthusiasm, and immense knowledge. His guidance helped me finalize my research amidst the various challenges that came my way.

I would like to thank the founder of Bangla-Pesa, William Ruddick, who as the key respondent was willing to support in providing insights into Bangla-Pesa. My research would not have been possible without him.

I thank my fellow Classmates in Strathmore Business School, for the stimulating discussions and the sleepless nights we were working together before deadlines, and for all the fun we have had in the two years.

Last but not the least; I would like to thank my family for the never ending support, I must acknowledge my Mum Joyce, without whose love and encouragement, I would not have finished this thesis.
ABSTRACT

This study sought to examine the role of complementary currency in promoting business growth in an informal settlement, the case of Bangla-Pesa in Bangladesh Slum, Mombasa County. Noteworthy, is that the Bangla-Pesa program has been dubbed as first of its kind in Africa. The study targeted all the traders of the Bangladesh Business Network. A Census Survey study methodology was undertaken to address these objectives. Three research instruments, namely; questionnaire, interview schedule and observation were used. In total the study was able to gain the participation of one hundred and twenty three (123) traders and twelve (12) key informants.

With respect to business support, the study found out that most of the respondents (83.7%) considered training a prerequisite to business growth. On the role of Bangla-Pesa in promoting access to finance, all the respondents indicated that the use and adoption of the program had provided the respondents with an avenue of savings. Through merry-go-rounds, the traders were able to gain financial assistance. The BBN had also been able introduce some of their members to banks and microfinance institutions for funding. In promotion of trade, all the traders agreed that the program had been able to increase their sales and profitability, thereby boosting their business growth. All the participants in this study were of the view that Bangla-Pesa is a sustainable program, especially due to the aspect of promoting community cohesiveness. To identify the strength of relationships between the dependent and independent variables, a Pearson Correlation Coefficient Matrix was carried. It revealed that there exists a strong positive relationship between business growth and the dimensions that promote trade and business support services of magnitude 0.885 and 0.862 respectively, with a significant P value of 0.026 and 0.047 respectively.

The study concludes that promotion of trade and enhancing business support significantly increased business growth while Bangla-Pesa’s contribution to access to financing had no significant effect on business growth in the informal settlement. The study recommends further research to gauge the impact of the adoption and use of complementary currency in Kenya.
# TABLE OF CONTENTS

Declaration.......................................................................................................................... i
Dedication............................................................................................................................. ii
Acknowledgement............................................................................................................... iii
Abstract................................................................................................................................ iv
Table of Contents ................................................................................................................ v
List of Tables ......................................................................................................................... ix
List of Figures ....................................................................................................................... x
Abbreviations and Acronyms ............................................................................................. xi

## CHAPTER ONE: INTRODUCTION .................................................................................. 1

1.1 Background to the Study ............................................................................................. 1
  1.1.1 Overview of Bangla-Pesa .................................................................................... 4
  1.1.2 How Bangla-Pesa Works ................................................................................... 5
1.2 Problem Statement ....................................................................................................... 6
1.3 Aim of the Study .......................................................................................................... 7
1.4 Research Objectives ..................................................................................................... 7
1.5 Research Questions ...................................................................................................... 7
1.6 Scope of the Study ........................................................................................................ 8
1.7 Significance of the Study ............................................................................................ 8
1.8 Justification of the Study ............................................................................................ 8
1.9 Limitations of the Study ............................................................................................ 9
1.10 Definition of Terms ................................................................................................... 9
1.11 Chapter Summary ...................................................................................................... 10

## CHAPTER TWO: LITERATURE REVIEW ..................................................................... 11

2.1 Introduction .................................................................................................................. 11
2.2 Business Growth .......................................................................................................... 11
2.3 Complementary Currencies .......................................................................................... 12
  2.3.1 Definitions of Complementary Currency ............................................................... 12
  2.3.2 Concepts and Functionality of CCs ...................................................................... 13
  2.3.3 Business Support Services Offered by Complementary Currency Networks .......... 13
  2.3.4 Ways in which Complementary Currency supports Access to Financing ............... 14
2.3.5 Role of Complementary Currency in Promoting Trade .................................. 14
2.3.6 Challenges, Opportunities and Sustainability of Complementary Currency ........... 15
2.4 Global Experiences with Complementary Currency .................................................. 16
2.4.1 The Berkshare ........................................................................................................ 16
2.4.2 The Ithaca Hour ..................................................................................................... 17
2.4.3 The Case of Japan .................................................................................................. 18
2.4.4 The Case of Curitiba in Brazil ................................................................................. 19
2.4.5 The Metamorphism of Bangla-Pesa in Kenya ...................................................... 20
2.5 Theoretical Framework ............................................................................................... 21
2.5.1 Resource Mobilization Theory .............................................................................. 21
2.6 Conceptual Framework ............................................................................................... 22
2.7 Research Gaps ............................................................................................................ 23

CHAPTER THREE: RESEARCH METHODOLOGY .................................................... 25
3.1 Introduction .................................................................................................................. 25
3.2 Research Design ......................................................................................................... 25
3.3 Population and Sampling ............................................................................................. 25
3.3.1 Target Population .................................................................................................. 25
3.4 Data Collection Instruments ....................................................................................... 26
3.4.1 Questionnaire ....................................................................................................... 26
3.4.2 Interview Schedule .............................................................................................. 26
3.4.3 Observation ........................................................................................................... 27
3.5 Data Collection Procedures ....................................................................................... 27
3.6 Piloting of the Instruments ........................................................................................... 27
3.6.1 Validity of the Research Instruments .................................................................... 27
3.6.2 Reliability of the Instrument ............................................................................... 28
3.7 Data Analysis ............................................................................................................... 28
3.7.1 Multiple Regression Analysis .............................................................................. 28
3.8 Ethical Considerations ................................................................................................. 29

CHAPTER FOUR: DATA ANALYSIS, FINDINGS AND PRESENTATION ................... 30
4.1 Introduction .................................................................................................................. 30
4.2 Participation Rate ......................................................................................................... 30
4.3 Demographic Information ........................................................................................................31
  4.3.1 Gender .............................................................................................................................31
  4.3.2 Education Level of Respondents ....................................................................................31
  4.3.3 Type of Business ..............................................................................................................32
  4.3.4 Length of Time Business has been in Operation ..............................................................33
  4.3.5 Monthly Turnover of Business .......................................................................................33
  4.3.6 Tenancy ...........................................................................................................................34

4.4 Business Support Offered within the BBN .........................................................................35
  4.4.1 Importance of Training ....................................................................................................35
  4.4.2 Forms of Training offered within the BBN ....................................................................36

4.5 The Role of Bangla-Pesa in Promoting Access to Financing ...............................................37

4.6 Ways in which Bangla-Pesa Promotes Trade .....................................................................38
  4.6.1 Types of Goods and Services bought by Bangla-Pesa ....................................................38
  4.6.2 Contribution of Bangla-Pesa to the Bangladesh Community ..........................................39

4.7 Threats to Bangla-Pesa and their Mitigation .......................................................................41
  4.7.1 Threats ............................................................................................................................41
  4.7.2 Ways in which Regulatory Authorities and Financial Institutions can enhance the adoption of Complementary Currency in the Country .................................................................42

4.8 Sustainability of Bangla-Pesa ...............................................................................................45
  4.8.1 Sustainability of the Mission of Bangla-Pesa .................................................................45
  4.8.2 Economic Sustainability of Bangla-Pesa .......................................................................46

4.9 Statistical Outcomes ..............................................................................................................48
  4.9.1 Pearson Correlation Coefficient matrix .........................................................................49
  4.9.2 Test for Multicollinearity ..............................................................................................50
  4.9.3 Summary of descriptive statistics ................................................................................50
  4.9.4 Reliability Test ...............................................................................................................51

4.10 Multiple Regression Analysis ..............................................................................................51

CHAPTER FIVE: SUMMARY OF FINDINGS, CONCLUSION AND RECOMMENDATIONS ....55

5.1 Introduction ............................................................................................................................55

5.2 Summary of Findings ............................................................................................................55

5.3 Conclusions ...........................................................................................................................57
5.4 Recommendations ........................................................................................................57
5.5 Suggestions for Further Study .....................................................................................58
REFERENCES ......................................................................................................................59
APPENDICES ........................................................................................................................64
Appendix I: Letter of Introduction ..................................................................................64
Appendix II: Questionnaire for Business Enterprises ....................................................65
Appendix III: Interview Schedule for Key Informants .....................................................70
LIST OF TABLES

Table 4.1 Importance of Training.................................................................35
Table 4.2: Respondents Perception of the Contribution of Bangla-Pesa.........................40
Table 4.3: Factors Influencing the Sustainability of Bangla-Pesa..................................47
Table 4.4 Pearson Correlation Coefficient Matrix ................................................................49
Table 4.5: Test for Multicollinearity.........................................................................50
Table 4.6: Descriptive statistics for main variables.........................................................51
Table 4.7 Model Summary.........................................................................................51
Table 4.8: Analysis of Variance (ANOVA) Results.......................................................52
Table 4.9: Distribution of Coefficients.........................................................................53
LIST OF FIGURES

Figure 1.1 Community Currency Cycle ........................................................................................................ 6
Figure 2.1 Storey's Fundamentals of Business Growth ................................................................................. 11
Figure 2.2 Conceptual Framework ................................................................................................................. 23
Figure 4.1: Participation Rate ......................................................................................................................... 30
Figure 4.2: Gender of Respondents ............................................................................................................... 31
Figure 4.3: Education Level of Respondents ................................................................................................ 32
Figure 4.4: Duration of time Business had been in Operation ................................................................. 33
Figure 4.5: Monthly Turnover of Business ................................................................................................. 34
Figure 4.6: Tenancy of Business Premises ................................................................................................. 35
Figure 4.7 Training Offered .......................................................................................................................... 36
Figure 4.8: A Bangla-Pesa Accepting Shop ............................................................................................... 38
Figure 4.9: Support by Authorities and Institutions towards adoption of Bangla-Pesa ....................... 44
Figure 4.10: Sample of Bangla-Pesa ........................................................................................................... 48
### ABBREVIATIONS AND ACRONYMS

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Full Form</th>
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<tr>
<td>BBN</td>
<td>Bangladesh Business Network</td>
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<td>CBK</td>
<td>Central Bank of Kenya</td>
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<tr>
<td>CBOs</td>
<td>Community Based Organizations</td>
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<td>CC</td>
<td>Complementary Currency</td>
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<tr>
<td>DPP</td>
<td>Director of Public Prosecutions</td>
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<tr>
<td>KRA</td>
<td>Kenya Revenue Authority</td>
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<tr>
<td>Kshs</td>
<td>Kenya Shillings</td>
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<tr>
<td>LETS</td>
<td>Local Exchange Trading System</td>
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<tr>
<td>MITI</td>
<td>Ministry of Trade and Industry</td>
</tr>
<tr>
<td>NTT</td>
<td>Nippon Telegraph and Telephone</td>
</tr>
<tr>
<td>OLS</td>
<td>Ordinary Least Squares</td>
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<tr>
<td>SHARE</td>
<td>Self-Help Associated for a Regional Economy</td>
</tr>
<tr>
<td>SPSS</td>
<td>Statistical Package for Social Science</td>
</tr>
<tr>
<td>UK</td>
<td>United Kingdom</td>
</tr>
<tr>
<td>USA</td>
<td>United States of America</td>
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<td>USD</td>
<td>United States Dollar</td>
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CHAPTER ONE
INTRODUCTION

1.1 Background to the Study
Globally, there are many nations that are faced with dire poverty and struggling national economies and feel confronted by seemingly insurmountable problems. In the face of rapid globalization and urbanization, Magrit (2006) chastises the circulation of official currency as one that acts like a vacuum cleaner constantly sucking up resources from regions of low returns to those of high returns, in turn creating massive problems for smaller, poorer regions. Hence the need for other perspectives on money if everyone in the world is to be assured of the basic necessities of life. According to Seyfang (2003), complementary currencies are one the popular reactions against the advents of globalization amongst the poorer and isolated regions. As noted by Quintiliani (2002), by understanding the concept and adoption of complementary currencies (CC) a paradigm shift towards this end can be realised; an eye opener that helps nations understand that they are now confronted by opportunities instead of problems.

Businesses play a critical role in social economic development and contribute immensely to employment creation, income generation and act as stimulants of growth in both urban and rural settings. Thus, the success of small businesses is a prerequisite of a strong national economy. In the US for example, it is estimated that small business create two thirds of new jobs and employ over 60 million Americans; essentially providing almost half of the private sector workforce, hence a significant contributor to the country’s economy (US Small Business Administration, 2014).

Despite the crucial role played by businesses to economies, challenges still persist for many businesses, especially the small ones. Nkonoki (2010) posits that some of the challenges that businesses have had to contend with, especially in third world countries, are failure to operate on profits forcing many to close down or that of operating without a good return on investments constrained from growth and expansion. Mfaume and Wilhelm (2004) identifies; corruption, poor education and training, government policy, lack of access to finances as some of the chronic issues limiting the success of small business and medium sized business in the East African region.
Lietaer (2001) exposes the vulnerabilities posed on communities and businesses by revealing that the occurrences that followed the 2008 financial crisis not only marginalised many communities and increased the rate of unemployment, but also led to many small and medium enterprises being confronted with bankruptcy. Bearing in mind the socio-economic and political implications of such occurrences and converging trends, many scholars have been quick to note that the most fundamental rules and agreements on conventional currency are not able to meet the challenges of the future. Lietaer (2010) recognizes that, opening up to other means of exchange besides the conventional currency is one of the most viable ways of protecting such communities from future financial breakdown. According to Gowling (2014), opening up to community/complementary currencies presents an opportunity of businesses to create an additional market, hence stimulate business growth.

Complementary currencies function alongside official currency and act as an addition means of exchange. Historically, most complementary currencies around the world have been established in areas with a perceived shortage of stable currency either as a result of political instability or trade depression or in isolated communities (Timberlake, 1987). In such areas, the introduction of complementary currency is usually meant to facilitate exchange and production. According to Collom (2005), complementary currencies are designed to supplement the national currency and are often produced and used on a local basis, rather than a nation-wide basis. Nevertheless, there are glaring differences between complimentary and traditional currencies. Unlike the traditional currencies or national currencies, complementary currencies; are use-oriented rather than profit oriented, aim to connect underutilized resources with unmet demands, have a limited rather than a general acceptance, and cannot be used to speculate in regional or international financial markets. Noteworthy, complementary currencies have no interest attached but use a demurrage mechanism to keep the currency in circulation (Magrit, 2006).

Blanchard and Giavazzi (2003) opine that there is major uncertainty involved in regulation within the economic system with very little chances to predict where the economy will move next and what values economic variables will embrace. As such, advocacy is laid on governments and its citizens to accommodate all possible stabilization methods. In Brazil for example, where complementary currencies are part of official government policy, the path to their legalization has been long. At their inception the Central Bank of Brazil advocated for the users of complementary...
currency to be charged with money laundering and forgery forcing the Banco Palmas, issuer of Palmas vouchers, to turn to the courts. The Banco Palmas was able to obtain a resounding victory when the judge ruled that it is a constitutional right for the people to have access to credit. In a scoff to monetary authorities, the court also pointed to the fact that the central bank was doing “nothing of note” for poor people (Meyer 2013). Today, there are a myriad of experiments around the globe with local and complementary currencies. The Ithaca Hours in New York, the LETS in Canada, the S.E.L. in France, Time Dollars in Venezuela, and even the Depression era local scrip in the United States are just a few of them (McClanahan, 2003).

Although Kenya has been rooted as a technological and logistical hub for East Africa, Kenya faces extreme poverty with a majority of the population living in extreme poverty. This population faces numerous challenges due to glaring socio-economic marginalization, lack of property rights, poor education levels and minimal access to infrastructure, health and social services. Complementary currencies are best suited to address some of these challenges, more so within the informal settlements. The informal settlements can reap heavily from the benefits of complementary currencies due to their density and diversity of businesses, acute scarcity of a medium of exchange, lack of market stability and absence of public services (Bendell, Richards and Ruddick, 2015).

Nevertheless, the Kenyan experience with complementary currency has been quite perplexing. Efforts by a community based organization, Bangladesh Business Network (BBN), in Mombasa, to stimulate their local economy through the adoption of a complementary currency dubbed Bangla-Pesa landed several members of the community into trouble in 2013. The Bangla-Pesa program was targeted for the informal settlement Bangladesh in Mombasa County. Members of the initiative that were using Bangla-Pesa as medium of exchange found themselves in court for their action. They were charged for allegedly using illegal currency to transact business (Nyambega, 2013).

Further, there was heated debate on the role of the complementary currency Bangla-Pesa on promoting business growth since it was utilized concurrently with the national currency, the Kenyan Shilling. Local residents claimed that the Bangla-Pesa currency enabled them to purchase goods and services in local shops. Similarly, traders within the locality claimed that the use of Bangla-Pesa spurred economic activity within the slums which led to exponential growth of the local micro
traders (Mghenyi and Mwaura, 2013). On the other hand, local policy makers claimed that Bangla-Pesa did not have any significant role in promoting business growth and poverty reduction and even claimed that the use of the complementary currency led to higher levels of poverty in the slum. This led to inconclusive discussions on the role of Bangla-Pesa in promoting business growth amongst the micro traders in Mombasa County. It is within this framework that this study sought to examine the role of Bangla-Pesa in promoting business growth.

1.1.1 Overview of Bangla-Pesa

Bangla-Pesa (named after the Bangladesh Slum in which it is used) is a complementary currency used as a medium of exchange in the Bangladesh slum in the city of Mombasa. It is only acceptable within the confines of this particular slum and acts as a voucher that traders and service providers use to do business. Unlike vouchers that are used for a particular good or service, Bangla-Pesa coupons are accepted for many transactions and therefore represent a complementary currency acting as a means of exchange in the slum. For this slum, Bangla-Pesa operates alongside the official government issued currency (Muthaka and Kimenyi, 2013).

Bangla-Pesa is one of many non-profit programs in Kenya to strengthen and stabilize the economy of the informal settlements by organizing small scale businesses into Business Networks through which members can utilize a community currency to mediate trades. One unit of Bangla-Pesa is equivalent to one unit of the Kenya Shilling. The Bangla-Pesa is a unit of credit within this mutual-credit-clearing (or barter exchange) system which provides a means of payment that is complementary to official money. As such, it helps to stabilize the community in the face of monetary volatility by allowing Network members to trade with each other without using the national currency Bangla-Pesa is dubbed as a program that is meant to strengthen and stabilize the economy of the informal settlement of Bangladesh, Mombasa County.

Over 180 small scale businesses have been organised into a community organisation called the Bangladesh Business Network (BBN) through which its members can utilize Bangla-Pesa to mediate trade. This is a unit of credit based on mutual-credit-clearing and provides a means of payment that is complementary to the official Kenyan currency (Olafor, 2013). It operates as a voucher that is only allowed within the registered members of Bangladesh Business Network (BBN). To join the network, an interested member (and who must be a trader) fills a registration form and is required to marshal the endorsement of four members from the network. The four act
as guarantors and are responsible for the persons conduct within the group. After reviewing the application and list of guarantors, a committee evaluates the application and can accept or reject it. If accepted, the new member is trained on how the BBN operates and is then allotted Bangla-Pesa which one commits to back with goods and services according to the statues of the network. Members are mandated to spend and receive Bangla-Pesa locally for goods and services only within members of the network.

Upon acceptance of membership in the network, each new member of the network is allocated Ksh 400 worth of vouchers to represent their own goods and services - which they then trade among each other. The business can then spend their Bangla-Pesa with other businesses in the network. Their statutes state that no one should have a total balance of more than 400 Bangla-Pesa. If a member has a balance approaching 400 Bangla-Pesa they need to spend it before they accept more. They also collect a membership fee of Ksh 200 in the Bangla-Pesa to use for community service work each year. This community fund is also managed by the BBN. Bangla-Pesa are issued as paper vouchers denominated in 5, 10, 20 and 50 and serves as a voucher or promissory notes for members' goods and/or services and can be used to account for barter exchanges among other network members. One Bangla-Pesa has the equivalent value of one Kenya Shilling. The Bangla-Pesa Currency was launched in May 2013 (Grassroots Economics, 2014).

1.1.2 How Bangla-Pesa Works

Bangla-Pesa works by allowing barter between small business owners. Since Bangla-Pesa is accepted only in "Bangladesh," the cash stays in the community, allowing people to save their Kenyan shillings for bigger purchases. For example, a motorcycle taxi driver may have the capacity for 20 trips a day but only takes five. At the same time, a fish vendor throws out 20 percent of her stock. With Bangla-Pesa, the fish vendor can buy a ride to the market instead of walking; the taxi driver can buy the excess fish, or something else (Patinkin, 2014).
1.2 Problem Statement
In the past few decades, there have been concerted efforts to improve the business environment in Kenya in order to spur economic growth and reduce the levels of poverty within the country. There have been many political, economic and social reforms towards this end. Nonetheless, the country continues to face economic hardships attributed to many factors, among them is an underdeveloped private sector which accounts for most of the employment. Faced with a dense local business trading and periodic currency scarcity, the Bangladesh informal settlement in Mombasa has been a prime target for the introduction of a complementary currency: the Bangla-Pesa. Although the use of Bangla-Pesa emerges as a possible solution to the economic hardship faced and an opportunity of spurring business growth, the concept has in the past been met with a lot of criticism. Members of the Bangladesh Business Network, that adopted the use of the complementary currency, have on several occasions been harassed and arrested by police officers for using Bangla-Pesa. Based on these ongoing, it is evident that besides not being fully understood and appreciated, the concept of complementary currency in Kenya is an understudied one.
While dropping the charges against the founders of the Bangla-Pesa initiative in August 2013, the Central Bank of Kenya (CBK) and the Kenya Revenue Authority (KRA), through the Director of Public Prosecutions (DPP) noted that no crime had been committed in regard to its use. According to the judges presiding over the case, the judges advised that there was need for the government to have understood the concept and operations behind Bangla-Pesa before rushing to prosecute the founders of the initiative (Galgalo, 2013). The court finding in this case raised a number of questions: is there a need or role for complimentary currency in Kenya? If so, what fundamentals should guide these initiatives? Should the government be involved, and if so how? Thus, this study was founded on this premise; the premise that there are many unanswered questions regarding the role played by complementary currency in Kenya.

1.3 Aim of the Study

The aim of this study was to examine the role of complimentary currency in boosting business growth through a case of Bangla-Pesa in Bangladesh Slum, Mombasa County.

1.4 Research Objectives

The objectives of the study were to:

1. Examine the kind of business support services offered within the BBN.
2. Establish how the use of Bangla-Pesa promotes access to financing for members of the BBN.
3. Determine ways in which adoption of Bangla-Pesa promotes trade for members of the BBN.
4. Determine the threats and opportunities presented by the adoption of Bangla-Pesa.
5. Evaluate the sustainability of Bangla-Pesa as a complementary currency.

1.5 Research Questions

The following research questions were employed to meet the research objectives:

1. Which are the business support services offered by the BBN?
2. How does the use of Bangla-Pesa promote access to financing for members of the BBN?
3. In what ways does the adoption of Bangla-Pesa promote trade for members of the BBN?
4. What threats and opportunities are presented by the adoption of Bangla-Pesa?
5. Is Bangla-Pesa sustainable as a complementary currency?
1.6 Scope of the Study
This study was carried in Bangladesh Informal Settlement in Mombasa County. The study targeted all the traders under the Bangladesh Business Network who have adopted the use of Bangla-Pesa as a medium of exchange. The study sought to examine the role played by Bangla-Pesa in promoting business growth.

1.7 Significance of the Study
The study sought to bring understanding and clarity on key issues revolving around complementary currency. The findings of this study add to the existing body of knowledge on complementary currencies through its overview of Bangla-Pesa. By providing and disclosing information in an impartial manner, the study makes it easier to apply knowledge on complementary currencies to real issues in the society and give an avenue for the integration of such ideas and practices in policy making.

Apart from increasing the awareness of complementary currency in Kenya from an academic perspective, the study also provide county governments on valuable ways in which they can contribute to the success of complementary currencies within their jurisdiction. The study further provides policy makers with valuable information on complementary currency in Kenya. The Kenyan national government might also find this study useful as it informs its policy on poverty reduction. Considering that study provides information on the influence of Bangla-Pesa, not only on business growth, but also on its role in poverty eradication and which is a major objective of vision 2030. This could inform policy actions and strategic alternatives of the government.

For scholars, this study provides information that may act as a source of future references. Local communities and community based organizations (CBOs) could also benefit from this study as its findings provide an avenue for addressing the suitability of CC in line with respective local economic environments.

1.8 Justification of the Study
It is important to note the existing modern economy highly identifies itself with the production and consumption cycle. As such focus is laid on increasing wealth through the production and sales of goods and services. In this economy, business initiatives thus are centred on the efficiency of working in line with maximizing on profits. Apparently, the major driving force becomes working at
low cost and capitalizing on high sales (Lietaer and Hallsmith, 2011). The two visualize the birth of economies that would be more resilient to big changes if more diversity would be enhanced in the way exchanges are made and store of economic value is undertaken. Zhang (2002) pushes for the world to recognize that we are in an era of high economic complexity. To Zhang, this is a call for economic decisions to be made within a large context. This context should be viewed within different subsystems.

According to Lietaer (2010), many economies in the world have excluded the subsystems as a subject of consideration despite the fact they are unambiguously important. Lietaer (2010) advocates for complementary currency to be viewed as one that is capable of fostering additional subsystems and increasing diversity which in turn can make a whole economy adopt resilience to market shocks.

1.9 Limitations of the Study

The researcher was faced with several noteworthy limitations. The area under study was an informal settlement that was characterised by poor record keeping and low levels of education among the respondents. As such, the findings mainly relied on qualitative data and thus may not give specific business growth statistics. The nature of the study was such that it only targeted the traders within the BBN and as such it may not be able to generalise on the entire population which is composed of even households. At this point, it is important to note that whereas the study was not able to target traders outside the BBN, there is need to bear in mind that the study was relying on their experiences gained before joining the BBN to inform the study. Time limited the scope of study and could not allow for extensive enquiry.

1.10 Definition of Terms

**Business Growth:** The increase in the number of employees, sales and profits of Small and Medium Enterprise (SME) business.

**Entrepreneur:** a person who is able to scan the environment, identify an economic opportunity or a person who is able to fulfill the defined needs. The person also takes calculated risks.
Informal sector: unregistered businesses, which do not have permanent facilities, do not pay taxes and operate without full compliance of law and employees.

Informal settlements: densely populated areas where residents have little or no property rights and often occupy the bottom economic tier of society.

Legal tender: currencies issued under the authority of a government and by whose laws are acknowledged as a valid means of payment for settling debts.

Localism: preference for a locality, particularly for one's own area or region.

1.11 Chapter Summary
This dissertation is composed of five chapters. Chapter one introduces the research topic through the research problem, statement of the problem, purpose of the study on complementary currency, study objectives, research questions, justification, and definition of the key terms. Chapter 2 gives a review of existing literature on the topic in the form of past and current research and industry literature related to the problem statement. The literature is discussed in line with the objectives of the study and was relied on to formulate the theoretical underpinning of the study and in development of the conceptual framework for the study.

The third chapter presents and justifies the research methodology. The sample and sampling procedures are highlighted. The data collection instruments and methods, the reliability and validity of the research instruments and the data analysis are also discussed.

The fourth chapter presents the empirical part of the study and gives the analysis and results of the data gathered through the use of the research instruments. Chapter five is the final chapter of the study and presents a summary of the findings, the conclusion and recommendations of the study. Suggestions for further study are also addressed in the chapter.
CHAPTER TWO
LITERATURE REVIEW

2.1 Introduction
This chapter gives a review of existing literature on CC, its concept and usage at a global and local perspective. At a global level, the literature reviewed covers CC in United States of America (USA) and Japan among the developed countries while Brazil is considered under the developing countries and the case of Bangla-Pesa in Kenya is considered under the local context. The theoretical underpinnings of the study and the conceptual framework are also discussed at the end of the chapter.

2.2 Business Growth
Storey (1994) postulates that business growth is categorised by the combination of three components; the entrepreneur, the firm and the strategy.

![Figure 2.1 Storey's Fundamentals of Business Growth](source: Storey (1994))

According to Storey (1994), all the three components highlighted in figure 2.1 (the entrepreneur, the firm and the strategy) need to combine appropriately for a firm to achieve rapid growth. Hence, it is at the shaded part that this is well achieved. It is important to note that the shaded area represents only a small proportion of each of the individual components. Thus, this clearly implies
that less rapidly growing, stunted or failing businesses may have some appropriate characteristics in the entrepreneur, firm or strategy components, rapid business growth is only best achieved where all the three combine.

Nkonoki (2010) one the other hand argues that, factors limiting business growth are usually inherent in the characteristic and attitude of the entrepreneur(s) and the firm. These factors can be impacted by the decisions within the firm and range from; lack of motivation and drive, lack of background and experience in the business, capital constraint, lack of a proper business plan/vision, theft/cheating and lack of trust in doing business, poor management, running informal/unregistered businesses, lack of proper record keeping, inadequate education and training, people factor/lack of needed talent and improper professional advice and consultation.

In this study, each component provides a distinctive contribution to our understanding of the growth of small firms and the role of complementary currency in promoting this growth. The study brings out the role of Bangla-Pesa and BBN in shaping the entrepreneur (in this case the users), in supporting the firm (in this case the business) and in the strategy. Thus business growth is viewed from this perspective in this study.

2.3 Complementary Currencies

2.3.1 Definitions of Complementary Currency

Seyfang (2006) defines CC as a wide range of exchange systems tailored to address specific needs in a community that are unmet by conventional currency. The soul of the theory “Complementary” is the informed by the descriptor as these currencies are designed to work in tandem with national currencies and not as their replacement.

Quintiliani (2002) defines complementary currency as an agreement within a community to use and accept a non-national currency as a means of payment. In practice, these are not intended to replace national currencies, but are meant to perform functions that current national currencies neglect or cannot perform as efficiently. They are therefore not meant to replace but to complement national currencies. They take a wide variety of forms to adapt and fit specific needs with the main features being that; CCs earn zero or negative interest, often comes with an expiry date and its circulation is confined to a local ‘community’ or a specific geographic segment. CC’s can be backed by the government’s currency or by bank debt or can be entirely separated from the country’s
national currency system. In essence, creators of the complementary currency decide the value of the currency, where and how the currency can be exchanged (Lietaer, 2001).

### 2.3.2 Concepts and Functionality of CCs

According to (Quintiliani, 2002) complementary currencies can either be implemented as a fiat currency or a mutual credit. As a fiat currency, it is created and distributed by a designated authority while as a mutual credit system; the transaction participants create it as a simultaneous debit and credit. A case in point of mutual credit system is the Local Exchange Trading System (LETS) in Vancouver, Canada which is membership based. The members list the goods and services offering in LETS currency though in certain instances a combination of LETS currency and the national currency is adopted. Members have a zero balance by the time of joining and debt is incurred when the member buys a service with LETS currency and in return receives a credit when selling the good and/or service. An important aspect of the LETS is that all members' outstanding debit or credit balance is known to the public and thus making it a self-policing process against abuse of the system by individuals (Quintiliani, 2002).

### 2.3.3 Business Support Services Offered by Complementary Currency Networks

One of the most notable features of CC is the creation of social wealth. Lietaer and Hallsmith (2011) reveal that CC provides communities within a given region to create real wealth in their local economy. This is done by matching the communities unmet needs by building capacity to tap into their underutilised resources. Usually, this is done through networking and educating the masses on their potential.

In the United Kingdom, the Tesco is considered as one of the largest chain store. Tesco has grown into being largest chain store. In the UK, Tesco has grown to become the largest supermarket chain store by tapping into the potential of its loyalty currency which it developed into a fully-fledged complementary currency system. By building on the strength of the community, and raising awareness on issues facing them and how they could be addressed, while offering a complementary currency roadmap, Tesco was able to rise into a giant store (Lietaer and Hallsmith, 2011).
2.3.4 Ways in which Complementary Currency supports Access to Financing

Although complementary currencies have different forms and uses, their existence is centred on facilitating exchange within a given community. According to Smid (2013), in cases where the rates of unemployment are high and spending money is scarce, CC can match the unmet needs with the unused resources of a local government.

The Berkshare Model, and which will be discussed later in the document, is seen as one of the best models where complementary currency can increase access to financing hence promoting local businesses. In the Berkshire region of western Massachusetts, locals are able to exchange their federal dollars for the Berkshare at a participating bank. The users are then able to spend the money at participating shops listed in the local directory and advertised by a “BerkShares Accepted Here” sign on shop windows. This incentivizes the citizens and visitors to use the BerkShares, thus keeping them in circulation. By so doing, the local economy is strengthened as it encourages citizens to use services and shops run and owned by members of the local community (Smid, 2013).

2.3.5 Role of Complementary Currency in Promoting Trade

According to Hoffman (2010), complementary currency can assist in creating an economic resiliency for a given community; especially during times of monetary decline when local businesses and economies often struggle to maintain financial viability. Local currencies can help stimulate local economies and increase their resiliency by encouraging local spending, thus retaining money within a community, increasing the speed at which it circulates within a community, and identifying unfilled niche markets.

The use of complementary currency helps strengthen social relationships. Soder (2008) notes that use of CC helps increase social interaction as it is specific to a given demographic area it promotes the building of social capital and collective action. According to Cahn (2001), CCs help bridge the divide between socioeconomic groups by making otherwise undervalued jobs viable. Thus local currencies create a sense of belonging to the members of a given community.

Complementary currency has been used to solve environmental issues a good example being in Curitiba in Brazil. Hoffman (2010), indicates that communities that have their own local currency have a greater awareness about their social, cultural strengths and the ecological assets within
their community. This is better illustrated by the fact that in their design, local artists are used and adopt imagery for printed bills that often draw attention to ecological systems, historical figures or distinctive features.

Various benefits can be drawn from the use of complementary currencies. According to Soder (2008), the use of complementary currencies promotes consumption amongst local communities, enhances resource mobilization and creates new jobs and employment for the local community. This often leads to the growth and development of micro entrepreneurs and extra economic values. Furthermore, use of complementary currencies promote social and community links (Soder, 2008).

Gomez (2009) and Alridge and Patterson (2003) inform that the use of complementary currency promotes the growth of local authorities and more revenue for local authorities. The use of LETS in the Canada led to an increase in revenue collection capacity for the local community. According to Lietaer and Hallsmith (2011), an additional positive aspect of the LETS was that the use of green dollars freed up more Canadian dollars for other uses. The LETS network was also an efficient and inexpensive way for local businesses to advertise.

2.3.6 Challenges, Opportunities and Sustainability of Complementary Currency

Starting a complementary currency system is no simple feat. A successful implementation requires significant resources, mainly time and money. Collom (2005), in his study of local currencies in 2005, identified 82 currencies that were started in the USA since 1991. In 2005, he found that only 20.7% or 17 systems were still operating. Cities and towns with economic marginality, higher education rates, more self-employment and younger demographics seemed to experience more success with local currencies. According to Collom (2005), the most frequent causes of decline in local currencies were leadership burnout and limited participation.

The sustainability of complementary currencies is hindered by variety of factors and variables. Blanc (1998) and Blanc (2006) state that, complementary currencies are hindered by a limited purchasing power in market places. Complementary currencies are constrained to specific geographical areas which limit its impact to the local community, its circulation and valuation can therefore be perceived and measured with local parameters. They could also be constrained to the purchase of a few and specific products and services (Blanc, 2006).
The sustainability of complementary currency is also limited due to its time limits. According to Gessell (2010), complementary currency fades in value, rusts and dissolves in the short term between 3 – 6 months. Furthermore, the fees and charges on conservation of complementary currencies often lead to decrease in its sustainability in the long and short term. Gesell (2010) and Gatch (2012) note that complementary currencies often become perishable like goods and labour. Smid (2013) informs that for complementary currency to succeed, they need to funded to cover all the costs associated with their production. At the same time it requires democratic governance, transparency and accountability in order to succeed. It also needs to be professionally managed in order to support the public good and entice more people to adopt it. Where these lack, the sustainability of such initiatives become threatened (Smid, 2013).

Adding onto these discourse are Cato and Suarez (2012) and Gatch who state that, complementary currencies appear during periods of monetary crisis and economic crisis but often disappear after the economic and monetary position of the community improves. Consequently, if a community was using a complementary currency and their economic status improves, then the complementary currency often disappears.

2.4 Global Experiences with Complementary Currency
2.4.1 The Berkshare
The BerkShare is one of the most successful complementary currency models in the USA. It is used as the local currency in the Berkshire region in Western Massachusetts. The Berkshare is an innovation of a discussion group formed in 1982 around the topic of regional economies. The discussion group later rose to become a non-profit making organization going by the name Self-Help Associated for a Regional Economy (SHARE). The focus of the organization was provision of low-cost productive loans to people in their area who produced quality goods and services for local consumption and were unable to afford normal bank financing (Swann and Witt, 1995).

The initiative was very successful giving a 100% returns on all loans. SHARE progressed to revitalize the area’s regional economy by redirecting money into loans that supported local entrepreneurship. Between 2004 and 2008, SHARE had been able to put out nearly 2.5 million BerkShares into circulation (Hoffman, 2010). It is estimated that by the year 2010 close to 400 businesses in Berkshire were officially accepting the currency, and many more doing so informally.
The Berkshire has attracted interest even from tourists who are known to exchange their dollars for a few of the beautifully decorated bills (BerkShares Inc, 2008).

The Berkshire is sold to consumers at a discount. By 2011 the Berkshire was being exchanged in such a way that 1 Berkshare, with a retail value of USD 1, retailed for $0.95, providing users with an effective discount on their purchases. The notes only yield what is paid for them and there are incentive forms for its circulation. Hoffman (2010) notes that by highlighting the wealth of their local environment the people have been able to recreate the definition of their town and community, incorporating much more than the structural and human aspects into their narrative.

2.4.2 The Ithaca Hour

According to Hoffman (2010), The Ithaca Hour was created in 1991 when half a dozen concerned citizens sat around a table discussing how to respond to economic downturns. The group realized that there were many unmet “needs” in their community and that an ample supply of able bodies existed that could fill those needs and engage in meaningful work. From the discussions the group realized that what was lacking was the means to connect the two. As a result they decided to come up with a way for people to earn money by doing things they liked to do through communal interaction. The group was motivated by the success of the Deli Story of New Barrington, MA and the discussion of creating a Berkshire Currency.

Brinkerhoff, Jacob, Jovie and Wheatley (2012) describe the Ithaca Hour as being based on one common theme: ‘meaningful work at a liveable wage, in the service of community.’ The ‘Hour’ is meant to remind the users that in addition to being a medium of exchange for commodities, the currency represents someone’s labour or the time taken to provide a skill or perform a service. Hoffman (2010) discloses that as a way to maintain bill security, Ithaca Hours Inc. uses a commercial printer and prints their money on special paper with distinctive design techniques such as serial numbers and crosshatches incorporated into their bill.

The membership of the Ithaca Hour is in three categories; individuals, small businesses and large business. Since stores need more Ithaca Hours in order to disperse the currency as change then the need for this classification of membership was borne. Nevertheless, every member essentially doubles their money when they join. For example, an individual can join Ithaca Hours Inc. for 10 USD and in return they receive listing in the directory and 2 Ithaca Hours, equivalent to 20 USD.
Through the issuance of money in such a manner, the community is able to gradually and carefully increase the supply of Ithaca Hours in circulation. Since 1991, Steve Burke as cited in (Hoffman, 2010) estimates that 13,000 Ithaca Hours an equivalent of 130,000 USD have been put into circulation. As of 2010 the Ithaca Hours Inc. had over 400 individuals and businesses participating on an annual basis (Hoffman, 2010).

2.4.3 The Case of Japan

According to Lietaer and Dunne (2013), Japan is one of the most developed countries when it comes to the adoption of CC. Globally, Japan has the most number of CC systems in operation and the greatest diversity on such experiments. To a great extent the very concept of having another means of exchange for communities has been transformed over years by the unique interpretations and the conceptual manipulation of Japanese promoters and practitioners (Yasuki, 2011).

The pioneer of the concept of local currencies or CC in Japan was Toshiharu Kato who introduced it in 1998. At the time he was the Director of the Service Industries Division at the Ministry of Trade and Industry (MITI). It was labelled ‘Eco-money’. Toshiharu Kato defined his brainchild as a 21st Century style money that assisted in various functions which included; the care for the elderly, addressing the welfare of communities, upholding of communities and their culture. With this concept in mind Toshiharu sought to make Eco-money a tool to promote local production and consumption that built sustainable communities.

According to Yasuki (2011), there were more than 62 groups who had shown interest in the Eco-money concept. Various bureaucrats and municipal officers were happy to adopt CCs because they could promote their social projects by paying less than when using the legal tenders. In Japan the concept of Eco-money has been adopted by many communities especially local governments who use it as a way of increasing mutual contact in their communities.

With the inception of Eco-money a non-profit making organization labelled Eco-money was formed that provided local communities with the support needed in the introduction of CCs. The organizations functions include; analysing the needs of a community, designing a CC system to meet the needs, supporting the practical introduction of the system including capacity development and studying the results. The network also creates linkages with corporations that compose the
Eco-money Business Consortium. Efforts of the network have been able to see multinationals such as Nippon Telegraph and Telephone (NTT) and Oracle Japan get involved (Yasuki, 2011).

Japan's biggest weak point in terms of CC is that it never accomplished to set up its national network of CCs due to hostile relationships among different group leaders. Another crucial disadvantage is that very few people involved with CC in Japan are eager to stay in touch with international counterparts and therefore their information on CCs in the world is quite outdated. This picture has resulted in negative impacts on the development of CCs in Japan (Yasuyuki, 2011).

2.4.4 The Case of Curitiba in Brazil

Curitiba, in Brazil, is known for its use of CC. The town is located in the state of Parana. Use of complementary currency in Curitiba began in 1991 as a solution to waste management after waste collection trucks found it difficult to access shantytowns. This triggered the mayor, Jaime Lerner, to come up with a solution to the accumulating waste that posed a health risk to the community of Curitiba. Lerner launched the “Cambio Verde” (green exchange) programme to incite people to bring waste to containers outside the shantytowns in return for food or bus tickets. Since 1991, the Green Exchange has collected and recycled 45,125 tons of trash, thereby saving 195,252,646 litres of water. It also recycled 15,793 tons of scrap iron and 4,523 tons of paper Cambio Verde helps strengthen both social and economic performance at city level and catalyzes the link between essential needs such as food, waste management and underutilized resources such as excess production, citizen capacity to recycle (Vitola, 2007).

According to Rabinovitch and Leitmann (1996), the introduction of Curitiba as a complementary currency was able to help the residents, most of whom were impoverished, leverage on their untapped resources, with the parents gaining access to tokens that they used for paying transport. In the long run many of the people were able to use the tokens to get to downtown where most of the jobs were, eventually drawing them into the formal economy. Overtime, these people had more money to use in the local economy which boosted trade in the town. It is estimated that the average income per person in Curitiba us 66% greater than that of the average Brazilian; a fete attributed to the integration of complementary currency into community development.
2.4.5 The Metamorphism of Bangla-Pesa in Kenya

The first complementary currency in Kenya circulation was the Eco-Pesa which was launched in August 2010 and came after a 3 month design and community assessment which had begun in May 2010. The implementation of Eco-Pesa was carried out in Bangladesh, Mombasa County (Ruddick, 2011). According to Devas, Gataboki and Rakodi (2000), the residents of these three slums live under extreme impoverishment and businesses in the area experience low amounts of local trade. On the other hand, the residents are faced with challenges of being unable to obtain loans from financial institutions and suffer from high rates of unemployment and lack of social services such as waste management.

The concept of Eco-Pesa was first introduced by Ruddick (2011), who introduced it as a way of facilitation and promotion of environmentally targeted social service work and economic development activities in Kenyan informal settlements. The initial target for the currency was to address the lack of waste management that characterized these informal settlements. To Ruddick, paying residents with Eco-Pesa was going to assist in waste collection by providing a cost effective means of removing the waste while also getting the entire community involved. Thereafter, Eco-Pesa could then be used at local small businesses in the community, who in turn could continue using it at other businesses, in this way, creating local circulation and boosting local trade. After being able to collect 20 tonnes of waste from the community, the programme began youth-led tree planting operations and were paid with Eco-Pesa Currency in order to assist in local reforestation and beautification (Ruddick, 2011).

Ruddick (2011) notes that initially the introduction of Eco-Pesa was faced with resistance from the locals but this disappeared when waste collection events started. Local entrepreneurs became eager to adopt Eco-Pesa as they begun to trust in its value. Eco-Pesa as a backed currency model – was a one-off program that lasted a year. According to Ruddick (2011), residents and businesses alike took pride in having their own currency and this led many locals into adopting it and went ahead to christen it as “Bangla-Pesa”. The programme was able to create a stronger and more positive community identity. Through Bangla-Pesa many people across the country have come to know of the Bangladesh Informal settlement in Mombasa.
Despite having run for a while, the pioneers of the programme were arrested and arraigned in court early 2013 for advancing Bangla-Pesa, an “illegal currency”. Nevertheless, they were set free when the courts ruled in their favour and stated that there was need for the legislative arm of government to understand the concept of Bangla-Pesa.

2.5 Theoretical Framework
A theoretical framework is as a collection of interrelated concepts that guide a research work. It is gives direction on the items for measurement and the statistical relations being studied. It can also be defined as a reasoned statement or group of statements, which support the evidence meant to explain a given phenomenon (Gary and Kotler, 2015). Thus, one of the major components of reviewing literature is to establish theories that might be used to explore questions in an academic research. In the development of this literature review this study has found the concept of use of complementary currency in Kenya as one that is best analyzed through the Resource Mobilization Theory (RMT).

2.5.1 Resource Mobilization Theory
According to McClahan (2003), CC form from the personal grievances that arise from structural and social changes in a community. Resource mobilization indicates that the major factor that leads to formation of social movements is the availability of resources and opportunities for group action Jenkins (1983). According to Jenkins, the theory has five principles; that the actions of social movement members and participants are rational, the actions of social movements are strongly influenced by institutionalized power imbalances and existing conflicts of interest, the power imbalances and conflicts of interest are adequate to generate grievances that lead to the mobilization of social movement’s intent on changing the distribution of resources and organization, Centralized and formally structured social movements more effectively mobilize resources and achieve goals of change than decentralized and informal social movements and that the success of social movements relies heavily on the group strategy and the political climate (Jenkins, 1983).

In this study the RMT has been used to analyse and explain the adoption and use of Bangla-Pesa and its contribution to trade from the experiences of the BBN members. The researcher views that understanding Bangla-Pesa can best be undertaken through the concept of the social movement in this case the BBN. By using the RMT, the study was able to bring out the rationale of the actions of
social movement members and participants. The role of BBN in enhancing the adoption and use of Bangla-Pesa was viewed from the second principle of the RMT. The formation of Bangla-Pesa and the woes that have befallen the proponents of the initiative is one that has strongly been influenced by institutionalized power imbalances and existing conflicts of local authorities. The sustainability of Bangla-Pesa is seen as a resource mobilization initiative that is meant to achieve given goals amongst its users. Thus its success relies on the strategy that the group has adopted which in this case focuses on the threats and opportunities, and highly dictated by the economic environment.

2.6 Conceptual Framework

According to Balachander and Ghose (2003), a conceptual framework is a group of concepts that are systematically organized to provide a focus, rationale and a tool for interpretation and integrations of information. This is best achieved by a pictorial illustration. This study notes that the provision of complementary currency is heavily underpinned in within a given network, in this case the BBN. In order to promote the use and adoption of their set of complementary currency, such networks engage in various activities in order to loop in members. Such activities include business support services, provide access to financing and promote trade for the members. In this study, these variables form the independent variables for the study. The study notes that provision of business support services, increasing access to financing and promoting trade for members is a prerequisite for business growth, which in dependent variable in this study.

A review of various revealed that the experiences with complementary currency across the globe have been met with various challenges that have affected their sustainability. The study could thus not overlook this. Thus, the study was also able to explore the challenges and opportunities presented through the use of complementary currency, in this case Bangla-Pesa in order to inform on their sustainability. The figure 2.2 gives an illustration of the conceptual framework.
2.7 Research Gaps

Although the significance of business growth and its role in economic development, especially in the third world, cannot be ignored, this study was able to realize that the empirical and theoretical understanding of business growth remains sketchy. Most of the studies reviewed are from the developing countries. Nevertheless, these studies provide a general base on business growth, more so in informal settlements. Noteworthy, studies on business growth in Kenya are few, and thefew that that the study came across have not been carried out in to an extent that they could provide concrete insights that can be used for further studies such as this one.
Further, the study was able to discover there is a dearth of knowledge on complementary currency in Kenya, more so on its role in promoting business growth. Suffice to say, complementary currency in Kenya is a very new phenomenon in Kenya and surprising the case of Bangla-Pesa is considered the first in Africa. Therefore, the scarcity in knowledge on the region in regards to complementary currency and business growth is self-explanatory. On the studies reviewed, despite the extensiveness of the coverage, pertinent gaps and questions are still imminent on the topic and which can be in fit in an African context. Thus, this study sought to fill out this gap in literature by exploring this under researched field.
CHAPTER THREE
RESEARCH METHODOLOGY

3.1 Introduction
This chapter focuses on the research design that was used to conduct this study so as to answer the research questions. The research methodology is illustrated in detail and covers the target population, sample and sampling procedures, research instruments, instruments validity and reliability, data collection procedures and data analysis procedures.

3.2 Research Design
According to Cooper and Schindler (2013), research design is a complex concept that may be viewed from different perspectives. This study adopted a descriptive explanatory research design that sought to examine the role of Bangla-Pesa in promoting business growth. Descriptive statistics were used to analyse the variables of the study in order to gather insights of the entrepreneurs within the BBN. In this study, the research objectives required that the research design adopted to address the research questions be informed largely by the conceptual framework articulated in section 2.6. The independent variables for this study were; Business Support Services, Trade Promotion and Access to Financing. The dependent variable for this study was business growth in terms of number of employees, sales, profits, turnover and new products and services. The explanatory part attempted to show the relationship between the independent and dependent variables.

Birks and Malhotra (2003) makes it clear that there are two types of surveys; sample and census survey. This study targeted all the traders within the BBN, essentially making it a census survey as it targeted an entire population. The study was triangulated by a qualitative approach that used a detailed questionnaire and interviews schedule. This approach was useful in the study as it applied the complimentary roles.

3.3 Population and Sampling
3.3.1 Target Population
The target population of this study was all traders within the BBN. The traders operate their businesses in the Bangladesh informal settlement in Mombasa County. The traders operate under the umbrella of Bangladesh Business Network and serve all the residents of this settlement. In the
context of this study, the informal settlement was on record as having made use of Bangla-Pesa as a community currency. Therefore, the study was a cross sectional survey of all businesses that accept Bangla-Pesa as a transacting currency. At the time of this study there were at least 200 businesses that met this criterion. The number was deemed manageable, hence the need for a census study. The key informants in the study were officials within the BBN network and key community actors. These informants were selected on the assumption that they had deeper knowledge of the topic under study.

3.4 Data Collection Instruments
The study employed the use of three sets of instruments, namely; questionnaires, interview schedules and observation. These instruments were used to gather the primary data relied on this study.

3.4.1 Questionnaire
A questionnaire is a research instrument that enables researchers to gather data over a large sample. As stated by Orodho (2004) a questionnaire has a diverse number of merits upon which a researcher may opt to use it as an instrument to collect data. In this research, a structured questionnaire was used for the collection of data from the traders. The questionnaires were developed in such a way that each item addressed a specific objective and answered a specific research question. This questionnaire offered a large coverage enabling the gathering of data from the target population. The questionnaire was divided into four sections: the first section will be used to derive the demographics of the respondents while the other three sections were aligned along the objectives of the study.

3.4.2 Interview Schedule
The study employed the use of this instrument to collect information through personal interviews using a set of predetermined questions. This instrument was used to collect data from key informants such as the founders of the Bangla-Pesa. The researcher’s selection of interview schedules as one of the research instruments is influenced by Kerlinger (2004), who was able to observe that more people are willing to communicate orally than in writing, thus providing data more readily in an interview. This justifies the use of interview schedules in the study. The
researcher was able to probe the participants, giving explanations and clarification where necessary regarding the issue of Bangla-Pesa.

3.4.3 Observation
Direct observations were relied upon to come up with a clear picture of the Bangladesh informal settlement and to capture the Bangla-Pesa vouchers as well the nature of businesses transacting with the vouchers. The observation technique was categorically keen on the members of the BBN and was done alongside photography.

3.5 Data Collection Procedures
The study benefited from the services of three local research assistants who attended three weeks induction training on how to administer the questionnaires. They were trained on the process of gathering data by use of questionnaires. Thereafter, these three assistants helped the researcher in the questionnaire administration. Interview schedules with key informants were undertaken personally by the researcher.

3.6 Piloting of the Instruments
Prior to the main study, a pilot study was carried. In the pilot study the entire research procedure was carried out, including analysis of the data collected, following closely the procedure planned for the study. According to Cooper and Schindler (2013), pilot studies are carried out with fewer subjects than the one employed in the main study. The essence of the pilot study is to determine the instruments’ validity and reliability. For this study, the pilot study was carried out with four traders and who did not eventually participate in the main study.

3.6.1 Validity of the Research Instruments
Validity is the ability to measure what it is intended to measure. Instrument validity concerns with the level of accuracy to which the particular instrument actually measures what it is meant to measure (Meyers, Gamst and Guarino, 2006).

The pilot study helped to enhance construct validity of the research instruments. It gave the projection of the content validity. The study adopted the data triangulation technique by using a combination of data sources with the effect that the strengths and weaknesses in each source were going to be compensated when used together (Creswell, 2013). The aim was to improve the
validity of the research instruments. The research instruments were developed in close consultation with the supervisor who guided on the relevance of the content on the instrument in relation to the purpose, objectives and research questions.

3.6.2 Reliability of the Instrument
A test is reliable when it measures what it purports to measure consistently. Reliability refers to precision consistency and accuracy of the research instrument. It is the measure of the degree to which a research instrument yields consistent result of data after repeated trials (Meyers, Gamst and Guarino, 2006). During the pilot study the researcher adopted the test-retest technique to test reliability of the questionnaires. The questionnaires were administered to the four business respondents, within a span of two weeks. After administration of the questionnaires, Cronbach’s test was used to check the reliability of the data collection tool. Cronbach's alpha ranges from $r = 0$ to $1$, with $r = 0.7$ or greater considered as sufficiently reliable (Nunnally and Bernstein, 1994). This study obtained a Cronbach's alpha of 0.7 i.e. average of the three items that were tested and was considered adequate showing that the questionnaire was reliable.

3.7 Data Analysis
The data generated by questionnaires, interviews and observation. Schedules were checked, edited organized and computer coded to reduce the mass of data obtained into a form suitable for analysis. The coded data was then analysed using the Statistical Package for Social Sciences (SPSS) 19.0. SPSS was helpful in generating tables, graphs, charts that allowed for ease of interpretation, and finally conclusion and recommendations. The research questions giving qualitative data were analysed using content analysis procedures. Analysed data was then summarized using frequencies and percentages and presented in tables, bar charts, Multiple regression and correlation analysis. Frequencies and percentages were adopted to present, discuss and interpret findings obtained and formed the basis for the research findings, conclusion and recommendations.

3.7.1 Multiple Regression Analysis
Multiple Linear Regression based on ‘Ordinary Least Squares’ (OLS), which means that the model will be fit so that the differences of sum-of-squares in terms of observed and predicted values will be minimized (Anderson et al., 2010) was used. Thus, multiple regression analysis was done
where Business Growth was regressed against three independent variables (Promoting Trade, Business Support Service and Access to Financing) in order to come up with inferential statistics, correlations and other tests of significance.

In specific terms, regression analysis of this study was carried out and all independent and variables were regressed to obtain the main effect of the study and the result from this analysis was used to estimate the predictive power of these variables to meet the three objectives of this study. The general form of the multiple linear regression is presented in equation 3.1.

From the regression model the following regression equation was derived:

\[ Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \epsilon \] ……………………..3.1

Where;

\[ Y = \text{Business Growth} \]
\[ X_1 = \text{Promoting Trade} \]
\[ X_2 = \text{Business Support Service} \]
\[ X_3 = \text{Access to Financing} \]
\[ \epsilon = \text{Error term} \]
\[ \beta_0 \text{ is the intercept or constant, } \beta_1 - \beta_3 \text{ are coefficient} \]

A key statistic is R squared which showed the percentage variance in the dependent variable (Business Growth) that can be explained by the independent variables (Promoting Trade, Business Support Service and Access to Financing). T-tests were used to test the significance of the relationship between business growth and independent variables (Promoting Trade, Business Support Service and Access to Financing). Also, the F-Statistic (ANOVA table) was employed.

### 3.8 Ethical Considerations

The participants in this study did so out of their own volition. Their right to refuse to either be interviewed or to answer all or some of the questions given was respected. At the same time all the information gathered during the time of this study was considered and treated as confidential and was only used in meeting the research objectives. Ethical approval was obtained from the Strathmore Business School and the Mombasa County Government and local administration in Bangladesh slum.
CHAPTER FOUR
DATA ANALYSIS, FINDINGS AND PRESENTATION

4.1 Introduction
This chapter gives the presentation, analysis and interpretation of the data collected during the field study. The data was collected through questionnaires that were administered to traders in the BBN, purposively sampled officials of the Bangla-Pesa Initiative and observation. In total, the researcher administered questionnaires to one hundred and twenty three (123) traders within the Bangla-Pesa Network.

4.2 Participation Rate
Whereas the census survey targeted all the one hundred and eighty five (185) traders, as at the time of the study, the researcher was only able to get the participation of one hundred and twenty three of them. This gives a participation rate of 66.5% which the researcher considered adequate in meeting the research objectives. Figure 4.1 gives the participation rate.

Figure 4.1: Participation Rate

Source: Field Study (2015)

Among the reasons that contributed to lack of all the traders in the Bangla-Pesa network participating was as a result of absence from their business areas. From community members, the main reasons for non-availability of these traders included; a good number had gone in search of stock from the nearby Kongowea Market, to attend to prayers at the Mosque while the time of...
operating for others did not coincide with the time the study was carried out and this included those that began operations in the evening.

4.3 Demographic Information
This section highlights the demographic characteristics of the respondents and their businesses. The demographics include aspects pertaining to the gender of respondents, nature and type of business and the monthly turnover of the business among others.

4.3.1 Gender
According to the study findings, and as depicted in figure 4.2, most of the respondents (70.7%) were females while the males were 29.3%.

Figure 4.2: Gender of Respondents

4.3.2 Education Level of Respondents
The findings of the study indicate that most of the respondent represented by 37.4% had attained primary education while 26% had no formal education, 25.2% had attained secondary education and 11.4% tertiary education. Figure 4.3 gives these findings.
The level of education of entrepreneurs has been found to be positively associated with business growth (Brijlal, Naicker and Peters, 2013). According to Kangasharju and Pekkala (2002), higher education contributes to higher business growth. A brief of this has been mentioned in the study limitations in section 1.9.

4.3.3 Type of Business
The findings of the study reveal that most of the businesses operating in the BBN and which accepted Bangla-Pesa were small scale traders. Most of them (86.4%) were in retail trading with many engaging in the sale of food commodities. The other 13.6% were in the service industry providing services such as courier (beba Services), water vending, sewing and carpentry among others.
4.3.4 Length of Time Business has been in Operation

The findings of the study show that most of the traders had been operating their business in the Bangladesh settlement for between 4 to 6 yrs while 29.3% for over 6 years, 22.8% for 2 to less than 6 years and 14.6% for less than 2 years (Figure 4.4).

Figure 4.4: Duration of time Business had been in Operation

Cumulatively, 85.4% of the traders had been in business for more than two years, an indication that most of the study respondents had been in operation before the Bangla-Pesa initiative was initiated in the Bangladesh settlement. The respondents were therefore in a vantage position of providing valuable information based on their experiences between the two periods, before and after the introduction of Bangla-Pesa, hence an advantage to the study.

4.3.5 Monthly Turnover of Business

From the findings of the study indicated in figure 4.5, most of the respondents had a monthly turnover of between Kshs 10,001 and Kshs 25,000. Thirty nine percent (39%) of the respondents earned between that range while 30.1% earned less than Kshs 10,000, 25.2% between Kshs
25,001 and 50,000 and 5.7% between Kshs 50,001 and 100,000. There were no respondents who indicated that they had a monthly turnover higher than 100,000.

**Figure 4.5: Monthly Turnover of Business**

On average, the businesses had a monthly turnover of Kshs 15,480 or a daily turnover of Kshs 516. During the study, the researcher noted that most of the respondents engaged in small businesses, with discussions with some of them revealing that the businesses were a means of meeting their daily basic needs; food being the primary need.

Most of the respondents indicated that they had no employees and business was carried out with the help of the family members, mainly the children. In total, 79.7% of the respondents indicated that they did not have any employees to assist them in their businesses. On the other hand, those who had employees had on average only one employee with the range being 1 – 2 employees.

### 4.3.6 Tenancy

The study findings reveal that most of the businesses premises were not rented. Figure 4.6 shows that 70.7% of the respondents were operating from premises that were not rented while 29.3% operated from rented premises. Most of those who were not operating from rented premises carried out their businesses from *kiosks* and *vibandas* located by the road sides. Majority of those
who were in rented premises operated shops while a few were hair salons, movie stores, cyber café and a dispensary among others.

![Figure 4.6: Tenancy of Business Premises](image)

The monthly rent for the business premises ranged from Kshs 1,500 to Kshs 20,000. It is important to note that only two respondents indicated that their rental charge was Kshs 20,000. On average the monthly rent for the businesses premises was Kshs 4,550.

### 4.4 Business Support Offered within the BBN

#### 4.4.1 Importance of Training

In this study most of the respondents placed an importance on training as a necessary tool of enhancing business growth. When asked if they placed an importance on training, the majority 83.7% were positive. Only a small percentage of 16.3 did not place on importance on training.

<table>
<thead>
<tr>
<th>Response</th>
<th>Frequency</th>
<th>Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>103</td>
<td>83.7</td>
</tr>
<tr>
<td>No</td>
<td>20</td>
<td>16.3</td>
</tr>
<tr>
<td>Total</td>
<td>123</td>
<td>100</td>
</tr>
</tbody>
</table>

Source: Field Study (2015)
According to Patel (1985) as cited in Mungai (2012), training is important as it allows entrepreneurs to explore the environment and identify the various opportunities for improvement, hence mobilize resources and be able to implement actions that maximize those opportunities. Further, Mungai (2012) reaffirms the importance of training on business growth by stating that skills are necessary for the initiation of an enterprise.

4.4.2 Forms of Training offered within the BBN

In this section, the study gives the findings of the type of business support services offered within the BBN. All the respondents in this study indicated that they received business training through the BBN. First, findings of the formal business training offered are given. Figure 4.7 gives the forms of formal training offered within the BBN.

![Figure 4.7 Training Offered](source: Field Study (2015))

The figure indicates that most of the respondents had received training on time management. This is represented by 61%. Thirty point one percent (30.1%) had been able to receive technical training
while 18.7% on record keeping and similar percentage on management training. Fourteen point six percent (14.6%) had been able to receive training on marketing management.

All the respondents indicated that the training received had been provided through trainers who had been contracted by the BBN and from the BBN’s team of advisors. The founders had also been part of the training team, with their training mainly being around the use of Bangla-Pesa and community networking. The BBN members usually met once a week (Saturday) and it is from such meetings that the member’s needs would be discussed and training organized. Although all the respondents indicated that there was need for more training they were contended with the training offered noting that it was catering for their needs towards growing their businesses.

According to the founders, the Grassroots Economics Foundation (Formerly Koru Kenya) helps train the community and verifies there are enough businesses in the network will to back the voucher - prior to printing them in Germany and giving them to the Business Network. Grassroots Economics acts as a trainer and also verifier to make sure that the vouchers are being used properly and are matched by local backing.

Nevertheless, the study was able to learn that was no well designed curricula for training the members, and most of the training was done through peer to peer training. According to (Mungai, 2012), in the absence of a well designed training curricula, transfer of learning can be inhibited. According to Baldwin and Ford (1988), cited in Mungai (2012), the level and content of training have a direct relation with the acquired skills. In other words the better the training content, the more successful the transfer of the skills.

4.5 The Role of Bangla-Pesa in Promoting Access to Financing

All the respondents in this study indicated that the adoption of Bangla-Pesa had provided them with an avenue to utilize excess stock which would have previously not have been utilized, providing an opportunity for savings. Most of the respondents (73%), had been able to join BBN chamas which operated as merry go round schemes that helped the entrepreneurs to access financing from the chamas and from microfinance institutions.

According to one of the officials of the Bangla-Pesa Initiative, Bangla-Pesa had allowed people to barter more effectively and pay for basic needs including education for local students. It had also
enabled BBN members to save more Kenyan Shillings in the form of merry-go-rounds and also provided funding for community service work like waste collection and sports. One of the officials further revealed that, over 3 million Kenyan shillings worth of goods and services had been traded using Bangla-Pesa.

Another official of the BBN, said the use of Bangla-Pesa allowed the users to have more resources to spend. The respondent revealed that with its inception trade jumped by 22% in the first week of its existence. The BBN has a merry-go-round (saving circle) and helps introduce members to banks and micro finance loans. The BBN is also applying for UWEZO funds.

4.6 Ways in which Bangla-Pesa Promotes Trade

4.6.1 Types of Goods and Services bought by Bangla-Pesa

The study found out that most of the goods that were purchased using Bangla-Pesa were mainly foodstuffs such as; sugar, fish, porridge, potatoes, githeri, maize flour, cooking oil, milk and bread. The most accessed service by use of Bangla-Pesa was courier services which were mainly procured by the traders for transportation of their goods from the nearby Kongowea market to their business premises. Other services included carpentry works, hair dressing, tailoring and school tuition for children among a few others.

Figure 4.8: A Bangla-Pesa Accepting Shop

Source: Field Study (2015)
On average, the respondents revealed to the study that they carried out an average of six transactions on a daily basis using Bangla-Pesa. The least number of transactions noted from their responses was three with a maximum of twelve (3-12). As shown in Figure 4.8, businesses operating from permanent structures and which was part of the BBN had a clear poster showing the acceptance of Bangla-Pesa. Thus, not all business premises in the Bangladesh Settlement in Mombasa accepted Bangla-Pesa as a medium of exchange.

4.6.2 Contribution of Bangla-Pesa to the Bangladesh Community

All the respondents in this study noted that the use of Bangla-Pesa had contributed positively to their businesses. Several of them noted that Bangla-Pesa had improved their standards of living and was a great means of poverty eradication within the settlement and where many of the residents were living in squalid conditions. One of the respondents stated that the introduction of Bangla-Pesa had eased the exhaustion arising from her efforts to feed and house her children allowing her to concentrate more on her business. In turn, she had been able to record an increase in her daily sales. The respondents also revealed that Bangla-Pesa had allowed more trade between the members, providing a stable of customers and an avenue of free advertisement.

The acceptance of Bangla-Pesa by the four schools was seen by many of the respondents as a major plus for the community. As result of this inclusion, parents were able to pay part of their children school fees with Bangla-Pesa hence allowing them to reinvest in their businesses the money they would have used to undertake the same. To the respondents, this had made their operating capital to increase. From many of the responses, the introduction of three primary schools into the Bangla-Pesa Initiative had given the program an impetus that had seen numbers in the network to almost 200 accepting businesses. Many of the respondents claimed that schools fees was one their largest expenditures and hence the acceptance of Bangla-Pesa was a strong boost to the entire local community as more money was freed for other necessities. This is because, in several occasion parents had been unable to meet the fees for their children with some of them being chased away from school. In other cases parents ended up being overburdened with debts. The use of Bangla-Pesa, they noted, had relieved many of them this pressure as it allowed them to pay little by little to make up for what they were lacking. On the other hand the teachers too were gaining more than they were before the introduction of Bangla-Pesa and this was mainly through extra tuition fees. From an interview with one of the school heads, the rate of the number
of children being chased away from school had decreased tremendously as result of the adoption of Bangla-Pesa within the settlement.

The researcher was also able to elicit more opinions from the respondents by the use of a Likert Scale with 11 dimensions on the contribution of Bangla-Pesa and which the respondents were expected to rate on a scale of 5 (Strongly Disagree, Disagree, Neither Disagree nor Agree (neutral), Agree and Strongly Agree). Table 4.2 gives the findings.

<table>
<thead>
<tr>
<th>Contributions of Bangla-Pesa</th>
<th>Frequency</th>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Neutral</th>
<th>Agree</th>
<th>Strongly Agree</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>New opportunities to the Community</td>
<td></td>
<td>7</td>
<td>10</td>
<td>28</td>
<td>49</td>
<td>29</td>
<td>123</td>
</tr>
<tr>
<td>%</td>
<td></td>
<td>5.7</td>
<td>8.1</td>
<td>22.8</td>
<td>39.8</td>
<td>23.6</td>
<td>100</td>
</tr>
<tr>
<td>Increased interactions between community members</td>
<td>Frequency</td>
<td>1</td>
<td>5</td>
<td>11</td>
<td>58</td>
<td>48</td>
<td>123</td>
</tr>
<tr>
<td>%</td>
<td></td>
<td>0.8</td>
<td>4.1</td>
<td>8.9</td>
<td>47.2</td>
<td>39.0</td>
<td>100</td>
</tr>
<tr>
<td>Increased community empowerment</td>
<td>Frequency</td>
<td>9</td>
<td>13</td>
<td>29</td>
<td>41</td>
<td>31</td>
<td>123</td>
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<tr>
<td>%</td>
<td></td>
<td>7.3</td>
<td>10.6</td>
<td>23.6</td>
<td>33.3</td>
<td>25.2</td>
<td>100</td>
</tr>
<tr>
<td>Provided members access to social services</td>
<td>Frequency</td>
<td>9</td>
<td>11</td>
<td>28</td>
<td>45</td>
<td>30</td>
<td>123</td>
</tr>
<tr>
<td>%</td>
<td></td>
<td>7.3</td>
<td>8.9</td>
<td>22.8</td>
<td>36.6</td>
<td>24.4</td>
<td>100</td>
</tr>
<tr>
<td>Helped reduce the rate of crime</td>
<td>Frequency</td>
<td>10</td>
<td>22</td>
<td>26</td>
<td>37</td>
<td>28</td>
<td>123</td>
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<tr>
<td>%</td>
<td></td>
<td>8.1</td>
<td>17.9</td>
<td>21.1</td>
<td>30.1</td>
<td>22.8</td>
<td>100</td>
</tr>
<tr>
<td>New opportunities to business</td>
<td>Frequency</td>
<td>6</td>
<td>15</td>
<td>22</td>
<td>47</td>
<td>33</td>
<td>123</td>
</tr>
<tr>
<td>%</td>
<td></td>
<td>4.9</td>
<td>12.2</td>
<td>17.9</td>
<td>38.2</td>
<td>26.8</td>
<td>100</td>
</tr>
<tr>
<td>Improved daily sales</td>
<td>Frequency</td>
<td>2</td>
<td>12</td>
<td>12</td>
<td>49</td>
<td>48</td>
<td>123</td>
</tr>
<tr>
<td>%</td>
<td></td>
<td>1.6</td>
<td>9.8</td>
<td>9.8</td>
<td>39.8</td>
<td>39.0</td>
<td>100</td>
</tr>
<tr>
<td>Business growth</td>
<td>Frequency</td>
<td>8</td>
<td>13</td>
<td>23</td>
<td>45</td>
<td>34</td>
<td>123</td>
</tr>
<tr>
<td>%</td>
<td></td>
<td>6.5</td>
<td>10.6</td>
<td>18.7</td>
<td>36.6</td>
<td>27.6</td>
<td>100</td>
</tr>
<tr>
<td>Reduced the rate of unemployment</td>
<td>Frequency</td>
<td>8</td>
<td>20</td>
<td>32</td>
<td>38</td>
<td>25</td>
<td>123</td>
</tr>
<tr>
<td>%</td>
<td></td>
<td>6.5</td>
<td>16.3</td>
<td>26.0</td>
<td>30.9</td>
<td>20.3</td>
<td>100</td>
</tr>
<tr>
<td>Opened doors for accessing financial lending</td>
<td>Frequency</td>
<td>21</td>
<td>26</td>
<td>37</td>
<td>31</td>
<td>8</td>
<td>123</td>
</tr>
<tr>
<td>%</td>
<td></td>
<td>17.1</td>
<td>21.1</td>
<td>30.1</td>
<td>25.2</td>
<td>6.5</td>
<td>100</td>
</tr>
<tr>
<td>Reduced rates of poverty</td>
<td>Frequency</td>
<td>6</td>
<td>12</td>
<td>24</td>
<td>42</td>
<td>39</td>
<td>123</td>
</tr>
<tr>
<td>%</td>
<td></td>
<td>4.9</td>
<td>9.8</td>
<td>19.5</td>
<td>34.1</td>
<td>31.7</td>
<td>100</td>
</tr>
</tbody>
</table>

Source: Field Study (2015)
From Table 4.2 the greatest contribution of Bangla-Pesa was that it had increased interactions between community members. Forty seven point two percent (47.2%) of the respondents agreed to this while 39% strongly agreed. Cumulatively giving an 86.2% response of those who agreed and strongly agreed. This was followed by Bangla-Pesa having improved daily sales with 39.8% of the respondents agreeing and 39% strongly agreeing; a cumulative figure of 78.8%. Reduction of poverty followed with 34.1% agreeing, 31.7% strongly agreeing while 9.8% neither agreed nor disagreed. After this was Bangla-Pesa having contributed to business growth with 36.6% of the respondents agreeing, 27.6% strongly agreeing while 18.7% neither disagreed nor disagreed. Close to this was of Bangla-Pesa having opened new opportunities to the community with 39.8% of the respondents agreeing, 23.6% strongly agreeing, 22.8% neither disagreeing nor agreed. Next was that it provided members with access to social services. On this, 36.6% of the respondents agreed, 24.4% strongly agreed, 22.8% neither disagreed nor agreed while those who disagreed and strongly disagreed were 16.2%. On having increased community empowerment, 33.3% agreed, 25.2% strongly agreed, 10.6% neither disagreed nor agreed while those who disagreed and strongly disagreed were 17.9% The least contribution of Bangla-Pesa was that of opening doors for accessing financial lending with majority of the respondents (38.2%) disputing this while 31.7% were on the affirmative.

4.7 Threats to Bangla-Pesa and their Mitigation

4.7.1 Threats

From the findings of the study, all the respondents in the study concurred that the idea of Bangla-Pesa was very new and such was prone to many misconceptions. According to the respondents negative reporting in the mass media was a major threat to the survival of such an initiative as creates negative public perception causing many would be users to shun away.

The mass media is a double-edged sword. Many of the respondents felt that it can be used to create understanding of such local initiatives as the Bangla-Pesa within the wider public. Hence, many posited that the mass media could be used as an important element of promoting complementary. Several respondents noted that the case of Bangla-Pesa had been misreported in the media, with reporters inking the initiative with the outlawed Mombasa Republican Council. They felt that there was need for reporters to get the views of all those involved in order to address
doubts and concerns that can emerge from public and government agencies as a result of their reporting.

Another reported challenge of Bangla-Pesa was that of businesses accepting too much Bangla-Pesa, such that they can’t meet their imported stock requirements. At the same time, non-members could be coerced to accept the vouchers and not understand where to spend them or how to use them. To address this, members are given the criteria not to accept a balance of more than 400 Bangla-Pesa and to spend as fast as they receive - and not trade with non-members.

According to the founder, the security features on the vouchers such metallic foiling, serial numbers, ultra violet ink and specialty were quite expensive. Hence enhancing these security features of the vouchers is quite expensive. As a result, the printing costs are high. Therefore, loss or damage of the voucher is does a disservice to the network. Although the voucher has security features as shown in Plate 2, the risk of counterfeiting was a concern to the members of the BBN. To address this, the organization limits trade of Bangla-Pesa within its members.

4.7.2 Ways in which Regulatory Authorities and Financial Institutions can enhance the adoption of Complementary Currency in the Country

Most of the respondents in this study felt that there was need for complementary currencies to be enhanced within the country, especially within slums settings where majority of the people are suffering from abject poverty. One of the ways in which both the local and national government could enhance the usage of these currencies was through non-interference. The respondents noted that when the government interferes with such operations users end up getting scared and thus pulling aware from such initiatives. According to the BBN initiative secretary, the 2013 fiasco had scared away very many users, some of whom have never even desired to rejoin the group again due to the trauma suffered from the police harassment.

Increasing awareness campaigns was another avenue the respondents felt would go a long way in enhancing the adoption of Bangla-Pesa. Through extensive media campaigns for complementary currencies, the government and its agencies would create faith of users hence allowing for more to be drawn in. On the other hand, a few respondents indicated that there was need for the Central Bank of Kenya (CBK) to come up with regulatory measures governing the adoption and use of complementary currency in Kenya. Such measures it was suggested should include such aspects
as; registration of each given complementary currency in an area and documenting on the operations, security features and locality of the currency.

One of the respondents expressed the following concerns positioning the users as being the pivot of initiatives regarding community currency. He stated,

“I think it is immensely important that people understand what backs their currency and for people to feel they have a role in the creation of and back of that currency. Local markets must also be made to weather the effects of seasonal imports and exports. These programs have helped hundreds of communities worldwide to do just this. Indeed the Swiss WIR is such an example that has more than 50,000 members across Switzerland”.

There were also a few users who argued that there was need for government initiatives to give a priority to groups such as the BBN when it came to public funding. The respondents felt that the Uwezo Fund would be a great avenue for supporting complementary currency in Kenya. Since BBN was already in existence, the respondents were of the view that funding of the group would be a worthwhile venture of alleviating poverty and empowering the locals.

There was also need for banks to play a bigger role in increasing the coverage of complementary currency in Kenya. Ruddick felt that banks in Kenya were generally ignorant of how complementary currencies operate and were thus not in a position to tap into the opportunities they present. He advised that banks need to understand the concept, appreciate it and work with complementary currency group networks such as the BBN. Using such groups the banks would offer financial assistance to the members. This would not only help the members but also the banks which would realize more business through new account openings and customer base.

Figure 4.9 shows that most of the respondents (80.5%) did not believe that the regulatory authorities and financial institutions had played a positive role towards the adoption of Bangla-Pesa. Those that indicated that regulatory authorities and financial institutions had played a role towards the adoption of Bangla-Pesa were 19.5%.
Although most of the respondents indicated that regulatory authorities and financial institutions had not played a role towards the adoption of Bangla-Pesa, nearly all of them indicated that the arrests of the officials of Bangla-Pesa in 2013 had negatively affected the adoption of Bangla-Pesa. The respondents decried the government for having arrested the officials on unfounded claims that Bangla-Pesa was a secessionist movement that was linked to Islamic terrorists. Although the charges against the officials were eventually dropped, the respondents feel that the action by the government scared away many people from the initiative; a situation that persisted to date.

On the other hand, those who indicated that the regulatory authorities and financial institutions had played a role lauded the County Government of Mombasa for having been interested and having shown support in the initiative. According to the Chair lady at the time, there had been local sports competition sponsored by the BBN network in collaboration with the County Government. They considered this a step in the right direction towards creating awareness on Bangla-Pesa. Several respondents also lauded the Judiciary for dropping the framed up charges and thus giving Bangla-Pesa and by extension complementary currency in the country a lifeline.

According to the founder, Bangla-Pesa was the first initiative of its kind in Africa. Since then two other initiatives, Gatina-Pesa and Kangemi-Pesa have been launched, the former was launched in
October 2014, and the later was launched in April 2015, a time that coincided with this study. More in the pipeline e.g. Lindi-Pesa in Kibera, Lindi Ward. Efforts to launch two similar initiatives in South Africa in May 2015 were also ongoing. Following in the successful footsteps of Bangla-Pesa the County Government of Mombasa had written to the founder to assist roll out a replica of the program in Ganahola and Kibarani areas within the county. Further, the county government was also seeking ways of integrating the complementary currency into agriculture, fisheries and sanitation programs within the county.

The founder stated that,

“In many countries, like Brazil, these programs have been adopted to great effect by central governments, counties and municipalities. We wish to see much more support from local leaders and eventually a regulatory framework developed”.

4.8 Sustainability of Bangla-Pesa

4.8.1 Sustainability of the Mission of Bangla-Pesa

The researcher, through an interview schedule, was able to gain valuable insights on the intended purposes of the Bangla-Pesa initiative from the founder of the initiative. The founder informed the study that Bangla-Pesa is a voucher for goods and services of members of the Bangladesh Business Network. Its circulation and mutual-credit nature make it a community currency. The founder started the initiative as means of empowering the community of Bangladesh Settlement to pull themselves out of abject poverty through the developing and managing their own community currency. According to the founder, Bangla-Pesa acts as a means of exchange complementary to the Kenyan Shillings when Kenyan Shillings are scarce, enabling trade when it would otherwise be stopped. The Bangla-Pesa is regulated by the Bangladesh Business Network BBN (a CBO) in coordination with Koru-Kenya (now called Grassroots Economics Foundation) and local government.

Based on this background information, the founder indicated that the mission of the initiative is sustainable and lauded it as worthwhile venture. The founder even invited the researcher for the launch of a similar initiative in Kawangware dubbed Gatina Pesa, Lindi Pesa in Kibera and Kangemi Pesa in Kangemi Noteworthy, Gatina Pesa and Kangemi Pesa by the completion of this study had already been launched while Lindi was to be launched later in the year.
All the respondents in this study too agreed that the intention of Bangla-Pesa in its very nature was sustainable as the problems in the slums was endemic, and would persist for as long as slums were in existence. On her part, the organizations chairlady stated,

“Bangla-Pesa ni sawa kabisa. Ni sawa vile tunaendelea nayo ni sawa” meaning Bangla-Pesa is completely good. The way we are going on with it is completely good.

The BBN officials were optimistic that with the courts having ruled in their favor, Bangla-Pesa and by extension complementary currencies in Kenya was going to have more roots. The researcher was able to learn from the officials that at the time of the study, CBK had requested information regarding the usage of Bangla-Pesa. The officials were optimistic that CBK would come up with regulations governing complementary usage in the country away from the laws relating to vouchers.

4.8.2 Economic Sustainability of Bangla-Pesa

Just like in the case of the sustainability of the mission of Bangla-Pesa, all the respondents were of the view that it was also economically sustainable. Many noted that more people were embracing the initiative and registering to become members of the BBN. The group officials felt that with increasing membership the economic sustainability of Bangla-Pesa was assured.

The founder too was of the view that the concept of complementary currency in Kenya was viable economically as it mainly targeted communities living in areas that were suffering from high levels of poverty. Therefore, just like in the case of Bangla-Pesa, complementary currency allow for people to barter trade more effectively and pay for basic needs including education for local students. It has also enabled BBN members to save more Kenyan Shillings in the form of merry-go-rounds and also provided funding for community service work like waste collection and sports. Thus the benefits it presents were the foundation of its sustainability economically.

The study was also able to elicit more opinions on factors affecting the sustainability of Bangla-Pesa through a Likert Scale with 6 dimensions affecting its sustainability. Respondents were expected to rate each on a scale of five (Strongly Disagree, Disagree, Neither Disagree nor Agree (Neutral), Agree and Strongly Disagree).
From the findings in Table 4.3, government interference emerges as the fact that has the most influence on the sustainability of Bangla-Pesa. The respondents make it clear that government interference could cripple the Bangla-Pesa initiative with 50.4% of the respondents strongly agreeing and 49.6% agreeing. Equally important was the support that Bangla-Pesa was receiving from the users. Most of the respondents were in support of the officials of Bangla-Pesa. This is captured in the findings where 42.3% of them strongly agreed to this while 44.7% agreed, 8.9% neither agreed nor disagreed and 4.1% disagreed. Close to this was Bangla-Pesa becoming stronger every day. On this, 41.5% of the respondents strongly agreed, 46.3% agreed, 7.3% neither agreed nor disagreed while 4.9% disagreed. With regard to the educated community members being in support of Bangla-Pesa, 24.4% agreed, 19.5% strongly agreed while 21.1% neither disagreed nor agreed, 17.9% disagreed and 17.1% strongly disagreed. As for the youth in the community being committed to the success of Bangla-Pesa, most of the respondents, 25.2%, neither disagreed nor agreed followed by 23.6% who agreed, 19.5% who disagreed, 16.3% who strongly disagreed and 15.4% who strongly agreed. Cumulatively, 39% of the respondents (strongly agreed and agreed) believed that the youths were committed to the initiative while 35.8% (strongly disagreed and disagreed) were of the contrary opinion. On Bangla-Pesa creating conflicts within the community, most of the respondents showed disrepute with 25.2% strongly disagreeing...
and 37.4% disagreed while 17.9% neither disagreed nor agreed with a similar number agreeing and 1.6% strongly agreeing.

The findings show that, Bangla-Pesa was still exposed to various threats. The next section discusses some of the threats to Bangla-Pesa and complementary currency in Kenya.

**Figure 4.10: Sample of Bangla-Pesa**

![Sample of Bangla-Pesa](image)

Source: Field Study (2015)

Finally, lack of a legal framework governing the use of complementary currency in Kenya was also cited as a major threat to the sustainability of Bangla-Pesa. Officials of the BBN were worried that without a comprehensive structure governing the use of such community currencies hindered the successful growth of initiatives such as Bangla-Pesa and Gatina Pesa.

Discussions from the officials of Bangla-Pesa revealed that they would greatly welcome any initiative geared towards establishing structures and legal frameworks governing the use of complementary currency in Kenya. The officials further noted that out of the experiences of Bangla-Pesa, policy makers in the national and county government could gain valuable lessons that can be relied when formulating polices towards the same.

**4.9 Statistical Outcomes**

In this study, a correlation matrix was constructed using the variables in the questionnaire to show the strength of relationship among the variables. This was in line with Kline (1998) who defines a
correlation matrix as a set of correlation coefficients between several variables. To establish a correlation matrix, the standard deviation and means of the variables presented in Table 4.2 were calculated and grouped into four dimensions; Business Growth (BG), Access to Financing, Business Support Service (BSS), and Promotion of Trade (PT).

According to Wegner (2013), statistical outcomes are vital in the prediction of unknown values of a numeric variable using other numeric variables that are related to it and for which values are known. In this study, regression and correlation analysis have both been employed to quantify the relationship between the independent variables and dependent variables and also measure the strength of the relationship.

4.9.1 Pearson Correlation Coefficient matrix

To identify the strength of relationships between the dependent and independent variables, a Pearson Correlation Coefficient Matrix was carried. This was also helpful in determining the independent variables that were useful in predicting the dependent variable.

Table 4.4 indicates the Pearson Correlation Coefficient matrix between business growth, Business Support services, promoting trade and access to finance. The findings reveal that there is a strong positive relationship between business growth and the dimensions that promote trade and business support services of magnitude 0.885 and 0.862 respectively. The strong positive correlation was found to be significant with a P value of 0.026 and 0.047 respectively. On the other hand, there existed a weak but positive correlation between business growth and access to financing. With a p value = 0.046.

Table 4.4 Pearson Correlation Coefficient Matrix

<table>
<thead>
<tr>
<th></th>
<th>Business Growth</th>
<th>Promoting Trade</th>
<th>Access to Financing</th>
<th>Business Support Services</th>
</tr>
</thead>
<tbody>
<tr>
<td>Business Growth</td>
<td>Pearson Correlation</td>
<td>1</td>
<td>.885*</td>
<td>.372*</td>
</tr>
<tr>
<td></td>
<td>Significance</td>
<td>.026</td>
<td>.046</td>
<td>.047</td>
</tr>
<tr>
<td>Promoting Trade</td>
<td>Pearson Correlation</td>
<td>.885*</td>
<td>1</td>
<td>-.120</td>
</tr>
<tr>
<td></td>
<td>Significance</td>
<td>.026</td>
<td>.379</td>
<td>.003</td>
</tr>
<tr>
<td>Access to Financing</td>
<td>Pearson Correlation</td>
<td>.372</td>
<td>-.120</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Significance</td>
<td>.066</td>
<td>.379</td>
<td>.853</td>
</tr>
<tr>
<td>Business support services</td>
<td>Pearson Correlation</td>
<td>.862*</td>
<td>.390**</td>
<td>.025</td>
</tr>
<tr>
<td></td>
<td>Significance</td>
<td>.047</td>
<td>.003</td>
<td>.853</td>
</tr>
</tbody>
</table>

Source: Field Study (2015)
These results reveal that, the greatest contribution that the BBN had through the Bangla-Pesa towards business growth was that of promoting trade for the members and provision of business support services. On access to financial services, the results indicate that it had not contributed greatly to the business growth within members of the BBN network.

4.9.2 Test for Multicollinearity

There exists multicollinearity problem when some independent variables are highly related (Pallant, 2007). To detect multicollinearity problem, Anderson et al (2010) suggest the use of tolerance and variance inflation factor (VIF) which is part of regression process. They recommend that multicollinearity with a tolerance value within the threshold of .10, which equal to a VIF of 10, is acceptable. Alternatively, Meyers (Gamst and Guarino (2006) opine that there exists multicollinearity problem when correlation between variables is more than .90. The results of multicollinearity for the variables in the main effect and joint moderating effect are documented in Table 4.5 In all cases, the values of tolerance and VIF for each independent variable were within the threshold of .10 and 10 suggesting that multicollinearity did not pose any problem in the study. The correlation analysis in table 4.4 equally indicates similar result as highest correlation is .885.

<table>
<thead>
<tr>
<th>Variables</th>
<th>Tol.</th>
<th>VIF</th>
</tr>
</thead>
<tbody>
<tr>
<td>Promoting Trade</td>
<td>.942</td>
<td>3.827</td>
</tr>
<tr>
<td>Access to Financing</td>
<td>.261</td>
<td>1.066</td>
</tr>
<tr>
<td>Business support services</td>
<td>.938</td>
<td>1.062</td>
</tr>
</tbody>
</table>

Note: Tol. = tolerance, VIF = variance inflation factor

To centre a variable, the overall mean of the variable is deducted from the variable.

4.9.3 Summary of descriptive statistics

Descriptive statistics was used to reduce the data to a manageable size and to provide insights into the pattern of the trend of the data. The descriptive statistics techniques used in the study include range, sum, mean and standard deviations on a scale of 1-5.
Table 4.6: Descriptive statistics for main variables

<table>
<thead>
<tr>
<th>Main Variables</th>
<th>Minimum</th>
<th>Maximum</th>
<th>Mean</th>
<th>S.Dev</th>
</tr>
</thead>
<tbody>
<tr>
<td>Promoting Trade</td>
<td>3</td>
<td>4</td>
<td>3.67</td>
<td>.476</td>
</tr>
<tr>
<td>Access to Financing</td>
<td>2</td>
<td>4</td>
<td>2.92</td>
<td>.647</td>
</tr>
<tr>
<td>Business support services</td>
<td>2</td>
<td>4</td>
<td>3.17</td>
<td>.694</td>
</tr>
</tbody>
</table>

The descriptive statistics for the respondents are presented in table 4.6. Promoting trade from 3 to 4 with a mean of 3.67 meaning that most respondents agree that promoting trade is important in enhancing business growth. The survey also shows that business support services are important with a mean of 3.17 followed by access to financing with a mean of 2.92.

4.9.4 Reliability Test

A reliability test was done using Cronbach's alpha test. The main reason for this test was to measure the internal consistency of the study components, which is, how closely related a set of components are as a group. The Cronbach's alpha values for this research are as indicated in table 4.7. The findings suggest that most of the components have relatively high internal consistency. The Cronbach's test yielded a value of 0.7. According to Cronbach (1951), a reliability coefficient of 0.70 is considered “acceptable” in most social science research situations.

4.10 Multiple Regression Analysis

The relationship between business growth as the dependent variable and the independent variables (promoting trade, access to financing and business support services) were estimated using OLS (Ordinary Least Squares) (Coakes and Ong, 2011; Pallant, 2007).

Table 4.7 Model Summary

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R Square</th>
<th>Adjusted R Square</th>
<th>Std. Error of the Estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>.818(a)</td>
<td>.649</td>
<td>.635</td>
<td>.51273</td>
</tr>
</tbody>
</table>

a. Predictors: (Constant), Promoting Trade, Business Support Service, Access to Financing

b. Dependent Variable: Business Growth

A standard regression was carried out between business growth as the response variable and promoting trade, access to financing and business support services as the predictor variables. Table 4.8 shows the results for variations between the dependent and independent variables. \( R^2 \) is the coefficient of determination and shows how business growth is influenced by promoting trade, access to financing and business support services. With \( R^2 \) .649 for the model, this means that the
independent variables in the model i.e. promoting trade, access to financing and business support services could offer about 64.9% explanation of the variance in the dependent variable business growth. This implies that variations in independent variables causes 64.9% change in dependent variable (growth of SMEs). But, the conservative explanation offered by adjusted R square was 63.5%. This is a strong relationship such that the predictors identified in this study are great influencers of business growth. The 35.1% remaining implies that there are other factors that affect business growth other than the three independent variables (promoting trade, access to financing and business support services).

Thus, this implies that business growth exists as a result of Bangla-Pesa role in business support services, promotion of trade and access to financing. This numerical evidence is one strong enough to support the notion that there exists a strong relationship between the study variables.

Table 4.8: Analysis of Variance (ANOVA) Results

<table>
<thead>
<tr>
<th>Model</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regression</td>
<td>9.412</td>
<td>4</td>
<td>.697</td>
<td>4.242</td>
<td>.001b</td>
</tr>
<tr>
<td>1 Residual</td>
<td>10.463</td>
<td>119</td>
<td>.568</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>19.875</td>
<td>123</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

a. Dependent Variable: Business Growth

Note: Value of significance less than 5% (Sig) p-value

Critical value = 2.412

The ANOVA analysis is intended to investigate the variation in variables; the independent variables explain the observed variance of the outcome of the study and outcome level of business growth. The ANOVA statistics indicate that the regression model had a significance level of 0.1% indicating that the model was ideal for making a conclusion on the population parameters as the value of significance (p-value) since was less than 5%.

Moreover, the coefficient of determination (the percentage variation in the dependent variable being explained by the changes in the independent variables) R² equals 0.649, that is, the independent variables with only 35.1% unexplained. The ANOVA results indicate that the
independent variables significantly (F=4.242, p=0.001) explain the variance in business growth i.e. Bangla-Pesa intervention have enhanced business growth through promoting trade, business support service and access to financing.

The F critical at 5% level of significance was 4.242. Since F calculated is greater than the F critical (4.242>2.412), this shows that the overall model was significant. The significance is less than 0.05, thus indicating that the predictor variables, explain the variation in the dependent variable which is business growth. If the significance value of F was larger than 0.05 then the independent variables would not explain the variation in the dependent variable.

Table 4.9: Distribution of Coefficients

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>t</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>Std. Error</td>
<td>Beta</td>
<td></td>
</tr>
<tr>
<td>(Constant)</td>
<td>1.823</td>
<td>.072</td>
<td>1.601</td>
<td>.001</td>
</tr>
<tr>
<td>Promoting Trade</td>
<td>.879</td>
<td>.083</td>
<td>.276</td>
<td>2.411</td>
</tr>
<tr>
<td>Business Support Service</td>
<td>.655</td>
<td>.541</td>
<td>.094</td>
<td>2.092</td>
</tr>
<tr>
<td>Access to Financing</td>
<td>.032</td>
<td>.034</td>
<td>.041</td>
<td>1.882</td>
</tr>
</tbody>
</table>

a. Dependent Variable: Business Growth

The model shows a statistically significant positive relationship between promoting trade (β = .879, t= 2.411, p<0.05) and business growth. There are also statistically significant positive relationship between business support service (β = .655, t= 2.092, p<0.05) and business growth. In addition, access to financing also had a statistically insignificant positive relationship with business growth at (β= .32, t= 1.882, p>0.05). On the overall, the consistency of regression coefficients on promoting trade, business support service and access to financing in the model i.e. Bangla-Pesa suggest that these variables are important factors influencing business growth. Moreover, the un-standardized value of the mentioned table illustrates obviously that independent variables have a positive impact on business growth in this study. This suggests that on average, there was positive performance of the independent variables against dependent variable for all the cases under study.
All the variables except access to financing were significant as their significant value was less than \( p<0.05 \).

From the regression model the following regression equation was derived:

\[ Y = 1.823 + 0.879 X_1 + 0.655 X_2 + 0.532 X_3 + \varepsilon \]

Where:

- \( Y \) = Business Growth
- \( X_1 \) = Promoting Trade
- \( X_2 \) = Business Support Service
- \( X_3 \) = Access to Financing
- \( \varepsilon \) = Error term

Constant = 1.823, shows that if promoting trade, business support service and access to financing (Bangla-Pesa) are all rated as zero or held constant; growth of SMEs would be 1.823.

\[ X_1 = 0.879, \quad \text{shows that one unit increase in promoting trade results in an increase in business growth by a factor of 0.879} \]

\[ X_2 = 0.655, \quad \text{shows that one unit increase in business support service results in an increase in business growth by a factor of 0.655} \]

\[ X_3 = 0.032, \quad \text{shows that one unit increase in access to financing results in an increase in business growth by a factor of 0.032} \]

From the above regression model, holding promoting trade, business support service and access to financing constant, business growth of traders within the Bangla-Pesa network would be 1.823. Thus, it can be seen that although all the independent variables have a positive influence on the dependent variable, a change in promoting trade and business support enhances business growth of traders more than access to financing which ranks lowest. Being in an informal settlement, members of the BBN network are definitely in need of financing to grow their business. Nevertheless, the findings of this study indicate that Bangla-Pesa's contribution to access to finance is not significant. This can be attributed to its very nature of being a complementary currency; specific to a given area or region hence not accepted in the mainstream financial institutions that can boost access to financing. The relationship between business growth and the independent variables was estimated using OLS (ordinary least squares).
CHAPTER FIVE
SUMMARY OF FINDINGS, CONCLUSION AND RECOMMENDATIONS

5.1 Introduction
The overriding goal of this study was to investigate the role of complementary currency in promoting business growth through an analysis of the Bangla-Pesa initiative in Bangladesh informal settlement in Mombasa County. To accomplish this goal, it was necessary for the researcher to reach some prerequisite goals. This included; establishing the impact of the adoption Bangla-Pesa for the local traders within the informal settlement, investigate the role of financial intermediaries and the regulating environment on enhancing Bangla-Pesa and evaluate its sustainability. This chapter highlights the summary of the findings, conclusions and recommendations on the same. To conclude, the chapter gives suggestions for further studies.

5.2 Summary of Findings
This section gives the summary of the findings in line with the prerequisite goals and as outlined in section 1.3.

a) Business Support Offered within the BBN
Training has been cited as an important prerequisite for business growth as skills are necessary for the initiation of an enterprise. The findings of this study indicate that the training on business issues was the fundamental business support offered to the BBN members. This included training on time management, technical training, record keeping, management and marketing management. Although the training was considered adequate, the study found out that there was need for more training on business management and record keeping skills. The training was mainly offered through the Grassroots Economics Foundation (Formerly Koru Kenya) and through peer training. Noteworthy, is that the entire training program lacked a well-designed curricula for training the members. Correlation Analysis revealed that the business support gained through BBN had a strong positive correlation with a magnitude of 0.862 and a p value of 0.047. The study findings reveal that a one unit increase in business support service results in an increase in business growth by a factor of 0.655.

b) The Role of Bangla-Pesa in Promoting Access to Financing
Adoption of Bangla-Pesa in Bangladesh community had provided the members with an avenue to utilize excess stock hence allowing for savings. The study found out that, when well utilised,
such savings enabled the members to contribute to chamas from where they could get financial assistance as well into microfinance institutions. The adoption of the currency also allowed the users to barter more effectively and pay for basic needs including education for local students. Correlation Analysis yielded a magnitude of 0.372 and a p value of 0.066 indicating that there was no strong correlation between promoting access to finance and business growth.

c) Bangla-Pesa and Promotion of Trade

The study reveals that the introduction of Bangla-Pesa in the Bangladesh informal settlement was meant to address high poverty levels within the slum. Through the BBN the founders targeted the business traders who were mainly in business for subsistence. Nevertheless, since its introduction, the initiative has played a major role in promoting business growth in a number of ways. According to all the respondents, the presence of Bangla-Pesa led to members of the BBN experiencing a business growth of close to 22%. Among the benefits cited by respondents that could be attributed to the presence of Bangla-Pesa were; easing of exhaustion arising from daily efforts to provide for daily family needs thus allowing for more time to be dedicated to business, allowed people to barter trade more effectively, increased saving of more Kenyan Shillings in the form of merry-go-rounds and also provided funding for community service work like waste collection and sports and freed up more resources that users could spend.

The role of Bangla-Pesa on businesses when measured using a Likert Scale revealed that the greatest contribution of Bangla-Pesa to business growth was that it had increased interactions between community members allowing for more trade. This was followed by Bangla-Pesa having improved daily sales and then the reduction of poverty. The initiative had also opened new opportunities for the traders while at the same time providing the users with increased access to social services. Close to this, was that the initiative had increased community empowerment. Nevertheless, according to most of the respondents, the existence of Bangla-Pesa had not improved the abilities of the users to assess financial lending. Correlation Analysis revealed that the contribution of Bangla-Pesa to promotion of trade had a strong positive correlation with a magnitude of 0.885 and a p value of 0.026. The study findings reveal that a one unit increase in promotion of trade results in an increase in business growth by a factor of 0.879.
d) Opportunities, Challenges and Threats to Sustainability of Bangla-Pesa

On the sustainability of Bangla-Pesa, the study findings show that though the initiative has a sustainable social mission, its economic sustainability is one founded on a sandy ground and needs to be evaluated critically. Being a community currency that was began with the aim of empowering the poor from poverty, it can be considered as a worthwhile venture. While many of the respondents were of the view that it was economically sustainable, there were several challenges that needed to be addressed. From the findings, government interference emerges as the fact that has the most influence on the sustainability of Bangla-Pesa; with the respondents make it clear that government interference could cripple the Bangla-Pesa initiative. Misconceptions and misreporting by the media was also another threat to the sustainability of Bangla-Pesa and other such community initiatives. The respondents revealed that the media could stifle good projects by poor reporting. Lack of strong legal guiding the operations of community currencies in the country was also a major threat to their social mission and economic sustainability. The economic sustainability of such initiatives was also threatened by the cost of operations and maintenance of the vouchers. Without clear legal frameworks for complementary currencies, the risk of counterfeiting became a concern to the respondents.

5.3 Conclusions

Although the concept of complementary currency in Kenya and Africa is quite new, this study has been able to discover that the concept is slowly gaining traction across informal settlements. Their contribution to business in these settings where majority of the traders operate for subsistence cannot be ignored. The use of complementary currency can have a positive impact on poverty reduction in a number of ways and thus can be used as a tool for economic development. The fact that they help generate additional business for merchants, then there is each and every indication that complementary currency might soon become a common feature in many areas. Therefore, there is still much that needs to be done to accommodate this emerging tool of economic empowerment.

5.4 Recommendations

Based on the findings discussed earlier, there is need for complementary currency networks to promote long-term planning while at the same time reaching out to more merchants to participate
in such schemes. Along with this, there is need for adequate capacity building within communities by looping in all members of the communities where such initiatives are launched.

There is also need for initiatives of complementary currency to focus on vouchers that are backed by commodity or service, like in the case of Bangla-Pesa instead of those that focus on a central authority such as the Fiat which is prone to inflation.

The government and all its regulatory bodies need to come up with legal frameworks governing the operations of complementary currencies. This will help increase the public confidence on such initiatives hence allowing for more people to join in turn increasing trade transactions.

Finally, there is need for more public awareness on the concept of complementary currency. County governments and local authorities should embrace this concept and create channels of impacting their community members on the importance of engaging in related initiatives.

5.5 Suggestions for Further Study

Suffice it to stress that there is need for further research on complementary currency, more so in Kenya. There is need for more studies to determine the institutional and legal frameworks that can be used as bedrock for the concept of complementary currency. At the same time, there is need for scholars and other professionals to come up with measures and guidelines for successful initiatives in regards to complementary currency. Such studies should highlight the best practices of successful community currency networks with a view of conceptualizing a model for the African continent, where such initiatives are scarce.
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APPENDICES
APPENDIX I: LETTER OF INTRODUCTION

Roselyne Omanga  
Strathmore University  
School of Business Studies  
P.O. Box  
Nairobi

Dear Respondent,

RE: REQUEST FOR YOUR INDULGENCE IN A SURVEY ON BANGLA-PESA

I hereby request you to participate in a study that is intended to meet my academic requirements of Masters of Executive Business Administration at Strathmore University. The Study is titled:

“THE ROLE OF COMPLEMENTARY CURRENCY IN PROMOTING BUSINESS GROWTH IN AN INFORMAL ECONOMY. THE CASE OF BANGLA-PESA IN BANGLADESH SLUM, MOMBASA COUNTY”

This is study is intended for academic purposes only and all information that you provide will be treated as confidential.

Your sincerity and honesty in answering the questions provided will be highly appreciated.

Yours Faithfully

Roselyne Omanga
APPENDIX II
QUESTIONNAIRE FOR BUSINESS ENTERPRISES

I am Roselyne Omanga, a post graduate student at the Strathmore University. I am undertaking a study titled: *The role of complimentary currency in promoting business growth. The Case of Bangla-Pesa in Bangladesh Slum, Mombasa County*

The study is meant for academic purposes. The information provided in the interviews will remain strictly confidential and anonymous. The information will be used only for the purposes of this study whose findings will be used to assist me meet the requirements of a degree in Masters of Executive Business Administration. Your cooperation is highly appreciated.

**General Background**

1. Type of Business
   a) Retail trader  
   b) Wholesale  
   c) Hardware  
   d) Services  
   e) Others, please specify

2. When did you start the business? .................................................................

3. How many employees do you have? ..............................................................

4. What is your monthly sales turnover?
   a) Below Kshs 10,000  
   b) Kshs 10,001 to Kshs 25,000  
   c) Kshs 25,001 to Kshs 50,000  
   d) Kshs 50,001 to Kshs 100,000  
   e) Kshs 100,001 to Kshs 200,000  
   f) Kshs 200,001 to Kshs 500,000  
   g) Above Kshs 500,000

5. If business premise is rented, how much is your monthly rent? ..........................

6. How would you describe the contribution of Bangla-Pesa been to your business? ..................
   ……………………………………………………………………………………………………………………………
   ……………………………………………………………………………………………………………………………
7. What type of goods and services do customers usually use Bangla-Pesa to buy?  

<table>
<thead>
<tr>
<th>Goods</th>
<th>Services</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

8. How many Bangla-Pesa transactions do you handle per day?  

9. Indicate the extent to which you agree with the following statements based on the scale shown below:

<table>
<thead>
<tr>
<th>No</th>
<th>Impact</th>
<th>Strongly disagree</th>
<th>Disagree</th>
<th>Neutral</th>
<th>Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>a</td>
<td>Bangla-Pesa has presented new opportunities to the communities</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>b</td>
<td>Bangla-Pesa plays a significant role in this community?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>c</td>
<td>Community members interact more frequently</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>d</td>
<td>Our community is now more empowered as a result of Bangla-Pesa</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>e</td>
<td>Our community has access to social services as a result of Bangla-Pesa</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>f</td>
<td>The rate of crime has gone down courtesy of Bangla-Pesa</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>g</td>
<td>Bangla-Pesa has presented new opportunities to my business</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>h</td>
<td>Bangla-Pesa has led to improvement in my business</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>i</td>
<td>Bangla-Pesa has led to growth in the size of my business</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>j</td>
<td>The rate of unemployment has gone down courtesy of Bangla-Pesa</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>k</td>
<td>I am now able to get financing for my business from Saccos, banks as a result of Bangla-Pesa</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>l</td>
<td>The rate of poverty has gone down since the time we started using Bangla-Pesa</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>
10. To what extent has Bangla-Pesa contributed to the following? Please Tick where appropriate.

<table>
<thead>
<tr>
<th>Contribution</th>
<th>Very Great Extent</th>
<th>Great Extent</th>
<th>Small Extent</th>
<th>Very Small Extent</th>
<th>Not at All</th>
</tr>
</thead>
<tbody>
<tr>
<td>Promoting Trade</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Business Support Service</td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Access to Financing</td>
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</tr>
</tbody>
</table>

11. Have any authorities played any role towards the adoption and use of Bangla-Pesa?
   a) Yes    b) No
   ii) Briefly explain ........................................................................................................................................

12. What role can the county government play in enhancing the adoption and use of Bangla-Pesa?

13. Do you receive any training from the BBN? Briefly explain ........................................................................................................................................

14. Is Bangla-Pesa a sustainable initiative?
   a) Yes    b) No
   ii) Briefly explain? ........................................................................................................................................

15. In what ways has the Bangla-Pesa initiative achieved its intended objective? .................................................................
.................................................................................................................................................................
16. Indicate the extent to which you agree with the following statements based on the scale shown below:

<table>
<thead>
<tr>
<th>Sustainability</th>
<th>Strongly disagree</th>
<th>Disagree</th>
<th>Neutral</th>
<th>Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bangla-Pesa is becoming stronger every day</td>
<td></td>
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<tr>
<td>I support the officials behind Bangla-Pesa</td>
<td></td>
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</tr>
<tr>
<td>The youth in this area are more committed to the success of Bangla-Pesa</td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>The educated in this area are more committed to the success of Bangla-Pesa</td>
<td></td>
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<tr>
<td>Bangla-Pesa has created conflicts in the community</td>
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<tr>
<td>Conflicts are common among the leaders behind Bangla-Pesa</td>
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</tr>
<tr>
<td>Government interference will lead to collapse of Bangla-Pesa</td>
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</tr>
</tbody>
</table>

17. Have you seen any negative impact/bad results since the adoption of Bangla-Pesa?
   a) Yes     b) No
   ii) Briefly explain........................................................................................................

18. What is your own personal opinion on the adoption and use of Bangla-Pesa?
    ........................................................................................................................................
    ........................................................................................................................................
    ........................................................................................................................................

19. What are the threats posed through the adoption and use of Bangla-Pesa?
    ........................................................................................................................................
    ........................................................................................................................................
    ........................................................................................................................................

20. How can these threats be addressed?
    ........................................................................................................................................
    ........................................................................................................................................
    ........................................................................................................................................
21. Have you seen any negative impact/bad results since the adoption of Bangla-Pesa?
   a) Yes    b) No
   ii) Briefly explain........................................................................................................................................
        ........................................................................................................................................

22. Have you witnessed any positive impact/good results since the adoption of Bangla-Pesa?
   a) Yes    b) No
   ii) Briefly explain........................................................................................................................................
        ........................................................................................................................................

Thanks for your time and response.

Kindly Circle as applicable:

<table>
<thead>
<tr>
<th>AREA</th>
<th>01</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bangladesh</td>
<td></td>
</tr>
</tbody>
</table>

Use this section to fill any other findings on Bangla-Pesa

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APPENDIX III
INTERVIEW SCHEDULE FOR KEY INFORMANTS

1. Position in Koru Self-help group: ..............

2. In your own opinion, what is Bangla-Pesa? ........................................................................

3. What is it intended for? .................................................................................................

4. Who regulates its adoption and use? ..............................................................................

5. In what ways has it impacted on the living standards of the local community? ........

6. What benefits does it provide? ......................................................................................

7. What are threats that have arisen or can arise from the adoption and use of Bangla-Pesa?......

8. How can such threats be addressed? ............................................................................... 

9. What role do you think the local leaders and authorities can play in the adoption and use of
Bangla-Pesa? ...................................................................................................................

10. What is your own evaluation of the sustainability of Bangla-Pesa? ...............................

11. What other views do you harbour regarding the use and adoption of Bangla-Pesa? ...........

12. In your opinion how long will Bangla-Pesa survive? Why do you say so .......................