

**International
Institute of
Social Studies**

The logo for the International Institute of Social Studies, featuring the word "Erasmus" in a stylized, cursive script.

**Coping in Crisis: Women's Rotating Savings and
Credit Associations Strategies in Nigeria within the
Context of Covid-19**

A Research Paper Presented by:

CHRISTIE OTUDOR

(NIGERIA)

In partial fulfilment of the requirements for obtaining the degree of
MASTER OF ARTS IN DEVELOPMENT STUDIES

Major:
Social Policy for Development
(SPD)

Members of the Examining Committee:

Dr. Auma Okwany
Professor Irene Van Staveren

The Hague, The Netherlands.
December ,2020.

Disclaimer:

This document represents part of the author's study programme while at the International Institute of Social Studies. The views stated therein are those of the author and not necessarily those of the Institute.

Inquiries:

International Institute of Social Studies
P.O. Box 29776
2502 LT The Hague
The Netherlands

t: +31 70 426 0460
e: info@iss.nl
w: www.iss.nl
fb: <http://www.facebook.com/iss.nl>
twitter: [@issnl](https://twitter.com/issnl)

Location:

Kortenaerkade 12
2518 AX The Hague
The Netherlands

Contents

<i>List of Tables</i>	<i>v</i>
<i>List of Figures</i>	<i>v</i>
<i>List of Appendices</i>	<i>v</i>
<i>List of Acronyms</i>	<i>vi</i>
Acknowledgement	vii
<i>Abstract</i>	<i>viii</i>
Chapter 1 : Introduction	1
1.1 Setting the Context of the Study	1
1.1.1 Entrepreneurial Women in Nigeria’s Informal Sector and ROSCAs	1
1.1.2 Shock-Responsive Social Protection in the Context of ROSCAs	2
1.1.3 The Functioning of ROSCAs in the Context of COVID- 19 in Nigeria	4
1.2 Framing the Research Issue	5
1.3 Justification and Relevance of the Study	6
1.4 Research Aim and Questions	6
1.5 Chapter Outline of the Study	7
Chapter 2 : Exploring the Environment of ROSCAs in Nigeria	8
2.1 Contextual Background of ROSCAs in Nigeria	8
2.1.1 Poverty among Women, Poverty Reduction in Nigeria and Social Protection	8
2.1.2 Formal and Informal Social Protection Measures in Nigeria	9
2.1.3 ROSCAs and Women Empowerment	11
Chapter 3 : Conceptual Framework	13
3.1 Governance Below the State: ROSCAs as Informal Social Protection	13
3.2 Social Capital Theory	14
3.3 The Concept of Shock-Responsive Social Protection Systems	15
3.4 Ostrom’s Institutional Analysis and Development (IAD) Framework	16
Chapter 4 : Research Methodology	20
4.1 Study Area	20
4.2 Research Philosophy and Design	20
4.3 Types and Sources of Data	21
4.4 Sampling Technique	22
4.5 Data Collection	22
4.6 Data Analysis	23
4.7 Limitations and Ethical Considerations	24
Chapter 5 : Findings of the Study	25
5.1 Background Information on Study Participants	25

5.2 Empowerment of Women by ROSCAs	27
5.3 The Impact of COVID-19 on ROSCA operations	29
5.3.1 Effect of COVID-19 on Businesses of ROSCA members	29
5.4 ROSCAs and ROSCA Members' Coping in the Context of COVID-19 crisis	30
5.4.1 COVID-19 implications and the ROSCA's Institutional Arrangements	30
5.4.1 Measures Taken by ROSCAs to Assist Members Ensure Continuity During COVID-19	31
5.5 Existing structural preparedness and state support mechanisms for ROSCAs in the context of covariate shocks	34
5.5.1 Present and Future ROSCA preparation measures for the COVID-19 crisis	34
5.5.2 Present and Future Support from the Government and Non-State Actors for ROSCAs during COVID-19	36
Chapter 6 : Conclusions	39
References	40
Appendix I: Interview Guide	46
Appendix II: Non-Disclosure Form	48

List of Tables

Table 3. 1: Adaptation of IAD Framework in the context of ROSCAs	16
Table 4.1: Research Questions and Sources of Data	21
Table 5.1: The Background data of ROSCA Members	25
Table 5.2: The biographic data of state employees	26
Table 5.3: The Background Data of key Informants	27

List of Figures

Figure 1: Institutional Analysis and Development Framework	17
--	----

List of Appendices

Appendix 1: Interview Guide	45
Appendix 11: Non-Disclosure Form	48

List of Acronyms

ASCA	Accumulated Savings and Credit Association
CARE	Cooperative for Assistance and Relief Everywhere
CBO	Community Based Organization
FCT	Federal Capital Territory
ISS	Institute of Social Studies
MMD	Mala Masa Dubara
NCDC	Nigeria Centre for Disease Control
NGO	Non-Governmental Organization
ROSCA	Rotating Savings and Credit Association
SME	Small and Medium Scale Enterprise
VSLA	Village Savings and Loan Association

Acknowledgement

This research paper won't be complete without acknowledging people who have contributed immensely in making this dream come through. My profound gratitude and thanks first goes to God almighty who has been with me all the way and saw me through this journey. I would also like to specially thank my supervisor, Dr Auma Okwany and my second reader Professor Irene Van Staveren who guided me all through the process and offered well-grounded and well-reasoned insightful comments which were useful in bring this work to fruition.

I extend my thanks also to NUFFIC-OKP for the financial assistance to be a part of the MA program. The stage is set, and it's time to take the world. To Anjali Krishnan, I am deeply indebted to you for standing by me when it looked as if the world was caving in on me and I had to go through the most difficult times of my MA program. Your kind is rare. I am grateful our paths crossed at ISS.

To my beloved parents and family members, for the support, constant calls, and encouragement, thank you. Indeed, this achievement is for us all.

Abstract

Following limited access to public and market-based safety-nets, informal social protection mechanisms still make up the chief cause of risk management for most people in the world. Rotating Savings and Credit Associations (ROSCAs) are among the informal social protection mechanisms in emerging nations including Nigeria. They provide access to funding to individuals that might not have access to the formal credit institutions, especially women who are majorly disadvantaged in accessing formal credit. In the face of covariate shocks, ROSCAs which are successful in controlling idiosyncratic risks are theorized to collapse, with formal mechanisms which are market or public-based being robust against this kind of shocks. A qualitative research design using interviews as data collection tools was used to explore how entrepreneurial women ROSCAs in Nigeria are coping within the context of a covariate shock like COVID-19 and findings reveal that informal social protection mechanisms like ROSCAs have the potential of enabling members to become more resistant to risks and more resilient in cushioning against such shocks in the absence of State support mechanisms.

Relevance to Development Studies

In development agenda, State social protection measures are created with the main aim of reducing poverty and vulnerability by taking the edge off individual's exposure to risks, improving their capacity to manage social and economic risks. However, these measures often have limited coverage to those in need of them. As such, informal social protection measures are important to fill in this gap. Informal social protection measures such as ROSCAs are important safety nets in the society particularly in communities ridden with poverty, lack of access to credit and unreached by state social protection measures. For entrepreneurial women in Nigeria, ROSCAs provide a way of saving, accessing credit facilities and also enhancing their social capital. While ROSCAs are helpful in dealing with idiosyncratic shocks, they may not be effective in addressing covariate shocks such as the present COVID-19 crisis. Understanding how ROSCAs are coping within the context of the COVID-19 crisis is what this study is aimed at; to create an understanding of the capacity of informal social protection measures in addressing covariate shocks.

Keywords

Social protection, ROSCAs, shock-responsive, covariate shocks, COVID-19

Chapter 1 : Introduction

1.1 Setting the Context of the Study

1.1.1 Entrepreneurial Women in Nigeria's Informal Sector and ROSCAs

The proportion of women in the global informal employment is lower (58%) than that of men (63%). Nevertheless, in developing nations, there is a big proportion of women working in the informal sector (92%) compared to men (87%) (Bonnet et al., 2019). According to Bonnet et al. (2019), women in the informal employment make over 90% of countries in Africa, 89% of nations from the Southern part of Asia and close to 75% of countries in Latin American. In Nigeria, Enfield (2019) notes that women have a lesser chance to be efficient within the workplace and have a higher likelihood of working in informal and agricultural sector which are relatively low earning compared to formal labour. In the informal sector, Nigerian women are engaged in small and medium-sized enterprises (SMEs) including roadside restaurants, catering, childcare, hairdressing, event planning, selling farm produce in the market etc.

Although they make a major contribution to the national economy of Nigeria, SMEs do not have sufficient capital, and this is an indication that they have significant challenges in operation such as getting credit and attaining their goals (Thapa, 2015). The lack of long-term finances and the lengthy procedures of getting financial assistance is a huge obstacle that businesspeople in Nigeria are facing (Ezeagba, 2017). The inability of the entrepreneurs to get credit is connected to inadequate income and the lack of assets to serve as collateral (Johnston and Jonathan, 2008; Thapa, 2015). To add to this, women are at a disadvantage when it comes to accessing credit and other financial services. Normally the focus of commercial banks is on men and businesses that are being conducted formally and that way they neglect women who form a big and expanding portion of the informal economy (ILO, 2008). Majority of the entrepreneurs rely on individual funds, resources belonging to the family, money borrowed on credit, and other financial institutions that are not formal such as ROSCAs to provide initial and extra capital (Ademola, 2013). These institutions fill the gap in places where people cannot access formal savings and credit facilities.

A ROSCA is made up of a number of people who have agreed to meet for a specified time duration so that they can borrow and save together, a form of combined peer-to-peer banking, and peer-to-peer lending. ROSCAs are beneficial both socially and economically. Basically, they were designed for pooling funds from different members with the purpose of achieving set of financial objectives (Ademola et al., 2020). To add to the economic benefits of ROSCAs, the gatherings that members do, give them opportunities to feast, drink and network which makes up the social benefits (Hevener, 2006).

In ROSCAs, a group of trusted individuals agree to contribute a fixed amount to build a fund at regular intervals. Meetings are arranged on regular basis and the money collected from the

group members is given to the person whose name has been chosen through a draw or by negotiation . This process continues until all members receive the sum of the money that have been deposited into the fund (Basu, 2011). In different places, gatherings take place in a ritualistic way based on the group's social customs. The difference between ROSCAs is in the area of membership, the contributions made in terms of money and the mechanisms that the members use to enforce their rules (Agengelu, 2012). The membership in a particular cycle of ROSCAs varies from a small number to several members and they can be selected based on their ages, ethnic groups, occupation, religious affiliation, level of education or a particular social tie (Sandsör, 2010). Entrepreneurial women conducting small-business have also turned to ROSCAs as a means of getting capital for their businesses.

Known as *Isusu* in Nigeria, ROSCAs have become increasingly common among women entrepreneurs both in urban and rural areas. Pereira & Salaris (2019) notes that there are many benefits women entrepreneurs gain from ROSCAs. For example, Mwangi & Kimani (2015), notes that ROSCAs were used by women entrepreneurs in safeguarding their funds against misuse by their families. Also, women use ROSCAs for developing networks in order to share skills, and knowledge which improves the degree of women emancipation. Through such social networks, women ROSCA members are able to offer common social assistance to women in their times of need (Pereira & Salaris, 2019). In Nigeria, ROSCAs give women social action through collective strength to lobby, campaign and attain tasks beyond the ability of one woman (Egbide et al., 2020). Through these ROSCAs, women come together, and support each other to take on new ideas and projects which change their lives. However, one of the major negative aspects of ROSCAs is that, lack of consistent contribution based on the terms of the ROSCA will lead to one being ousted from the association. Since ROSCAs are not regulated by any state laws, they can be risky if someone untrustworthy joins. Furthermore, taking part in the activities of ROSCAs entails the opportunity cost of the time that members use to attend meetings and the default risks that the members undergo that could finally result in the collapse of the association (Ademola, et al., 2020). Apart from these, the ROSCAs provide credits that are little and not long term. Despite various studies exploring the usefulness, challenges and impacts of ROSCAs , statistics about the number of ROSCAs, growth patterns and their distribution in the country is largely lacking in literatures.

1.1.2 Shock-Responsive Social Protection in the Context of ROSCAs

According to the Oxford Policy Management (OPM 2017), shocks may be conceptualized as events causing loss in welfare. When they negatively impact big groups at the same time, they are described as being covariate. Such covariate shocks include global or national financial crises, natural disasters, and pandemics. When they fundamentally affect individuals or households, they are deemed to be idiosyncratic. Idiosyncratic shocks include a member of a family being critically ill or dying. Social protection is known to be a crucial policy instrument that is used for tackling

idiosyncratic shocks. However, in the recent past, several studies have tried to show how social protection systems may also become resilient and overcome covariate shocks (Bastagli 2014: Oxford Policy Management, 2017: O'Brien et al., 2018: Watson, 2016). All social protection systems in a way can respond to shocks because they deal in an ex-post or ex-ante way with sudden events that have a negative effect on families and their incomes. However, most social protection systems, particularly informal ones, are designed to support households experiencing shocks as a result of recurring events including sicknesses, loss of employment and death which are termed as idiosyncratic shocks.

Shock-responsive social protection focuses on shocks that impact on a huge part of the populace simultaneously. It encompasses the adaptation of routine social protection programmes and systems to cope with changes following largescale shocks. This can be ex-ante by building shock-responsive systems, plans and partnerships in advance of a shock to better prepare for emergency response; or ex-post, to support households once the shock has occurred (Tebaldi, 2019). In this way, social protection can complement and support other emergency response interventions. A lot of studies on this topic hint to the fact that informal social protection strategies like ROSCAs have the capacity to deal with idiosyncratic shocks connected to personal family or life cycle occurrences but they have reduced ability to overcome wider covariate shocks of various types that impact on the livelihoods and existence of the larger community (Morduch 1998: O'Brien et al., 2018). Alderman and Haque (2007) state that social protection mechanisms that are not formal are always limited and they often collapse when they are subjected to covariate shocks which may include climate shocks. Furthermore, the effects are worse for economically disadvantaged people whose support networks could be most affected by the lack of resources to start with.

While ROSCAs are crucial sources that can be used to mobilize resources at the personal, family and community levels, they are faced with obstacles when covariate and idiosyncratic risks arise. Their weaknesses and strengths must be recognized and dealt with in an effort to improve and make them adaptable to social protection that responds to shocks. There is a need for strengthening the knowhow and evidence base on the shifting types and dynamics of non-formal social protection mechanisms especially in low income countries so as to improve the understanding of their confines and capacities where there are covariate shocks. According to Watson (2016), providing inputs can help to deal with the weaknesses in the mechanisms applied in ROSCAs, for example, in contributing systems where there is potential segregation of people who may not be able to consistently raise contribution funds. Following the existing findings regarding shock-responsiveness of informal social protection systems towards covariate shocks, it is imperative to study how ROSCAs are adapting and can better adapt to covariate shocks. (Watson 2016 ; O'Brien et al., 2018)

1.1.3 The Functioning of ROSCAs in the Context of COVID- 19 in Nigeria

COVID-19 crisis is a significant covariate shock presently disrupting the world. Since it was first reported in December of 2019 in Wuhan ,China, it has spread to many countries rapidly across the globe. The spread of the disease has led to over a million confirmed cases in the first three months. The first case of the disease in Nigeria was confirmed on the 27th of February, 2020 (Nigerian Centre for Disease Control, 2020). Since then, the number of confirmed cases has been growing gradually. The increase in the cases of COVID-19 in Nigeria is still being observed and current statistics from the Nigeria Centre for Disease Control(NCDC) shows that the country has 60,982 cases that have been confirmed as of 15th October, 2020 (Nigerian Centre for Disease Control, 2020). In an effort to control the increase of the disease, the president of Nigeria ordered the cessation of all movements in the Federal Capital Territory(FCT) and Lagos State for 2 weeks which took effect from 11 pm on Monday, 30th March 2020.However, these measures have since been changed to an eased lockdown and approved interstate movement outside curfew hours until presently.

In the face of COVID-19, the normal operations of women ROSCAs in Nigeria are largely disrupted. The COVID-19 crisis has a significant impact on women's income streams. The benefits that accrue to the members of ROSCAs and the associations' continuity are however dependent on the regular income of members so that they can be able to pay their contributions on time. Members of women ROSCAs often get money to pay for the ROSCA contribution from their small business operations (Hammawa, 2016). Since the confirmation of the first case on 27th February, 2020 and the continued spread of the pandemic, the government of Nigeria issued lockdown directives that resulted in the closure of several business premises, particularly those which could not be done from home. The businesses that have been shut down mainly include small businesses and start-ups such as hairdressing salons and small food outlets, which are mostly run by women (Aliyu, 2020). World Bank (2020) notes that in light of the economic and human crunch caused by the COVID-19 crisis, the present gender disparities in economic opportunities may be aggravated, as evident in the Ebola pandemic which affected most West Africa countries from 2014-2016. In Nigeria for instance, women were faced with worse employment challenges and stayed without work for a longer time compared to men because women were disproportionately in the hardest-hit economic sectors (Bank, 2020). Also, measures to control the increase of COVID 19 globally and in Nigeria have limited social interactions which in turn inhibit members of ROSCAs from conducting their meetings physically. Therefore, apart from the disruption of the financial operations of ROSCAs, the social support offered by ROSCAs would also be disrupted by measures taken to prevent the spreading of the COVID-19 pandemic. This is because such social support, which includes emotional support depends on the regular meeting of the members (Sayedi, 2015). The governance of ROSCAs also conducted through meetings held by members may be affected by COVID-19 crisis and its associated implications.

Based on the premise that the COVID-19 crisis poses a danger to the continuity of entrepreneurial women ROSCAs in Nigeria and evidence demonstrating the ill-preparedness of informal social protection mechanisms such as ROSCAs to cope with the effects of covariate shocks (Watson 2016 ; O'Brien et al., 2018), this paper sought to investigate the coping of these ROSCAs within the context of the COVID-19 crisis.

1.2 Framing the Research Issue

Watson et al. (2017) posit that informal social protection lacks mechanisms and capacity to effectively address prolonged covariate shocks such as famine, economic crisis, conflict-related crises and extreme climatic events. Arias et al. (2005) also notes that efforts to reduce risks at the local level through local social protection that supports families under ordinary circumstances often flop under circumstances of lengthy covariate shocks. Such lengthy covariate shocks are often accompanied by economic downturns, which increase the vulnerability of all households. ROSCAs are presently a growing, important, and easily accessible financial scheme for many women in Nigeria in light of ineffective social protection measures by the state and discrimination in formal credit (Egbide et al., 2020). However, as they fall under informal social protection, women entrepreneurs involved in ROSCAs in Nigeria are at risk of experiencing challenges because of COVID-19 disaster, which is a current problem that poses a threat to the functioning of ROSCAs.

The crisis has negatively impacted the income-generating activities of members of ROSCAs including jobs and business. World Bank (2020) notes that in African countries, businesses run by women are especially susceptible to shocks, because they are excessively informal and are located within segments of the economy that have little profit. High uncertainty and strict lockdown measures are progressively weighing on the Nigerian economy, and the higher burden falls on informal businesses that cannot be conducted via online platforms that are being operated by women (Ozili & Arun, 2020). These effects of the COVID-19 crisis may adversely affect women ROSCAs in Nigeria based on previous findings regarding the shock-responsiveness capacities of informal social protection systems.

While numerous studies investigating the shock-responsiveness of social protection have focused on formal social protection systems, few studies have examined shock-responsiveness in the context of informal social protection like ROSCAs (Watson, 2016). Social protection mechanisms and systems that are not formal have a critical part to play in the economies of native populations in different countries of Africa such as Nigeria.

Furthermore, Watson et al., (2017) note that strategic thinking and research about how informal social protection systems may be boosted to support families to handle wider covariate shocks and risks has not been included in national strategies concerning social protection. With the uncertainty regarding when COVID-19 crisis will end and also how people and economies will

recover from it, the survival of ROSCAs run by women entrepreneurs may be threatened if they cannot properly cope in the context of the crisis. In light of the pandemic and the possible risks for ROSCAs, this study's purpose is to investigate how the present COVID-19 crisis is affecting women ROSCAs, the coping strategies adopted by members of these ROSCAs to ensure their continuity, improvement of member's welfare and ways through which ROSCAs can be supported by the state to improve the resilience of ROSCAs to covariate shocks like COVID-19.

1.3 Justification and Relevance of the Study

Watson (2016) observe that non-state social protection measures such as ROSCAs that serve families under ordinary situations frequently fail when subjected to situations of protracted covariate shocks emerging out of economic recessions and pandemic, which increase the vulnerability of all households. Yet empirical research on how informal social protection systems can cope with wider covariate shocks such as COVID-19 crisis is largely absent from research on informal social protection mechanism. Therefore, the present study hopes to fill in this research gap by investigating how women ROSCAs are coping in the effects of COVID-19 crisis in Nigeria. Informal social protection measures such as women ROSCAs are playing an important part in the economic status of women in Nigeria especially where there is inadequacy of the formal social protection systems.

The continued vitality of these informal social protection measures is seen as a social capital that is usually the initial form of protection when it comes to mitigating risks of common idiosyncrasies such as sicknesses in households (Pereira & Salaris, 2019). However, larger covariate risks such as the COVID-19 crisis may threaten the vitality of informal social protection measures by limiting social interactions and reducing or eliminating the income of members. Therefore, the findings of this research may contribute to the strengthening of evidence bases, on how informal social protection measures such as ROSCAs can cope in the context of shocks such as COVID-19 in order to minimize the negative effects of the shock on their members and also to ensure their continuity.

1.4 Research Aim and Questions

The operations of women ROSCAs in Nigeria and eventually their survival is threatened by the COVID-19 crisis and its associative effects. Therefore, the research aims at examining the impact of COVID-19 crisis on women ROSCAs in Nigeria and the coping strategies of the associations in mitigating the impacts of COVID-19 crisis.

Main research question:

How are Women ROSCAs coping in the context of COVID-19 crisis?

The specific study questions:

- What are the ongoing effects of COVID-19 crisis on women ROSCA operations in Nigeria?
- What are the existing state and non-state support mechanisms for ROSCAs in the context of covariate shocks?
- How can the structural preparedness of ROSCAs be improved to cushion the impacts of covariate shocks?

1.5 Chapter Outline of the Study

The structure of this study includes five chapters. The first chapter presents the background of the study, study objectives, statement of research problem, and justification of the study. Chapter two reviews the existing literature that discuss concepts identified and used in the study. The review of literature covers broad areas such as conceptual framework, and findings of past studies with regard to the operations of women ROSCAs in Nigeria. Chapter three explains the conceptual framework relevant for this study's research questions

Chapter four examines methodology adopted for the study in terms of research designs, sampling techniques and sample size, data collection instrument, techniques in data collection and data analysis. Chapter five presents analysis, interpretation and discussion of research findings. The data is presented in qualitative form and is discussed into meaningful findings. Chapter six which is the final chapter encompasses a summary of the study in form of the main conclusions of the study as well as suggestions for future research.

Chapter 2 : Exploring the Environment of ROSCAs in Nigeria

2.1 Contextual Background of ROSCAs in Nigeria

2.1.1 Poverty among Women, Poverty Reduction in Nigeria and Social Protection

Poverty is a pervasive problem in sub-Saharan Africa as a result of structural alteration since the 1980s and the impacts of economic recession. The poverty issue in Nigeria has been tackled by many regimes. Nevertheless, it is still a paradox of poverty in a place where there is much wealth and high levels of growth in the economy (Omoyibo, 2013). This could be true because the country has a wealth of natural and human resources and its national revenue has been growing but a huge part of the population is engulfed in abject poverty because of the unequal distribution of resources, incomes and wealth (Danaan, 2018). According to Dauda, there is a difference between poverty in Nigeria and the poverty seen in other countries because, in as much as there is economic growth, poverty still dominates, where the North- West and North –East geopolitical zones lead in the poverty indices. For example, from 2000 to 2014 on average, the GDP of Nigeria increased at a rate of 7 percent every year (The World Bank, 2019). Economic growth was at 1.9 percent in 2018 and it stabilized at 2 percent in the first 6 months of 2019. The domestic demand of the country has been limited by stagnant private consumption in a period of high inflation, which hit 11 percent during the first six months of 2019 (The World Bank, 2019). Bertoni et al. (2016) notes that over the last two decades, the poverty rates in Nigeria declined, but the number of the poor remained unvaried.

Women make up more than 60 percent of the people most affected by poverty in Nigeria and based on the International Monetary Fund (IMF) figures that Nigeria has more than 87 million people in abject poverty, can be interpreted to be about 52 million women who are under extreme poverty as of 2017 (International Monetary Fund, 2017). From these figures of the poor in Nigeria, women are the majority especially because of their roles which are heightened by socio-cultural norms with a high level of susceptibility to intimidation, deprivation, and untold suffering. As a result of this, most of these women are forced to enter the informal economy which increases their vulnerability and poverty level (Ifeanyi et al., 2019).

Many policies and programmes designed to fight poverty in the form of social protection measures have been developed to deal with poverty in Nigeria including social protection policies. The Social Protection Policy for Nigeria is a broad policy framework that includes connected social agenda paradigms meant for reducing poverty and providing a good life for every citizen (Danaan, 2018). The absence of a strong policy for social protection at the federal level is a major impediment to implementing social protection at the State level (Holmes, 2017). More so in real life, up to this

point, programmes have been founded on a thin understanding of social protection whose main focus is on conditional cash transfers and two mechanisms for funding health that are controlled by the federal government and are designed as ad hoc small scale and state controlled programs with very little coordination between the states and the federal government and between sectors.(Yakubu et al., 2018). Furthermore, issues of low coverage have been reported for social protection programs including Maternal and Child Health Care, Conditional Cash Transfer for girls education and the Conditional Cash Transfer in care of the People (Holmes & Morgan, 2011: Holmes, 2017: Yakubu et al., 2018). Although previous governments in Nigeria has attempted to improve the status of women in the country though various policies aimed at bringing them out of poverty, the reality is not encouraging because many women are still immersed in poverty.

2.1.2 Formal and Informal Social Protection Measures in Nigeria

The need to alleviate poverty has led to several African states including Nigeria and international agencies to emphasize social protection as a critical strategy of poverty alleviation and livelihood improvement. Devereux & Sabates-Wheeler, (2004) define social protection as certain measures and interventions, both informal and formal that offer social support to economically underprivileged people and families, social equity to protect individuals against social risks like abuse, social insurance to shelter individuals from hardships and outcomes of income shocks as well as social services to groups who require special care. Categories of social protection measures include social protective measures that are protective, preventive, promotive and transformative. Furthermore, these measures can be categorized into both the state and non-state social protection measures. Awortwi & Walter-Drop (2017) mentions that state social protection measures include all programs of social protection funded by the state while funding sources for non-state social protection include international NGOs, national NGOs, District-wide NGOs and CBOs and associations.

World Bank (2019) notes that despite being a middle-income economy, Nigeria's progress in addressing poverty and human capital is slow. The number of persons that live in extreme poverty has continued to grow between 2011 and 2016, and many more vulnerable individuals are falling into poverty. Realizing the need to make significant advances in the nation's poverty situation, the government of Nigeria has taken several steps to create and implement a national social protection policy in supporting the pro-poor agenda. Furthermore, the government has also augmented the national level budget allocated to social protection programs. Despite these efforts, significant challenges are still present in Nigeria's social protection system. World Bank (2019) reveals that Nigeria spends fewer funds on social protection than every other lower-middle-income nation and many of its regional peers. The limited number of social protection measures that do exist are faced by problems such as weaknesses in targeting, fragmentation and low coverage. Furthermore, Aiyede et al. (2017) points out that existing social protection measures in Nigeria lack the linkages

to productive opportunities for its relatively huge and growing population. Egbide et al. (2020) suggest that the limitations of state social protection system coupled with the restriction in access to formal credit have led to more and more women forming and joining informal associations such as ROSCAs in Nigeria.

According to Awortwi & Walter-Drop (2017) ROSCAs are also developed as a response to the limitations of the government's formal social protection system in helping the vulnerable and the poor. ROSCAs are considered as part of these non-state social protection measures. Usually, they are created to improve the welfare and promote the economic status of participating members. There are different forms of ROSCAs, but the major characteristic is that they are self-selected, voluntarily formed groups of individuals who agree to save and contribute a pre-committed amount of money in every period towards the creation of a fund. This fund is then used to allot fixed amounts to each member in turn in accordance with some prearranged principle. Once a member has received the fund, she is excluded from any allotments until the ROSCA ends but must continue to participate in contributing to the fund (Guha & Gupta, 2005). In some ROSCAs, such as those investigated in this study, a percentage of the contributions made during each period are set aside as savings pool where members can borrow from while the rest is used in the fixed amounts given to members in turn.

Most intellectual debates concerning informal finances have been founded on two viewpoints: the dualism and the residual paradigms. The dualism paradigm explains that informal financial institutions exist because of the subordinate role they play to the formal financial institutions and hence create market segmentation. If market segmentation occurs, it is not as a result of regulation but rather because non-state social protection measures play an important role of redistributing income among members of the community and offer them a form of security by satisfying their ever-changing liquidity requirements (Oduro, 2010). It is easier for non-state social protection measures to operate in this setting compared to the state social protection measures.

The residual paradigm posits that the inefficiencies present in the formal financial system and the inappropriate manner in which the formal financial institutions across the globe were implemented encouraged the formation of informal financial institutions. The residual paradigm was advanced by Shaw (1973). This scholar posited that informal finance institutions are necessary because of the excessive regulation present in the formal financial institutions by using interest rate ceilings, direct credit policies, and preferential allocation of credit which led to the disruption of the economy. This disruption resulted in a high cost of transaction for the poor and disadvantaged people residing in rural areas hence heightening the formation of non-state social protection measures. Moreover, Fischer (1994) explains that the rural economies of many African nations need financial systems to provide small loans with low transaction costs and low risks but the state social protection measures do not have the capability of providing this service as it is taken over by non-state social protection measures. Similarly, Ardener & Burman (1995) adds that non-state

social protection measures are better suited to offer short-term loans/credit as they are closer to the customers and hence can address their changing financial needs. ROSCAs can be considered as non-state social protection as they do not operate under the formal structure of social protection.

2.1.3 ROSCAs and Women Empowerment

Most social protection programmes and associations have the capacity to possess several objectives such as a focus on different gender-related vulnerabilities and risks. This is achieved through addressing social, economic, and cultural rights along with exclusion and discrimination. The transformative and promotive concepts of social protection are particularly important for the elimination of discrimination and exclusive practices because they are integrally preventive and protective (Kabeer, 1997). Molyneux and Thomson (2011) confirm this assertion by explaining that programmes that are designed to address a certain target group are more effective if they promote awareness of rights by providing pertinent information, knowledge, and skills meant to facilitate economic and social empowerment. In a similar manner, programmes that are gender-sensitive address socio-cultural values and norms and also tackle the anomalies in them so as to ensure gender equality in such communities and ultimately minimize vulnerabilities and poverty.

The word empowerment has its root in the word power. Pakkanna (2020) explains that empower has two meanings, first is to give power or authority to, and second is to give ability to or enable. The context of the first meaning is in a sense of a transfer of power or delegation of authority. Meanwhile, the context of the second meaning is the effort to make someone to be capable and not powerless. Both of these meanings are the reason why the empowerment of women, in relation to their roles, becomes important and vital in development. Considering the descriptions of empowerment, women empowerment is seen as a process where women are allowed to organize themselves, to enhance their self-sufficiency, to affirm their independence in being able to make decisions and to control resources that they use to challenge and eliminate subservience (Keller and Shuler, 1991). The main tenets of women's empowerment are to ensure that they are able to make choices and affect outcomes that they consider important for them or their families (Kabeer, 2001). Therefore, Haque et al. (2011) conclude that empowerment is the process of eliminating factors that result in powerlessness or helplessness.

In the case of women empowerment, what is most important is their ability to influence financial matters in their families and in relation to their male family members. Being able to control financial matters would allow women to enhance their status, self-esteem, self-determination, and power relations in their families. Paveern et al. (2004) add that enhancing social networks with neighbours and other social groups is also important in enabling them to enhance their empowerment. Golla et al. (2011) explain that women have the ability to succeed and advance their economic positions and this would necessitate having the power to make economic decisions and act on them. Material resources are crucial aspects of women empowerment. One of the main

notions that promote the subordinate status of women is founded on the perpetuated notion that individuals who have nothing cannot do anything. Therefore, social protection programmes and associations aim to ensure support of women to build their capacity to further their mutual interest and work together collectively to contest structural factors that facilitate their discrimination.

Chapter 3 : Conceptual Framework

3.1 Governance Below the State: ROSCAs as Informal Social Protection

A huge proportion of inhabitants in African live in delicate conditions and therefore, they have high levels of susceptibility to whatever kind of shock or drastic change that occurs; their social situation and even their lives are acutely endangered. They need social protection to help them survive economic and social shocks. In many countries, State responsibility for vulnerable citizens' welfare is specified in the constitution or legislation. However, in cases of "limited statehood" where government is unable to deliver adequate social protection, non-state actors and institutions have come to the people's aid. Furthermore, the present growth or development trajectory has not been adequately inclusive in higher incomes and wage employment, prompting people to come together and form non-state social protection measures (Risse, 2011). Non-state collective practices of social protection are widely practiced, but most times are disregarded by national social protection policies and programmes. Additionally, there is little, or no support provided to encourage and sustain the said initiatives. Certain principles characterize self-help groups. These principles include the fact that they are propelled by the principles of democracy, solidarity, and reciprocity and depend on members' participation and ownership who are bound by common interests and needs. Their highest value is in reaching areas that are often unreached by public programmes (Vinci et al., 2014). Most informal social protection programs are not widely recognized and supported by laws or national polices but are rather entrenched in the local communities' social structures (Watson, 2016).

They are usually community savings and loan schemes, such as Village Savings and Loan Associations (VSLAs), Accumulated Savings and Credit Associations (ASCAs), Rotating Savings and Credit Associations (ROSCAs), and self-help groups. For women ROSCAs, the drive for forming these associations stems from the need to address their vulnerabilities as well as the discrimination that they face in formal financial institutions in accessing credit from the same (Lairap, 2004). The author notes that women are confronted with different types of discrimination including their financial and socio-economic exclusion as well as gender bias of formal financial institutions. Apart from redeeming women from discrimination that they face in accessing credit from formal financial institutions, ROSCAs offer a variety of benefits for women. For instance, evidence from Anderson & Baland (2002) suggests that money from ROSCA contributions enhanced the relative bargaining power of women within, the ability to decide at the home and power over family resources. Pereira & Salaris, (2019), note that the benefits of ROSCAs supersede the financial spectrum and encompasses social benefits. The concept of governance below the state

is employed to examine how ROSCAs are using their own governance mechanism and resources to deal with the COVID-19 crisis and its effects.

3.2 Social Capital Theory

Recent application of social capital theory to the assessment of community and household resilience in times of emergencies and shocks opens up novel ways of conceptualizing measures of informal social protection, to analyse their capability in responding to shocks (Blackburn et al., 2014). Social capital is viewed as the driving force of informal institutions such as ROSCAs that makes it possible for collective action, including responding to shocks. This is also seen to take several forms such as connecting social capital, and binding social capital (Watson et al., 2017). Fadiga et al., (2004) explains that social capital such as networks of relationships, shared norms, as well as trust are important factors offering explanations on how institutions such as ROSCAs have remained sustainable. The theory of social capital establishes a firm connection between ROSCA members' selections and their social networks because it avails knowledge, chances, people and wealth resources. Hammawa & Hashim (2016) notes that one of the advantages of women ROSCAs is that they offer social capital where women get to know information and contacts within the ROSCA. In similar thought, According to Aldrich (2012), there are three types of social capital that help communities in the preparation of dealing with or recovering from covariate shocks. Firstly, there is bonding social capital which represents the connections between members of a given community. This is dependent on principles of cooperation, reciprocity, and trust and these are usually required in times of disasters. Within this context, the people work together to help each other with the coping and recovery. The second type is the bridging social capital that links individuals from one group or community to individuals from other groups and communities. This facilitates connections to broader social and economic resources and other external assets which contribute to enhancing the community's resilience. The third type is connecting social capital which encompasses reliable social networks that interact across categorical official boundaries of society (Aldrich, 2012). This is perceived as a vertical connection between a network and certain type of power or authority and is crucial for the resilience and economic development because they offer information and resources that may be absent in a given community.

The theory of social capital will be used to examine the resources utilized by ROSCAs to cope with covariate shocks such as COVID-19 crisis. The theory will also be used to analyse the findings regarding how women entrepreneurs in the ROSCAs are tapping the resources entrenched in the ROSCAs in order to cope with the COVID-19 situation. In the discussions of findings, the theory of social capital will be employed in analysing how ROSCAs can improve their social capital to adapt to future covariate shocks such as COVID-19 through their own initiatives and also support from the state.

3.3 The Concept of Shock-Responsive Social Protection Systems

Covariate shocks create major problems in social protection systems. Firstly, these systems can be placed at risk, and secondly, they may need to have programmatic changes and an extra investment for addressing their impacts. For this, improving the shock response of a social protection system is necessary for improving resilience on various levels such as the communities, the family, and individuals. Both formal and informal social protection measures are basically known as crucial tools for dealing with idiosyncratic shocks, but they have been found lacking when it comes to coping with covariate shocks. In recent times, there has been more utilization of the 'social capital' concept in analysing community and household resilience when subjected to stresses and shocks (Frankenberger et al., 2013). This has resulted in new ways of conceptualizing informal social protection systems and assessing their capability to address both covariate and idiosyncratic shocks (Blackburn et al., 2014). Social capital is considered to be the force that drives informal institutions and enables collective action. The groups involved take community-based collective actions that are either constrained or supported by external or formal initiatives such as State institutions and social protection programmes.

Aldrich (2012) presented a conceptual framework that posits that communities should utilize the highest forms of 'bonding', 'linking' and 'bridging' social capital in order to obtain the best resilience especially if subjected to covariate shocks. Having these forms of social capital would allow individuals to draw on resources that are not present in the affected community. The conceptual framework also suggested that all the three forms of social capital should be boosted and maintained in order to ensure long term community resilience to stresses and shocks (Frankenberger et al., 2013). By doing this, communities would be able to take actions that enhance their absorptive capacity, adaptive capacity, and transformative capacity. Absorptive capacity is the capacity to reduce contact with stresses and shocks and rapidly come back to normal in the event of a shock. Adaptive capacity involves making informed and proactive decisions concerning alternative livelihood strategies depending on the changing circumstances. Transformative capacity involves changing and improving conditions under which individuals are living. It is suggested that the available social protection systems may be enhanced by providing risk-pooling, cost-effective, and reinsurance solutions that would safeguard against risks they cannot handle on their own (Decron, 2002; Decron, 2004; Clarke & Decron, 2009). A good example of this is a movement called 'The Mata Masa Dubara (MMD) or 'Women on the Move' in Niger that has support from CARE Niger that provides technical support and add various features to create village savings and loans associations (VSLAs) that are necessary for generating higher cushioning to serious climate change impacts. The conceptual framework by Aldrich (2012) will be adapted to investigate how ROSCAs are mobilizing, bridging, linking and bonding social capital to cope with the COVID-19

crisis and also how the ROSCA members think they can strengthen the association to address the effects of covariate shocks such as COVID-19 in the future.

3.4 Ostrom’s Institutional Analysis and Development (IAD) Framework

The IAD framework is important for perceiving intricate combined action challenges by having them divided into action arenas which are reduced pieces of comprehensible function. When this framework is used, the individual making the analysis makes the assumption that the action situation structure is permanent. For there to be an action situation, actors should be well positioned. Actors possess choices in the present structures and regulations. The institutional arrangements of the IAD framework may be investigated through 7 types of rules. These rules types as identified by Ostrom are similar for all common-pool resource agreements and which have made them successful and long-enduring in maintaining sustainability. These design principles include similarity between regulations and local conditions, known borders, collective-choice plans, improved restrictions for violators, monitoring systems, recognition of rights to organize and conflict-resolution mechanisms (Ostrom, 2002: Van Laerhoven & Ostrom, 2007). The context of ROSCAs can meet the seven primary institutional arrangements with regards long-enduring common pool resource institutions as was outlined by Ostrom’s framework.

Table 3. 2: Adaptation of IAD Framework in the context of ROSCAs

Institutional arrangements of the IAD Framework	In the context of ROSCAs
Clearly defined boundaries.	There are rules that designate the amount to be paid, and the duration of payments.
Congruence between appropriation and provision rules and local conditions.	Rules guiding the ROSCAs, are adapted and adjusted to current local conditions.
Collective-choice arrangements that allow most resource appropriators to participate in the decision-making process.	The ROSCA members participate in making and modifying the operational rules.
Effective monitoring	The appointed leaders regularly audit the conditions of the ROSCAs and the behaviour of members with regard to making contributions .
Graduated sanctions for those that violate the rules	The leader of the association, along with the other members, is also responsible for imposing

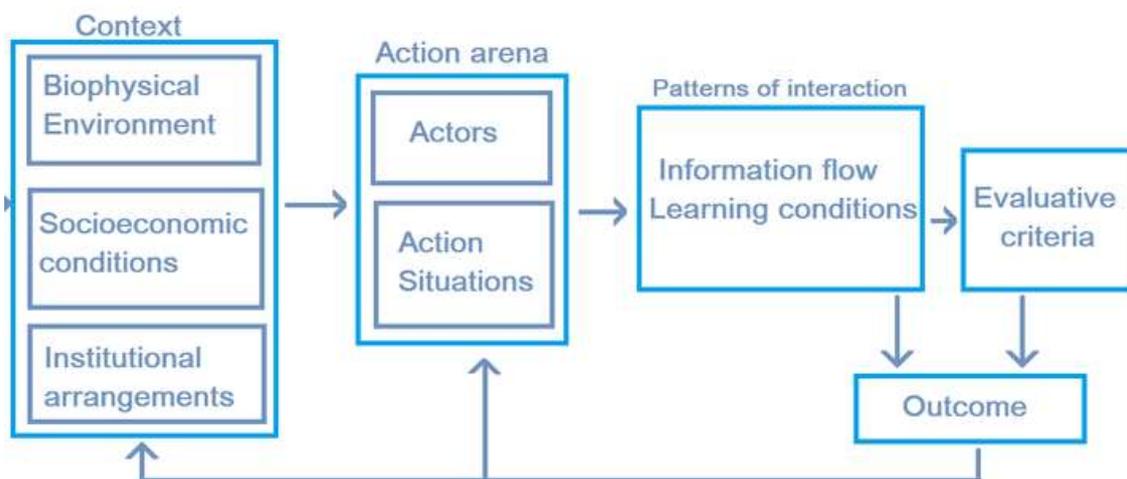
	fines and sanctions to enforce the agreed upon rules of the ROSCA.
Conflict-resolution mechanisms	ROSCA members have arenas to resolve conflicts between members or between leaders and members .
Minimal recognition of rights to organize	ROSCA members has the right to devise their own institutions and are not challenged by external governmental authorities.

Source: Author's own

Of particular interest in this study is the principle concerning congruence between rules and local conditions. This is because this principle will allow the research to explore how ROSCAs have adapted their rules of engagement to the present needs and circumstances of their members.

According to Hess (2005) the IAD is basically suitable for comparative analysis of how people unite, develop communities and companies and decide and form rules for sustaining resources and achieving desired outcomes. In studying outcomes from combined choice conditions, actors come under the influence of institutional plans, the socio-economic situations and physical surroundings- Figure 1.

Figure 1: Institutional Analysis and Development Framework



Adapted from Ostrom (2005)

The biophysical environment is made up influencing factors from the biological and physical environment that affect actors in an institution. Socioeconomic conditions comprise of influencing factors from the social and economic environment that affect actors in an institution. Institutional arrangements have to do with the rules determining the scope, borders, place, choice and pay offs. This refers to who has the highest likelihood of being impacted or not impacted by the happenings in the area of action. These are vital independent variables within institutional analyses because the

regulations determine the incentives faced by each of the actors and eventually, they are instrumental in the determination of behaviour (Ostrom, 2010). Actors are the individuals who withdraw resource units from a resource system.

The action arena is the place where those taking part in the study are faced with action situations, develop strategies and contact other participants to plan and invest resources into acceptable results that are the contributions of cost and benefits that favour a participant, and the interests of the individual and the group. Interaction patterns are the many influences in various situations of activity where interaction patterns are created, and they give birth to unpredictable outcomes. Through the investigation of such patterns it is possible for an individual to identify the institutional incentives of various actors in a particular situation of action (Ostrom, 2011). Due to the design of the framework, the incentives may be connected to particular factors that are perceived to be the source of the seen factors. The result, the level at which the resolution of the social dilemmas is obtained can be appraised with various criteria including effectiveness, sustainability, efficiency and equity. It is a reiterative process because whichever result is obtained affects the variables and the action arena for interactions in the days to come. In the various interaction patterns, those taking part have different opportunities with which they can learn from the knowledge provided by other people depending on the social contacts they have. The assessment criteria entangle the assessment of the pay offs and results of an action situation and they may be based on different factors including equity and effectiveness. Nevertheless, the interactions in the action arena determine the terms by which the criteria matter the most (Ostrom, 2010). The outcomes can be new policies, new regulations, retaining of old policies/regulations, credit taking as well as incremental policy changes.

Understanding ROSCAs as institutions, this paper uses the IAD framework for explaining and predicting the outcomes of how ROSCAs and their members address the effects of covariate crises such as COVID-19 on them. This will create an understanding of how ROSCAs operate and have changed in the face of covariate shocks. In this paper, the biophysical environment is understood as the COVID-19 crisis and its associated restrictive measures to prevent wide spreading. The socio-economic conditions will refer to the socio-economic effects of the Corona virus pandemic on the social and economic conditions of ROSCAs operated by women entrepreneurs studied in this paper. The actors are the members of the women ROSCAs under investigations while the action situation will be understood as the effects of COVID-19 on women ROSCAs that the actors have to cope with. In the context of this study, the patterns of interaction refer to the process that ROSCAs organize and direct resources to cope with the COVID-19 crisis and its consequences. The evaluative criteria are the methods and indicators chosen by the ROSCA members to identify the most appropriate ways of coping with the COVID-19 crisis. The outcome in this study indicates the measures adopted by ROSCAs investigated to cope with the COVID-19 crisis. ‘Ostrom’s Institutional Analysis and Development Framework’ will be utilized to create a framework for

analysing how the institutional arrangements of ROSCAs by entrepreneurial women in Nigeria have been affected by the COVID-19 crisis and also how these arrangements have changed in the face of the crisis.

Chapter 4 : Research Methodology

4.1 Study Area

Calabar Municipality is a Local Government Area in Nigeria. It is headquartered in Calabar city. Calabar municipality is 142 km² in size and in 2006 it had a population of 183,681. Based on the many programs launched in Calabar during the Duke's government, Calabar is popularly called Nigeria's tourism capital. The regime made Calabar, Nigeria's cleanest and the friendliest city to the environment (City Population, n.d). Shifts to a services-based economy in Calabar Municipality and the pride linked to the female businesses are creating opportunities for women to occupy a more responsible role in entrepreneurship in this area. From the researcher's contact with women doing small scale business in the Calabar Municipality area of Cross River State, it was evident that most women who do small-scale businesses often form ROSCAs hence it was a suitable area for me to locate my study on the coping of entrepreneurial women ROSCAs in the context of the COVID-19 crisis which has major effects on small- and medium-sized businesses.

4.2 Research Philosophy and Design

The two major research philosophies followed in social science research are positivist and interpretivist research philosophies. The positivist research philosophy posits that it is possible to objectively comprehend the social world. In this philosophy, the scientist is considered an analysis who analyses matters objectively and based on that detaches himself from individual values and functions independently (Žukauskas et al., 2018). Contrarily, interpretivism requires that the researcher interprets various aspects of the study. Therefore, interpretivism brings in human interest in the study. Therefore, this philosophy places emphasis on qualitative analysis as opposed to quantitative analysis. The interpretivist approach is founded on the naturalistic method of collecting data such as observations and interviews (Ryan, 2018). This research will follow the interpretivism research philosophy since it seeks to uncover the real view of the resilience of ROSCAs through the understanding of ROSCA members' experiences in the associations in light of the COVID-19 crisis. A qualitative research design will be employed where qualitative data will be used to obtain answers to the research questions. Qualitative research is based on exploration and it focuses on explaining how, and for what purpose a given phenomenon behaves the way it behaves in a given context (Maxwell, 2012). Qualitative research was used because it provides rich and comprehensive picture that can be developed about the behaviour of people in certain ways and how they feel about their actions.

4.3 Types and Sources of Data

Data collection was done using primary and secondary data sources in conducting the study. Primary data comprised of opinions of ROSCA members as well as government and non-governmental actors involved in regulating and supporting ROSCAs about the coping of ROSCAs in the context of COVID-19 crisis. The primary data was obtained from different groups of research participants. The participants included 4 key informants from CARE Nigeria, an NGO which works to support informal microfinance organizations by providing assistance to basic needs regardless of background to people who are susceptible such as womenfolk and girls through its sponsored Village Savings and Loan Associations and 4 key informants from the Cross-River State Ministry of Humanity and Social Welfare in charge of self- help groups. Another group of participants comprised 25 entrepreneurial women who are part of ROSCAs. The Secondary data used comprised of information's related to ROSCAs and their coping in the context of covariate shocks. The secondary data sources are indicated in Table 4.1 below.

Table 4.1: Research Questions and Sources of Data

Data Sought from participants	Type of data required	Data sources	Data collection method
What are the ongoing effects of COVID-19 crisis on women ROSCA operations in Nigeria?	Secondary data	Journal articles, organizational websites, websites of government departments, newspaper articles and books	Online and offline literature search and review
	Primary data	<ul style="list-style-type: none"> • Entrepreneurial ROSCA members 	Online interviews
What are the existing state and non-state support mechanisms for ROSCAs in the context of covariate shocks?	Secondary data	Journal articles, organizational websites, websites of government departments, newspaper articles and books	Online and offline literature search and review
	Primary data	<ul style="list-style-type: none"> • Entrepreneurial ROSCA members • Key informants from CARE Nigeria • Key informants from Cross-River State Ministry of Humanity and Social Welfare 	Online interviews
How can the structural preparedness of	Secondary data	Journal articles, organizational websites, websites	Online and offline literature search and review

ROSCAs be improved to cushion the impacts of covariate shocks?		of government departments, newspaper articles and books	
	Primary data	<ul style="list-style-type: none"> • Entrepreneurial ROSCA members • Key informants from CARE Nigeria • Key informants from Cross-River State Ministry of Humanity and Social Welfare 	Online interviews

4.4 Sampling Technique

I employed a hybrid sampling technique by combining purposive sampling method and snowball sampling method to select the participants for the study. Purposive sampling is also called judgmental, subjective or selective sampling and is one of the techniques practiced under probability sampling (Etikan et al., 2016). The goal of non-probability sampling is to investigate various units based on the researcher’s decision. Purposive sampling has its main focus on specific population characteristics that the researcher is interested in and they make it possible for the researcher to get answers to the research questions (Etikan et al., 2016). Therefore, for this study, the participants included people involved in the running of ROSCAs including ROSCA members, government and non-governmental actors involved in regulating and supporting ROSCAs.

In snowball sampling the respondents carry out recruitment for other respondents for a study (Sadler et al., 2010). I used this sampling to get participants who are members of ROSCAs. I had used the help of a research assistant to identify and make initial contact with five women-ROSCAs of different informal businesses from Calabar Municipality in Cross River. I established contact with five members from each of these ROSCAs, requested their participation in the study and had requested them to assist me get other participants by connecting me with four other members of their ROSCAs. Therefore, the number of participants from the ROSCAs added up to 25.

4.5 Data Collection

Semi-structured interviews were used to collect primary data. The interviews were done through Skype and WhatsApp. Interviews involve conversations and the interviewer inquiries from the respondent about the information. The interviews are designed in a structured manner to meet the objectives of the researcher (Newcomer et al., 2015). Online interviews have been chosen

particularly because it is an appropriate method of collecting data for this study because of measures put in place to control the increase of COVID-19 which puts limit to physical movement and contact. The secondary data was obtained from peer-reviewed journal articles, research reports, books and government publications. Because it is majorly founded on data that was collected by earlier studies, secondary research is done faster and without much cost.

4.6 Data Analysis

Thematic data analysis technique was employed in analysing the data in this study. This technique has been defined as a method that involves identification of patterned meaning in a set of qualitative data (Clarke et al., 2015). In conducting this analysis, the patterns identified are coded into themes which pinpoint relevant points in the data that can be related to the research. This research used thematic analysis to ensure that the contents of the data collected was examined and evaluated to draw themes related to the coping of women ROSCAs in Nigeria in the context of the COVID-19 crisis. Braun and Clarke (2012) notes that the process of carrying out a thematic analysis is guided by a series of steps. The initial step is familiarisation with data. In this step, the researcher must read through the secondary sources several times to get a deep understanding of the data. The second step has to do with coding. In this step the researcher determines the crucial features in the data that are related to the topic under study. For example, it is important to understand the features related to the impacts of novel policies and the consequences of strategies that the government is putting in place.

In the third step, the researcher identified and defined themes which are the patterns in the responses of participants that are relevant to the research questions. The themes were reviewed, defined and identified with the purpose of ensuring that they are precisely representing the data set. This step ensured that the outcome of the analysis process is related to the study objectives which make the research even more valid (Clarke et al., 2015). The final step involved weaving together description and explanation of the themes while relating the findings with the objectives defined at the beginning of the research. The adoption of a thematic approach is not free from limitation. Javadi and Zarea (2016) cite that poor analysis and interpretation of the data will lead to identification of unrelated themes and wrong conclusions which will affect the validity and credibility of the research. As such, it was necessary for the researcher to effectively familiarise with the data and identify relevant themes in relation to the objectives of the research. The approach ensured that the themes that are identified will be relevant and accurately represent the findings which would lead to valid conclusions. In undertaking the data analysis, no software was used. Instead the researcher generated themes manually from the collected data.

4.7 Limitations and Ethical Considerations

Due to the COVID-19 pandemic and the consequent restrictive measures to prevent its spread, the researcher could not travel to the study area to conduct the primary research. Interviews were conducted online. Since interviews were conducted online via WhatsApp and Skype, there was the limitation of missing deeper in-person interactions with participants' non-verbal cues and facial expressions which may have been useful in the interpretation of participants' responses. To address this, I took notes and also recorded the interviews in a bid to capture the actual opinions of the participants and also encourage the participants to be detailed in their answers.

The research also observed several ethical considerations. In the context of COVID-19 crisis, the first ethical issue that was ensured is that the research assistant and study participants were not at any risk of contracting the COVID-19 virus. The other ethical considerations were informed consent and voluntary participation. The research assistant made initial contact with participants via phone calls to explain the importance and purpose of the study, obtained verbal informed consent and their personal details such as age, marital status, business type and contact information for use in the online interview. The consent given by potential respondents was recorded. It was preferred that the research assistant made the initial contact, got informed consent and also obtained respondent's details through phone calls or emails in line with the COVID-19 protocols of avoiding physical contact and movement as much as possible.

As a result of seeking the support of a research assistant, this research had to adhere to several ethical issues. The research assistant had to sign a non-disclosure form (Appendix 1) to ensure that he was responsible for the confidentiality of the information on personal details of respondents gathered in the study. I also advised the research assistant not to coerce the research participants but to let them voluntarily choose to participate in the study after explaining its purpose and significance.

Chapter 5 : Findings of the Study

This study was designed with the purpose of examining the effects of the COVID-19 crisis on women ROSCAs in Nigeria and the coping strategies of the associations in mitigating the impacts of COVID-19 crisis. To ensure that the study is undertaken effectively, data collection was aimed at answering the following main research question: How are Women ROSCAs coping in the context of COVID-19 crisis? The study was designed as a qualitative study based on primary research in which different ROSCA members, NGO and state employees were interviewed on the topic. Specifically, the researcher collected data using interviews to answer the four questions aforementioned in the introductory chapter.

5.1 Background Information on Study Participants

This sub-section presents the background information of those who took part in the study. In this study, a total of 25 participants provided information on ROSCAs. For easier analysis, the biographic data of the interviewees is presented in a table format. As shown in the table, there were three groups of interviewees namely, ROSCA members, government employees, and employees of CARE Nigeria.

Table 5.1 below presents data characteristics of 25 entrepreneurial women who are part of ROSCAs.

Table 5.1: The Background data of ROSCA Members

ROSCA Members					
Member	Age (yrs.)	Marital status	Level of education	Business type	Duration of membership
ROSCA member 1	24	Single	Secondary	Grocery shop	2 years
ROSCA member 2	26	Single	University	Restaurant	6 months
ROSCA member 3	30	Single	Secondary	Hair dressing	3 years
ROSCA member 4	35	Married	University	Chemist	6 years
ROSCA member 5	40	Married	Secondary	Food kiosk	7 months
ROSCA member 6	27	Married	Primary	poultry business	4 years
ROSCA member 7	34	Single	University	Fast food Restaurant	1.5 years
ROSCA member 8	43	Married	University	Electronics shop	1 year
ROSCA member 9	41	Single	University	Cybercafé(Business centre)	10 months
ROSCA member 10	33	Single	Secondary	Boutique	2 years
ROSCA member 11	46	Widowed	University	Mobile phones shop	5 years
ROSCA member 12	47	Widowed	Secondary	Boutique	7 years
ROSCA member 13	40	Married	Secondary	Dairy business	2 years
ROSCA member 14	53	Married	Secondary	Fruits business	9 years
ROSCA member 15	51	Single	Secondary	Vegetable stall	4 years
ROSCA member 16	28	Married	University	Milk bar	1 year

ROSCA member 17	32	Single	University	Food vendor	2 years
ROSCA member 18	31	Married	Secondary	Poultry business	6 years
ROSCA member 19	40	Married	University	Mobile money business	5 years
ROSCA member 20	45	Single	Secondary	Fish stall	2 year
ROSCA member 21	28	Married	Secondary	Catering	11 months
ROSCA member 22	51	married	Secondary	Shoes shop	5 years
ROSCA member 23	37	Single	Secondary	Sachet Water selling business	2 years
ROSCA member 24	35	Married	University	Tailoring shop	1 year
ROSCA member 25	33	Married	University	Secondhand clothes shop	2 years

From table 5.1 above all of the 25 ROSCA members are between 24 and 53 years old. 10 of them are single, 13 are married and 2 are widowed. They are engaged in different types of businesses and they have also been members of ROSCAs for different durations ranging from 6 months to 9 years. All of them have either university or secondary education.

Table 5.2: The biographic data of state employees

State Employees				
State Employee	Age	Gender	Marital status	Level of education
1	45	Male	Married	Degree
2	50	Male	Married	Degree
3	34	Female	Married	Diploma
4	40	Female	Married	Degree
5	38	Female	Single	Degree

Table 5.2 displays the biographic data of 4 key informants from the Cross-River State Ministry of Humanity and Social Welfare in charge of self- help groups. As shown in the table, the employees are bachelor's degree holders with only one having a diploma.

Table 5.3: The Background Data of key Informants from CARE, Nigeria

Non-Governmental Organization Employees						
NGO employee	Age	Marital status	Gender	Level of education	Years in the NGO	Position
NGO employee 1	47	Married	Female	Master's Degree	10	Programs officer
NGO employee 1	28	Single	Female	Master's Degree	3	Field officer
NGO employee 1	30	Single	female	Bachelor's Degree	2	Secretary
NGO employee 1	44	Married	Male	Master's Degree	6	Finance officer

Table 5.3 presents the data of 4 key informants from CARE Nigeria. Three are Master's degree holder while one is a Bachelor's degree holder. All are women except the finance officer who is male. Their ages range between 28 and 47 years.

5.2 Empowerment of Women by ROSCAs

With the ROSCA membership, women are able to boost and expand their businesses with the small loans and monthly contributions that they get from the ROSCAs. This happens mostly when a member feels that her business is going down and she has no other source of income to invest in that business. The ROSCAs has helped many not to close their businesses due to lack of money. A 30-year old ROSCA member 3 who is a hairdresser said:

“Anytime my business is going down I borrow money from the ROSCA to boost it. I have done that two times since I joined this ROSCA and that way it has been of great help to me.”

(Interviewed: 18th June 2020)

The data collected from the entrepreneurs suggests that the ROSCAs have also improved and sustained the economic and social lives of the members. Women are able to support their family members with money for food, clothing and other needs. As a result, their value in the eyes of their husbands (for the married) has improved. The unmarried also get respect from their siblings and parents because they are helping to meet their needs.

Out of the 13 married respondents, 8 said that the relationship between them and their husbands have improved because the level of lack has gone down. They now have greater bargaining power and decision-making ability in the home than when they were without any source of income. A 27-year-old ROSCA member 6 who runs a poultry business said:

“Since I joined a ROSCA my marital relationship have seen a great boost. I can see my husband loves me more now. We do not fight often because of issues about our needs. I used to bother him with my needs, but now I even give him surprises of gifts here and

there, especially when it is my turn to get money from the ROSCA.” (Interviewed: 18th June 2020)

The findings revealed that ROSCA members have a higher standing in the community because now they can afford money to dress well, support relatives and friends whenever there are emergencies such as hospital bills, funeral expenses and school fees challenges. As a result, people respect them, and they no longer despise or look down on them because they do not have the wherewithal. ROSCA member 10, a single lady who owns a boutique said this:

“I can confidently say that my life is much better now than before I became a ROSCA member. My status is higher now because I can afford to support people who have problems. Something that I could not do before. Recently, a relative was admitted in hospital for weeks and I was happy to be among the people who contributed to the hospital bill and I realized that my friends and relatives started regarding me highly after that.” (Interviewed: 20th June 2020)

Furthermore, the relationship that exist between the ROSCA members is seen to be beneficial as cited by some of the respondents. For instance, one of the ROSCA members who has an electronics shop mentioned that being a member of ROSCA, she has created good friendship with the other members who have become her customers and some also give her personal advice and help when she has any issues.

Another member who owns a boutique mentioned that

“Sometimes when I have a problem that needs money and I do not have enough money I can ask the ROSCA member who is supposed to receive the contribution that week to allow me collect the contribution and then she would collect mine when my term comes later on because of the friendship and trust that we have built amongst ourselves” (Interviewed: 20th June 2020)

The findings that women ROSCAs are useful for boosting both the economic and social life of the members imply that they empower these women. Keller and Shuler, (1991) define the empowerment of women as a process in which women organize themselves with the purpose of improving their self-sufficiency and affirming their independence for making decisions and controlling resources used for dealing with subservience. Empowered women according to Haque et al (2011) are able to overcome their powerlessness and helplessness. Based on this concept, women ROSCAs as explained by the respondents are seen to play the role of empowering members.

The responses of the ROSCA members in this study indicated that they have been social, economically and physically empowered through their participation in the ROSCAs. These findings correspond with that of Paveern et al. (2004) who found that women microcredit institutions improved their social and economic well-being. In similar thought, the study by Molyneux and

Thomson (2011) also found that women's social and economic status were positively changed after involvement in women associations.

The description of the benefit the ROSCA members obtain from each other can be compared with the bonding form of social capital as described by Adrich (2012). This is because it shows the principles of trust among the members of the ROSCAs. Previous literature on ROSCAs have found similar findings. For instance, the study by Mozumdar et al. (2017) on the significance of social capital for women in business found that constructive relationship among women in business has positive impact on gaining legitimacy, building mutual trust and co-operation among them, which consequently improve the performance of their businesses.

5.3 The Impact of COVID-19 on ROSCA operations

5.3.1 Effect of COVID-19 on Businesses of ROSCA members

The businesses of all of the 25 ROSCA members interviewed were affected by the COVID-19 pandemic one way or the other, though the effects varied depending on what business it is. For example, those running grocery shops did not suffer much because people cannot do without them. However, certain businesses such as eateries, salons and clothes shops among others have been affected by the Federal Government restrictions put in place to control the pandemic. ROSCA member 2, who runs a small restaurant said:

“My business was badly affected since people could no longer gather there to eat because the government banned all gatherings. I was only allowed to sell takeaways, but that could not sustain me in the business because only a few people come for that. Therefore, I became creative and decided to start hawking food in offices and other workplaces that were still active and that has kept me going. But to keep the restaurant open I brought in my daughter to stay there a sell take away food.” (Interviewed: 21st June 2020)

As stated by ROSCA member 2, many businesses suffered from the restrictions being enforced to control COVID-19 such as the lock-down and curfew. Businesses have to close early due to the curfew. The lock-down also meant that people cannot travel freely and get supplies or sell their products as before. Consequently, profits went down and 6 women out of the 25 interviewed said they had decided to do other things. All the ROSCA members agreed that the Corona Virus crisis has had a negative effect on their businesses. The ROSCA members were in agreement that the challenge of getting money from banks and other financial institutions has been offset by their membership in the ROSCAs. However, based on the responses given, some businesses were affected more than others. The ROSCA members mentioned that all their businesses had been affected by COVID-19 since they all conducted businesses that required physical contact between people.

Respondents also stated that their ROSCA contributions helped them to get money for their business since it is hard for them to access bank loans because of the difficult conditions and requirements in banks and other financial institutions. ROSCA member 13, a milk vendor aged 40 years old had this to say:

“...through the ROSCA I get money in lump sum which I use to buy stock, pay rent and pay my workers. That way I have maintained the business through this crisis. As a result, the performance of the business has not been badly affected because many vendors around here have closed down, but my business is still operating even though not as profitable as it was before the crisis.” (Interviewed: 20th June 2020)

The findings regarding the effects that the COVID-19 crisis had demonstrate that the crisis is a covariate shocks as seen from its effects on all of the respondents' households as well as their businesses. In relation to this finding, Watson et al. (2017) found that covariate shocks can introduce problems in social protection systems in two ways. First, the system may be exposed to risk and it may need programmatic change and other investments for dealing with impacts. Secondly, is that it may cause the collapse of the systems by further aggravating the vulnerability of members which makes the social protection inadequate. The findings of this study with regard to the effect of the crisis on the business operations of the ROSCA members shows how it has increased their vulnerability and poverty status by lowering their sales, hence income and also limiting their ability to make the required contributions in the ROSCAs.

Following its implications in the business and social lives of the ROSCA members, the COVID-19 crisis fits into the biophysical environment component of the IAD framework. According to this framework, the physical environment in which an action situation is located influences the behaviour of participants (Ostrom, 2005). The effects of COVID-19 pandemic is seen to affect the physical environment in which the ROSCA members conduct their business operations through the lockdown, 1.5 meters apart requirement and restrictions on number of people allowed to be in a building at a particular time. Furthermore, the crisis has also impacted the socio-economic conditions that have affected the ROSCA members' businesses and force them into an action arena and action situation.

5.4 ROSCAs and ROSCA Members' Coping in the Context of COVID-19 crisis

5.4.1 COVID-19 implications and the ROSCA's Institutional Arrangements

The findings showed that COVID-19 has had a negative impact on the operations of ROSCAs. Since the lock-down was put in place, money collection and distribution was affected because the women used to meet and make contributions and the distributions were also given in cash to the

member whose turn had come. The ROSCAs run on the contributions made by the members and any disruption in the income of the women means the ROSCAs suffer as well. Most of the businesses of the members were affected and therefore, their ability to make contributions was also reduced. Since the members had been affected financially by the COVID-19 crisis the number of those seeking for loans from the ROSCAs also went up and the association leaders and members were concerned about how those who wish to take loans would be able to repay them since business is slow at this time.

Apart from the financial aspect, ROSCA members also found it hard to hold physical meetings and conduct their affairs normally. They were affected by the COVID-19 directives given by the government to control the disease. The curfews, lockdown and rules governing social gatherings, physical contact and travel placed great limitations on the operations of the ROSCAs. The physical contact, lock-down and curfew restrictions meant that ROSCA members could not meet as usual, but their operations had to go on. ROSCA member 7, who is a 29-year-old married woman running a vegetable stall said:

“we were terribly affected because we could not meet physically and hold our meetings because of the curfew and lock-down.” (Interviewed: 24th June 2020)

5.4.1 Measures Taken by ROSCAs to Assist Members Ensure Continuity During COVID-19

Although 1 ROSCA had completely suspended its operations, members of the 4 ROSCAs mentioned that their ROSCAs had found several ways to continue their operations through the COVID-19 season.

“Although we could not meet physically our members decided to contact one another through mobile phones and social media platforms . So far, these strategies have worked well, and we are carrying on with our meetings even though we miss our physical interactions.” (Interviewed: 22nd June 2020)

To comply with the rules of social distancing and hygiene, ROSCAs have changed their meeting procedures. Furthermore, they are also applying the protocols in their businesses. ROSCA member 19 who runs a mobile money business and is an official in one of the ROSCAs said:

“We are splitting our ROSCA into smaller groups, insisting on hand washing at the start and end of physical meetings, cutting down on the number of people allowed to attend meetings, reducing the level of cash handling for members, putting on masks when in meetings and other measures to ensure that members are safe.” (Interviewed: 27th June 2020)

To ensure the continuity of contributions, they have decided to loosen some of their rules such as the deadlines for making contributions. Members who cannot raise contributions are allowed to have a grace period of 10 more days after the deadline. The conditions for borrowing

and repayment have also been revised to accommodate those members who have financial challenges. To ensure that members do not quit the ROSCAs the borrowing interest rates for loans, and the repayment periods were revised to make them more accommodative. This allowed members to benefit by getting loans from their ROSCAs. However, this was for those who could demonstrate that they could use the money to engage in activities that would enable them pay back their loans. The loans are used by the members to purchase materials and inputs for engaging in alternative economic activities such as children's day care, tutorial classes for children who are no longer going to school because of closure of schools by the government as a result of the crisis. The money gained from such activities is what is being used to pay the ROSCA contribution and loans. For example, one of the ROSCA members who ran a catering business mentioned that since she could not do catering anymore as people were not holding gatherings and parties, she took a small loan from her ROSCA, started a day care and also tuition classes for the neighbourhood kids that were out of school as a result of the lockdown so that she could earn a little income to stay afloat during the crisis. She further explained that

“..... after presenting a rough business plan and budget to my ROSCA members to show how I planned to do the day care and tuition classes and the estimated income I could get, the leaders approved my loan request and I was able to start it. So far, the business is going on well and I am getting some profit from it which I can feed my kids as I did before while also paying the loan in instalments as agreed upon. (Interviewed: 24th June 2020)

Another respondent who had a second-hand cloth shop said that:

“My business was not doing well since corona started as people were not buying as much as they used to while I was still required to pay the rent for the shop. I noticed that I was running losses and had to cancel my rental contract and sell off the deadstock and throwaway prices. I decided to market my clothes online and have them delivered at people's doors. I asked for a small loan from the ROSCA to add to my savings so that I could buy new stock and rent a motorcycle to help me do the deliveries” (Interviewed: 30th June 2020)

The study found that out of the 5 ROSCAs sampled in Calabar Municipality 3 of them have approached willing NGOs for the provision of free handwashing supplies and face mask for use in their meetings and also in the businesses of their members as the COVID-19 restrictions were eased and they could slowly resume business with limited number of people allowed in their premises. One the respondents, a vegetable vendor said that:

“ I heard from a friend that CARE Nigeria was helping women in business by giving them equipment for ensuring social distancing measures such as 1.5 meters signs and stickers, masks and hand sanitizers. I looked out for them and contacted them on their social media handles, explaining to them about our ROSCA. They helped us with some of this materials which we shared amongst the members.” (Interviewed: 19th June 2020)

The findings demonstrate that to ensure that the financial position of the ROSCA members was not badly affected, members who could not get money from their businesses for purposes of contributing to the ROSCAs were encouraged to try and pursue other business opportunities which could function better in the context of the COVID-19 crisis and still earn profit. On the measures that ROSCAs were taking to ensure that there was continuity of ROSCA operations, the responses of the participants were similar across the ROSCAs. For instance, respondents confirmed that their ROSCAs were using strategies such as lessening the rules of borrowing and repaying, prioritizing the neediest members, liaising with NGOs to provide materials to conduct business and hold meetings during the crisis, and altering their ROSCA meeting procedures.

The responses show that the ROSCAs had to change their institutional arrangements in light of the effects of the COVID-19 crisis. For instance, one had to stop the contributions, others had to reduce the amount of contribution while others had to increase the length of the period between contributions. These changes in some of the institutional arrangements of ROSCAs coincide with the institutional requirement regarding the congruence between rules and local conditions as they demonstrate how the ROSCAs are attempting to adapt their rules and operations to the existing biophysical and socioeconomic conditions brought about by the COVID-19 crisis (Van Laerhoven & Ostrom, 2007).

A comparison of the institutional arrangements of ROSCAs conceptualized from the IAD framework in Table 1 and the findings of this study demonstrated how the crisis has affected the rules of operations of ROSCAs. For instance, the defined boundaries which dictate the amount to be paid and the duration of contributions have been affected since members' income from businesses extremely reduced that they could not be able to meet these rules (Van Laerhoven & Ostrom, 2007). Also, the conflict-resolution mechanisms of the ROSCAs were impacted because the members could not meet physically as frequently as they did to talk about issues affecting them in the ROSCA as they did before the COVID-19 crisis. In a similar vein, the collective-choice arrangements was also affected because not all members could give feedback in times of making decisions as only phone communication is possible at this time of the crisis- some members are inactive in WhatsApp groups.

Furthermore, the ROSCAs who split their associations into smaller groups and were able to meet physically also reported some miscommunications and disagreements between the smaller groups when it came to matters concerning the entire ROSCA's operations. Because of restrictions in physical meetings, the recognition of the rights to organize was also compromised because the operations of the ROSCAs were affected by the restrictions set by the government which in this case is an external authority (Yates, 2013). As explained in the IAD framework ROSCA members have the right to devise their own institutions and are not challenged by external governmental authorities.

The manner in which ROSCAs were attempting to adapt to the conditions brought about by the crisis also demonstrated the use of their social capital in dealing with covariate shocks such as borrowing money from other ROSCA members who have to pay for the contributions because of the trust and cooperation amongst themselves. This is particularly the bonding form of social capital where members of an institution work together to help each other with coping and recovery. The findings of this study correspond with that of Watson (2016) which indicate that through the pooling of resources and establishment of robust social relationships, informal social protection mechanisms such as ROSCAs can potentially empower their members to cope with the implications of Covariate shocks.

5.5 Existing structural preparedness and state support mechanisms for ROSCAs in the context of covariate shocks

5.5.1 Present and Future ROSCA preparation measures for the COVID-19 crisis

Respondents explained that before the COVID-19 crisis they were not prepared in any unique way to cope with a disruption of such magnitude as the one witnessed with the ongoing pandemic. The members had not conceived the fact that the country could be placed under such restrictive measures that locked down many economic activities. A 53-year-old ROSCA member 14, who has been a member of a ROSCA for 9 years has this to say:

“When COVID-19 was reported in Nigeria, we were caught flat footed. I have been a member of this group for 9 years now, and since I joined the group, we have never had a crisis like the one we are having now. ...I have never seen a pandemic that is as big as COVID-19 where the government has been forced to lock down the economy.....We were anticipating and making preparations for eventualities, but nobody ever thought of COVID-19 or something as big as this.” (Interviewed: 25th June 2020).

Even though the ROSCAs had no proper response or risk-preparedness mechanisms to cope with such shocks as the COVID-19 pandemic, some of the operation procedures and tools helped in coping with the crisis. For example, all of the ROSCAs already had WhatsApp groups where members could frequently converse and the treasurer could update the contributions and any other relevant information including meeting minutes, places and time. The ROSCAs were trying as much as possible to go on with their operations of giving out loans and strengthening their social capital through meetings, constant communication and sharing news about better and more lucrative opportunities for investment that are more profitable in the crisis than their normal businesses on the WhatsApp groups. Such use of the WhatsApp platform complemented their physical meetings. During the pandemic however, there was increased usage of these groups since members could not meet physically. However, doing everything over the WhatsApp groups could

be difficult at times since not all members could be active on the same time and also there were misinterpretation of texts that led to bickering and disagreements. This is seen to negatively influence the bonding social capital which has to do with the connections between members of the ROSCAs based on the principles of trust and cooperation.

Another example to demonstrate ROSCAs successful coping with the crisis is that they were conducting mobile transfer of contributions and all the transfers involved in the ROSCA. Hence these measures have been useful in this pandemic period where members cannot move freely around, and it has enabled the ROSCAs continue with their financial operations in the context of the crisis. Also, the welfare schemes and the saving schemes the ROSCAs had before the pandemic assisted in their coping with the COVID-19 crisis. 2 of the ROSCAs that participated in the study had a welfare scheme where each member could deposit a fixed amount when making the monthly contribution. During the pandemic, this welfare money was shared out among the members equally to help with coping with the crisis. 3 of the ROSCAs that participated in the study had a savings scheme where a percentage of each member's monthly contribution was kept in a savings pool before the money is given to the recipient of the month from which members could borrow from in case they want to grow their business or for their own personal use and return the money within a set period of time with marginal interest.

There are conflicting findings by previous researchers on the subject of ROSCAs' resilience in the face of covariate crisis with some of them claiming that ROSCAs are prepared to deal with covariate shocks and others arguing to the contrary. For instance, in support of the findings of this study, Dupas & Robinson (2013) in their study of ROSCA performance in Kenya found that ROSCAs have a great potential of coping with shocks. This study's findings showing how ROSCAs are using their existing structures to cope with the crisis seem to be in agreement with Watson (2016) who suggests that when resources are pooled together, and strong social relationships established, ROSCAs has the ability of empowering their members to deal with the effects of covariate shocks. By use of empirical evidence, Balgah & Buchenrieder (2010) also found that where there is no effectively functioning state or market, informal instrumental innovations come up that make it possible for agents to be more averse to risk, or at least resilient when it comes to the buffering of shocks.

Nevertheless, the findings of this study may be in contestation with that of Azibo & Buchenrieder (2011) who from their study of formal and informal social protection in Cameroon stated that due to the upsurge of extreme natural shocks, the capacity of informal social protection mechanisms to properly overcome risks and the shock associated with them is greatly reduced. According to Zimmerman & Carter (2003) and Carter et al. (2007), the increasing occurrence of natural shocks has the impact of straining the informal protection mechanisms to their limits. This is because, as proposed by Günther and Harttgen (2009), sudden extreme events come with welfare losses that magnify the vulnerability of the poor and renders their informal safety nets ineffective.

5.5.2 Present and Future Support from the Government and Non-State Actors for ROSCAs during COVID-19

Information from the state employees revealed that the government supports ROSCAs and it has put up a fund for supporting youth and women groups such as ROSCAs. Currently, the government is encouraging members of such groups to apply for loans and funding from the fund to finance their economic projects. While explaining the role that government plays in supporting ROSCAs, State employee 1 said:

“As a State Ministry of Humanity and Social Welfare in charge of self- help groups, we take it as our responsibility to ensure that ROSCAs are thriving. We work closely with them. Therefore, we educate women groups on how to run their self-help groups and provide them with loan facilities to fund their projects. We also educate them on how to make money and access money from the government fund.” (Interviewed: 26th June 2020)

Another state employee explained that there are plans for the future to ensure that women ROSCAs are supported to engage in bigger projects that can help cushion them from the problems that accompany shocks such as COVID-19.

While the information provided by government employees regarding the assistance provided for the women ROSCAs showed that the government is making efforts to assist women ROSCAs in the face of the crisis, the ROSCA members claimed not to know about such support. For instance, a 28-year-old ROSCA member 15 who runs a milk bar business said:

“We are not aware of any kind of support from the government in supporting ROSCAs. We are yet to get that kind of support. We have seen the cooperation and help that the NGOs is extending to us but from the government no assistance or communication has reached us. But we really desire to get that support because we have many financials needs here.” (Interviewed: 28th June 2020)

Another respondent, a 47-year-old boutique owner said that:

“This is the time we really need the government to help small businesses which are suffering because of COVID-19 but this government that is beating us on the streets if we do not follow the COVID-19 protocols cannot even provide us with masks and hand sanitizers.” (Interviewed: 28th June 2020)

While ROSCA members could not confirm that they had received support from the government in form of grants or loans, they recognized the efforts of NGOS such as CARE Nigeria in providing them with materials for adhering to the COVID-19 crisis. At the start of the crisis when the first few cases were confirmed in Nigeria and before the full lockdown, NGOs such as CARE Nigeria provided the ROSCA members with materials for preventing the spread of the pandemic and also informing them of the significance of adhering to all the COVID-19 crisis

protocols and also preparing them for the possible implications of the crisis on their business if its spread in Nigeria continued. During an interview session, NGO employee 3 said:

“Our desire is to work with these ROSCAs and other women groups to ensure that they remain functional through and after the COVID-19 crisis. We have been working with them by providing them specific grants and stimulus funding wherever possible, giving them hand sanitizers and also facilitating them to make their own cloth masks which they could use in their businesses and also sell for extra income.” (Interviewed: 29th June 2020)

Since ROSCAs are part of the informal social protection measures, government efforts to support them are minimal or totally absent (Egbide et al, 2020). Furthermore, although some studies reveal that the government of Nigeria has programs and policies in place for supporting ROSCAs financially Awortwi & Walter-Drop (2017) argue that this support is largely missing. The findings of this study support those of Awortwi & Walter-Drop, (2017) on ‘limited statehood’ ,in the claim that government support for ROSCAs is inadequate. This is particularly relevant in the context of COVID-19 crisis since informal social protection measures have been found to lack the necessary capacity to cope with covariate crises and may require assistance from public institutions (Watson, 2016). The findings of this study about the inadequate support given by the Nigerian government are further confirmed by Kanayo et al (2019) who undertook a study of micro-finance institutions in Nigeria. The research study by Kanayo et al (2019) found that the impact of the government of Nigeria in its support for rural social protection mechanisms is yet to be ascertained by the microfinance members despite the government claims to have invested in helping these institutions.

The findings of such literature as well as those of this may also indicate a disconnect and tension in the interplay between informal and formal safety net measures. This tension had been explained by Oduro (2010) as concerns , and that a scaling up of formal social protection will displace informal social protection and have an adverse impact on the welfare of the poor and vulnerable. However, as Verpoorten & Verschraegen (2008) suggest that only a successful interplay between different actors embroiled in formal and informal social protection structures can effectively change the impoverished living conditions of the poor. There are nations who have made attempts to improve the interplay between formal and informal social protection mechanisms. For example, Getu & Devereux (2013) mentions that Tanzania’s national social protection framework is encouraging formal social protection arrangements that build on informal social protection practices whilst at the same time recognising that some informal arrangements place undue burden on some categories of people, in particular, women. The relatively small size of some informal social protection may increase the incidence of covariate risk and can limit the size of the pay-out received by members of the group. Bhattamishra and Barret (2010) therefore recommend that formal social protection measures should support community-based social

protection mechanisms to tap into commercial reinsurance markets necessary for sustaining large correlated losses as a result of covariate shocks.

Chapter 6 : Conclusions

COVID-19 has been found to have adverse effects on women ROSCAs in Nigeria. The study found that women ROSCAs have been affected financially because members are not able to make contributions on time based on agreed rules and regulations. Since the businesses of most members have been hit by the pandemic, they were struggling to raise their regular contributions, and even pay back loans for those who had borrowed. Members were also not able to meet physically and run their ROSCA activities. COVID-19 restrictions made it hard for members to hold meetings. After comparison with the theories and other studies, the implication of these findings is that ROSCAs in Nigeria have been badly hit by the COVID-19 pandemic and coming back to normalcy may take some time because members will need to reorganize themselves, grow their businesses and revise their programs and activities in the ROSCAs to fit the new normal.

The findings of this study demonstrate the dynamism, resilience, and effectiveness of ROSCAs against a covariate shock. This study found that women ROSCAs have different strategies of coping with the effects of COVID-19. To avoid the collapse of the ROSCAs, the members agreed to lessen some rules governing borrowing and repayment of loans to favor the worst affected members so that they do not close their businesses completely or drop out of the ROSCAs. Due to COVID-19 they also agreed split their ROSCAs into smaller groups and insisted of the washing of hands and wearing of face mask. Also, there were loans given to members as a way of helping those who wanted to change the format of their business or start new business that could still function within the context of COVID-19. These examples of how ROSCAs are coping shows that informal arrangements do not necessarily collapse in light of covariate shocks as predicted by theory but are dynamic to take different forms in the context of covariate shocks. These findings agree with the previous reviewed studies on shock responsiveness resilience of informal institutions and this means that women ROSCAs have social capital that if strengthened and adapted to integrate structural preparedness for future crisis, they have the potential to cope in the context of covariate crises.

As state officials maintained that the government is involved in supporting women ROSCAs, conversely members of ROSCAs who participated in the study did not know of any governmental assistance offered to women groups. The respondents however confirmed that NGOs such as CARE have been working with the ROSCAs and supporting them in different ways during the crisis. This finding indicated a disconnect in the interplay between formal and informal social protection mechanisms in Nigeria which needs to be reconciled if the welfare of women in ROSCAs and the continuity of ROSCAs is to be supported by formal social protection structures.

References

- Abimbola, A., Egbide, B., Adekunle, A., Damilola, E., Adebajo, F. & Abiodun, A. (2020). Rotating and Savings Credit Association (ROSCAs): A veritable Tool for Enhancing. The Performance of Micro and Small Enterprises in Nigeria. *Asian Economic and Financial Review*, 10(2), 189-199.
- Ademola, A. O. (2013). Strategic effect of Socio-economic and financial factors on the performance of women entrepreneurs in South Western Nigeria. *Elixir International Journal Financial Management*, 63(1), 18455-18459.
- Ademola, A. O., Ben-Caleb, E., Eluyela, F. D., Falaye, A. J., & Ajayi, S. A. (2020). Rotating and savings credit association (ROSCAs): A veritable tool for enhancing the performance of micro and small enterprises in Nigeria. *Asian Economic and Financial Review*, 10(2), 189-199.
- Agegnehu, B. (2012). Why do members join indigenous informal financial institutions RoSCAs? Empirical evidence from iqubbs in Ethiopia. *Master thesis, Swedish University. Sweden.*
- Aiyede, E. R., Sha, P. D., Haruna, B., Olutayo, A. O., Ogunkola, E. O., & Best, E. (2017). The Practice and Promise of Social Protection Policies in Nigeria. *Journal of International Politics and Development (JIPAD)*, 15(1), 21.
- Aiyede, E. R., Sha, P. D., Haruna, B., Olutayo, A. O., Ogunkola, E. O., & Best, E. (2017). The Practice and Promise of Social Protection Policies in Nigeria. *Journal of International Politics and Development (JIPAD)*, 15(1), 21.
- Alderman, H. and Haque, T. (2007) 'Insurance against covariate shocks: The role of index-based insurance in social protection in low-income countries of Africa.' World Bank Working Paper no. 95. Washington, D.C.: The World Bank.
- Aldrich, P. (2012). Social Capital and Community Resilience. *American Behavioural Scientist*, 1-16.
- Aliyu, S. M. (2020). An assessment of women entrepreneurship performance in Nigeria. *Malaysian Management Journal*, 17, 1-12.
- Anderson, S., & Baland, J. M. (2002). The economics of roscas and intrahousehold resource allocation. *The Quarterly Journal of Economics*, 117(3), 963-995.
- Ardener, S., & Burman, S. (1995). *Money-go-rounds: The importance of rotating savings and credit associations for women*. Berg Publisher Ltd.
- Arias, O., Blom, A., Bosch, M., Cunningham, W., Fiszbein, A., Lopez Acevedo, G., Maloney, W., Saavedra, J., Sanchez-Paramo, C., Santamaria, M., and Siga, S. (2005) 'Pending issues in protection, productivity growth and poverty reduction' World Bank Policy Research Working Paper 3799, December. Washington D.C.: The World Bank.

- Awortwi, N., & Walter-Drop, G. (Eds.). (2017). *Non-state Social Protection Actors and Services in Africa: Governance Below the State*. Routledge.
- Awortwi, N., & Walter-Drop, G. (Eds.). (2017). *Non-state Social Protection Actors and Services in Africa: Governance Below the State*. Routledge.
- Balgah, R. & Buchenrieder, G. (2010). The Dynamics of Informal Responses to Covariate Shocks. *Journal of Natural Resources Policy Research* 2(4), 357-370.
- Bastagli, F. (2014). *Responding to a Crisis: The Design and Delivery of Social Protection*. London: Overseas Development Institute.
- Basu, K. (2011). Hyperbolic discounting and the sustainability of rotational savings arrangements. *American Economic Journal: Microeconomics*, 3(4), 143-71.
- Bhattamishra, R., & Barrett, C. B. (2010). Community-based risk management arrangements: A review. *World Development*, 38(7), 923-932.
- Blackburn, M., Guzman, A., Lieberman, J., & Sprinkel, A. (2014). Assessing the role of social capital in agro-pastoral resilience in the Sahel: A Systems Perspective. *coordination with Mercy Corps and the Elliott School of International Affairs, George Washington University*.
- Braun, V., & Clarke, V. (2012). Thematic analysis.
- City Population. (n.d). CALABAR MUNICIPAL: Local Government Area in Nigeria. Retrieved from <https://www.citypopulation.de/php/nigeria-admin.php?adm2id=NGA009009>
- Clarke, V., Braun, V., & Hayfield, N. (2015). Thematic analysis. *Qualitative psychology: A practical guide to research methods*, 222-248.
- Danaan, V. V. (2018). Analysing poverty in Nigeria through theoretical lenses. *Journal of Sustainable Development*, 11(1), 20-31.
- Dauda, R. S. (2017). Poverty and economic growth in Nigeria: Issues and policies. *Journal of Poverty*, 21(1), 61-79.
- Devereux, S., & Sabates-Wheeler, R. (2004). Transformative social protection. Retrieved from <https://opendocs.ids.ac.uk/opendocs/bitstream/handle/20.500.12413/4071/Wp232.pdf?sequence=1>
- Dupas, P. & Robinson, J. (2013). Savings Constraints and Microenterprise Development: Evidence from a Field Experiment in Kenya. *American Economic Journal: Applied Economics*, 5(1) 163–192
- Egbide, B. C., Damilola, E., & Adebajo, F. (2020). Rotating and savings credit association (ROSCAs): A veritable tool for enhancing the performance of micro and small enterprises in Nigeria. *Asian Economic and Financial Review*, 10(2), 189-199.
- Egbide, B. C., Damilola, E., & Adebajo, F. (2020). Rotating and savings credit association (ROSCAs): A veritable tool for enhancing the performance of micro and small enterprises in Nigeria. *Asian Economic and Financial Review*, 10(2), 189-199.

- Enfield, S. (2019). Gender Roles and Inequalities in the Nigerian Labour Market. Retrieved from https://assets.publishing.service.gov.uk/media/5d9b5c88e5274a5a148b40e5/597_Gender_Roles_in_Nigerian_Labour_Market.pdf
- Etikan, I., Musa, S. A., & Alkassim, R. S. (2016). Comparison of convenience sampling and purposive sampling. *American journal of theoretical and applied statistics*, 5(1), 1-4.
- Fadiga, M. L., & Fadiga-Stewart, L. A. (2004). *Collective action and informal financial institutions: An empirical analysis of rotating and savings credit associations (ROSCAS) in Senegal* (No. 377-2016-20631).
- FAO. (Bonnet, F., Vanek, J., & Chen, M. (2019). Women and men in the informal economy: a statistical brief. *International Labour Office, Geneva*. <http://www.riego.org/sites/default/files/publications/files/Women%20and%20Men%20in%20the%20Informal%20>
- Fischer, A. (1994) —Banking on the Edge: Towards an Open-Ended Interpretation of Informal Finance Thesis work for the Award of Master of Arts, McGill University, Montreal.
- Getu, M., & Devereux, S. (Eds.). (2013). *Informal and formal social protection systems in Sub-Saharan Africa*. African Books Collective.
- Guha, S., & Gupta, G. (2005). Microcredit for income generation: the role of RoSCA. *Economic and political weekly*, 1470-1473.
- Hammawa, Y. M., & Hashim, N. B. (2016). Women-micro entrepreneurs and sustainable economic development in Nigeria. *Journal of Business and Management Volume*, 18, 27-36.
- Hevener, C. C. (2006). *Alternative financial vehicles: Rotating savings and credit associations (ROSCAs)* (No. 06-01). Federal Reserve Bank of Philadelphia.
- Hoop, D., Desai, S., Siwach, G., Holla, C., Belyakova, Y., Paul, Y., Paul, S. & Singh, R. (2020). *Women's Groups and COVID-19: Challenges, Engagement, and Opportunities*. [Online] Available at: https://www.researchgate.net/publication/341946364_Women%27s_Groups_and_COVID-19_Challenges_Engagement_and_Opportunities
- Ifeanyi, O., Anthony, N., & Prisca, I. (2019). Poverty among Women in Nigeria—Psychological and Economic Perspective: A Study Based On South West, Nigeria. *International Journal of Business and Management*, 14(11), p90.
- ILO. (2008). Small change, big changes: Women and microfinance. Retrieved from https://www.ilo.org/wcmsp5/groups/public/---dgreports/--gender/documents/meetingdocument/wcms_091581.pdf
- Implications for Entrepreneurship Development. *Mediterranean Journal of Social Sciences*, 4(6), 611-617.

- International Monetary Fund. (2017). World Economic Outlook-Seeking Sustainable Growth Short-Term Recovery, Long-Term Challenges. <https://doi.org/10.5089/9781484328095.081>
- Javadi, M., & Zarea, K. (2016). Understanding thematic analysis and its pitfall. *Demo*, 1(1), 33-39.
- Kanayo, O., Jumare, F. & Nancy, S. (2013). Challenges of Microfinance Access in Nigeria: Implications for Entrepreneurship Development. *Mediterranean Journal of Social Sciences* 4(6), 611-618.
- Kuriakose, A.T., R. Heltberg, W. Wiseman, C. Costella, R. Cipryk, and S. Cornelius. (2012). "Climate-responsive Social Protection." *Social Protection and Labor Discussion Paper*, No. 1210. Washington, DC: World Bank. <<https://openknowledge.worldbank.org/handle/10986/13555>>.
- Maxwell, J. A. (2012). *Qualitative research design: An interactive approach* (Vol. 41). Sage publications.
- Morduch, J. (1998) 'Between the market and state: Can informal insurance patch the safety net?' Development Discussion Paper No. 621, January. Harvard University, Harvard Institute for International Development.
- Mozumdar, L., Farid, K. S., & Sarma, P. K. (2017). Relevance of social capital in women s business performance in Bangladesh. *Journal of the Bangladesh Agricultural University*, 15(1), 87-94.
- Mwangi, J., & Kimani, E. (2015). Challenges experienced by men and women in informal finance groups in Gachagi informal settlement in Thika Sub-County, Kenya. *International Journal of Innovative Research and Development*, 4(1), 28-35.
- NCDC. (2020). COVID -19 SITUATION REPORT SITUATION REPORT 85 Saturday, 23 rd May 2020. Retrieved from <https://ncdc.gov.ng/diseases/sitreps/?cat=14&name=An%20update%20of%20COVID-19%20outbreak%20in%20Nigeria>
- Newcomer, K. E., Hatry, H. P., & Wholey, J. S. (2015). Conducting semi-structured interviews. *Handbook of practical program evaluation*, 492.
- O'Brien, C., Holmes, R., Scott, Z., & Barca, V. (2018). Shock-Responsive Social Protection Systems Toolkit. Retrieved from —Appraising the use of social protection in addressing largescale shocks. Oxford Policy Management, Oxford, UK.
- Oduro, A. D. (2010). Formal and informal social protection in Sub-Saharan Africa. *ERD*, August.
- Oduro, A. D. (2010). Formal and informal social protection in Sub-Saharan Africa. *ERD*, August.
- Ojong, N. (2019). Informal borrowing sources and uses: Insights from the North West Region, Cameroon. *Third World Quarterly*, 40(9), 1730-1749.

- Oluwagbemiga E. Adeyem, Kolawole E Odusina and Akinwale E Akintoye (2016) Religion and Labour Force Participation in Nigeria: Is there any Inequality among Women? *African Journal of Reproductive Health* 2016 <https://www.ajrh.info/index.php/ajrh/article/view/172/0>
- Omoyibo, K. U. (2013). Leadership, governance, and poverty in Nigeria. *Mediterranean Journal of Social Sciences*, 4(6), 29.
- Oxford Policy Management. (2017). *Shock-Responsive Social Protection Systems Research: Literature review*, 2nd edition. Oxford: Oxford Policy Management.
- Ozili, P. K., & Arun, T. (2020). Spillover of COVID-19: Impact on the Global Economy. *Available at SSRN 3562570*.
- Pakkanna, M., Rasulong, I., & Akhmad, S. I. W. (2020). Microfinance Institutions And Women Empowerment: Evidence In The Rural Areas Of Tangerang, Indonesia. *International Journal of Scientific & Technology Research · February 2020*
- Pereira, E. T., & Salaris, S. (2019). The Evolution of the Role of Women in Labor Markets in Developed Economies. In *Handbook of Research on Women in Management and the Global Labor Market* (pp. 1-20). IGI Global.
- Pereira, E. T., & Salaris, S. (2019). The Evolution of the Role of Women in Labor Markets in Developed Economies. In *Handbook of Research on Women in Management and the Global Labor Market* (pp. 1-20). IGI Global.
- Risse, T. (Ed.). (2011). *Governance without a state? policies and politics in areas of limited statehood*. Columbia University Press.
- Sadler, G. R., Lee, H. C., Lim, R. S. H., & Fullerton, J. (2010). Recruitment of hard-to-reach population subgroups via adaptations of the snowball sampling strategy. *Nursing & health sciences*, 12(3), 369-374.
- Sandsør, A. M. J. (2010). *The rotating savings and credit association-An economic, social and cultural institution* (Master's thesis).
- Sayed, S. N. (2015). Savings and Credit Associations in Sabon-Gari Market, Zaria, Nigeria. *Abuja Journal of Business and Management* Vol. 1, Issue 2, p. 124-136, April-2015.
- Shaw, E. S. (1973). Financial deepening in economic development.
- Tebaldi, R. (2019). *Building shock-responsive national social protection systems in the Middle East and North Africa (MENA) region* (No. 30). Research Report.
- Thapa, A. (2015). Determinants of microenterprise performance in Nepal. *Small Business Economics*, 45(3), 581-594.
- Van Laerhoven, F., & Ostrom, E. (2007). Traditions and Trends in the Study of the Commons. *International Journal of the Commons*, 1(1), 3-28.

- Verpoorten, R., & Verschraegen, G. (2008). Formal and informal social protection in sub-Saharan Africa: A complex welfare mix to achieve poverty and inequality reduction. In *iNEquality08 International Conference*, Date: 2008/06/26-2008/06/28, Location: Neuchâtel.
- Vinci, I., Djeddah, C., & Hani, M. (2014, December). Local solutions to social protection the role of rural organisations. In *Universitas Forum* (Vol. 4, No. 1).
- Watson, C. (2016). Shock-Responsive Social Protection in the Sahel: Community Perspectives. Retrieved from <https://www.opml.co.uk/files/Publications/a0408-shock-responsive-social-protection-systems/wp3-community-perspectives-sahel-en.pdf?noredirect=1>
- Watson, C., Lone, T., Qazi, U., Smith, G., & Rashid, F. (2017). Shock-Responsive Social Protection Systems Research: Case Study of Pakistan. Retrieved from <https://assets.publishing.service.gov.uk/media/59e0d4f7ed915d6aadcdaf04/OPM-Case-Study-2017-SRSP-Pakistan.pdf>
- World Bank Group (2019). Profiting from Parity: Unlocking the Potential of Women's Business in Africa. Retrieved from <https://openknowledge.worldbank.org/handle/10986/31421>
- World Bank. (2019). *Advancing Social Protection in a Dynamic Nigeria*. ASA P165426 –. Retrieved from <http://documents.worldbank.org/curated/en/612461580272758131/pdf/Advancing-Social-Protection-in-a-Dynamic-Nigeria.pdf>
- World Bank. (2019). *Advancing Social Protection in a Dynamic Nigeria*. ASA P165426 –. Retrieved from <http://documents.worldbank.org/curated/en/612461580272758131/pdf/Advancing-Social-Protection-in-a-Dynamic-Nigeria.pdf>
- World Bank. (2015). More, and more productive, jobs for Nigeria: a profile of work and workers. World Bank Group. Retrieved from <http://documents.worldbank.org/curated/en/650371467987906739/More-andmore-productive-jobs-for-Nigeria-a-profile-of-work-and-workers>
- World Bank. (2020). Supporting African women through the economic consequences of COVID-19. Retrieved from <https://blogs.worldbank.org/african/supporting-african-women-through-economic-consequences-covid-19>
- Yates, C. A. (2013). Indigenous Credit Associations in Botswana: An Application of Elinor Ostrom's Common-Pool Resource Analysis.
- Zimmerman, F.J. and M.R. Carter (2003). Asset smoothing, consumption smoothing and the reproduction of inequality under risk and subsistence constraints. *Journal of Development Economics* 71, 233-260.

Appendix I: Interview Guide

Interview guide for entrepreneurial women in Rotating Savings and Credit Associations (ROSCAs)

Personal Details

1. Are you married or single?
2. How old are you?
3. What is your level of education?
4. What kind of business are you involved in?
5. How long have you been a member of your ROSCA?

Importance of ROSCAs for the Entrepreneurial Women

6. How has joining this association affected your business financially?
7. How has joining this association affected your social life?

The ongoing effects of COVID-19 crisis on women ROSCAs operations in Nigeria

8. How has the COVID-19 crisis affected your business?
9. How is the COVID-19 affected ROSCA contribution operations?
10. What changes has the COVID-19 restriction measures crisis caused in your ROSCA's meeting arrangements and strategies?
11. To what extent has the COVID-19 crisis affected the future of your ROSCA?

Women ROSCAs coping in the context of COVID-19 crisis

12. What ways have you adopted to keep in touch as ROSCA members in the context of the COVID-19 crisis?
13. What measures has your ROSCA undertaken to ensure its continuity with regard to the contributions in light of the COVID-19 crisis?

Existing structural preparedness and state and non-state actors support mechanisms for ROSCAs in the context of covariate shocks

14.To what extend was your ROSCA prepared for the COVID-19 crisis?

15.Did your ROSCA have any measures put in place on how to cope with crises such as the COVID-19 crisis?

16.Has the government provided any support for your ROSCA during this COVID-19 crisis?

17.If your answer is yes for the previous question, in which ways has the state supported your ROSCA in the context of the COVID-19 crisis?

18.Have any non- state actors provided any support for your ROSCA during this COVID-19 crisis?

19.If your answer is yes for the previous question, in which ways has the organization (s) supported your ROSCA in the context of the COVID-19 crisis?

Improvement of structural preparedness of ROSCAs to cushion the impacts of covariate shocks

20.How do you think your ROSCA should be better prepared for crises such as the COVID-19 crisis in the future?

21.What ways do you think the state and non-state actors can support ROSCAs such as yours in the context of crises such as COVID-19 crisis?

Interview Guide for CARE NGO Employees and State Employees

Existing structural preparedness and state and non-state actors support mechanisms for ROSCAs in the context of covariate shocks

22.Has your institution provided any support for your ROSCA during this COVID-19 crisis?

23.If your answer is yes for the previous question, in which ways has your organization supported your ROSCA in the context of the COVID-19 crisis?

Improvement of structural preparedness of ROSCAs to cushion the impacts of covariate shocks

24.How do you think ROSCAs should be prepared to cope with crises such as COVID-19 in the near future?

25.What ways do you think the state and non-state actors can support ROSCAs such as yours in the context of crises such as COVID-19 crisis?

Appendix II: Non-Disclosure Form

Research Assistant Confidentiality Agreement

A. CONFIDENTIALITY OF A RESEARCH STUDY

Confidentiality is the treatment and maintenance of information that an individual has disclosed in a relationship of trust and with the expectation that it will not be divulged to others in ways that are inconsistent with the understanding of the original disclosure (the consent form) without permission. Confidential information relating to human subjects in a research study may include, but is not limited to:

- Name, date of birth, age, sex, address, and contact information;
- Current contact details of family, guardian etc.;
- Medical or educational history and/or records;
- Sexual lifestyle;
- Personal care issues;
- Service records and progress notes;
- Assessments or reports;
- Ethnic or racial origin;
- Political opinions, religious or philosophical beliefs.

As a research assistant you will have access to confidential information pertaining to the research study. Many participants have only revealed information to investigators because principal investigators have assured participants that every effort will be made to maintain confidentiality. That is why it is of the utmost importance to maintain full confidentiality when conducting a research study. *Below is a list of expectations you will be required to adhere to as a research assistant. Please carefully review these expectations before signing this form.*

B. EXPECTATIONS FOR A RESEARCH ASSISTANT

1. Keep all research information that is shared with me (e.g. flash drives, notes, transcripts, data, etc.) confidential by not discussing or sharing this information verbally or in any format with anyone other than the principal investigator of this study;
2. Ensure the security of research information while it is in my possession. This may include:
 - Keeping all documents and/or data related to the research study on a password protected computer with password protected files;
 - Closing any programs, documents, or data files related to the research study when away from the computer;
 - Keeping any printed documents and/or data related to the research study in a secure location such as a locked filing cabinet;
 - Permanently deleting any digital communication containing documents and/or data related to the research study.
3. Not make copies of documents and/or data related to the research study unless specifically instructed to do so by the principal investigator;
4. Give all research information/data and research participant information/data back to the principal investigator upon completion of my duties as a research assistant;

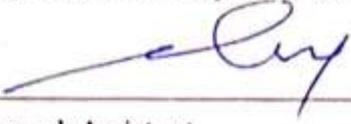
5. After discussing it with the principal investigator, erase or destroy all research information that cannot be returned to the principal investigator upon completion of my duties as a research assistant.

Name of Research Assistant: *Emmanuel Bassery*

Title of Research Study: Coping in Crisis: Women's Rotating Savings and Credit Associations Strategies in Nigeria within the Context of Covid-19

Name of Principal Investigator: Christie Otudor

By signing this form, I acknowledge that I have reviewed, understand, and agree to adhere to the expectations for a research assistant described above. I agree to maintain confidentiality while performing my duties as a research assistant and recognize that failure to comply with these expectations may result in disciplinary action.



Signature of Research Assistant

03/06/2020

Date