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The Credit and Debt Dynamics of Smallholder Farmers of Sunflower Production: A Case Study in Dodoma Region, Tanzania

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Contents

Acknowledgement	<i>V</i>
List of Maps	vi
List of figures	vi
List of Table	vi
List of Acronyms	vi
Abstract	vii
Chapter 1: Introduction	1
1.1 Nature of the problem	1
1.2 Historical background	2
1.3 Sunflower production and markets in Tanzania	4
1.3.1 Sources of Credit in Sunflower production	6
1.4 Objectives of the Study	7
1.5 Research Questions and Sub-questions.	7
1.6 Methodology	8
1.6.1 Study area	8
1.6.2 Study Population	9
1.6.3 Research Design	9
1.6.4 Data collection Analysis	10
1.6.5 Research Assistant	10
1.6.6 Limitations	11
1.6.7 Ethical considerations and positionality	11
Chapter 2: Laying the Groundwork: Theoretical Framework	
2.1 Consequence of Rural Indebtedness	
2.2 The Moral economy of the peasants	
Chapter 3: Utilization of credit and debt dynamics among Sunflower farmers	17
3.1 Sources of credit utilized by sunflower farmers in Dodoma	17
3.1.1 How Credit is utilized by sunflower farmers as Borrowers	23
3.2 Pressure of debt repayment and discipline in sunflower farmers	
3.3 Consequences of indebtedness in case of defaulting loans	26
3.4 The debt relations in the lens of the moral economy	27
Chapter 4: Dynamics of Credit and Debt and Sunflower production	29
4.1 Erosion of community bond and adoption of a capitalist logic	29
4.2 Credit, debt and economic growth	30
5. Conclusion	32
Bibliograph	33

Appendices38

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List of Maps

Map 1.1 A map showing the study area

8

List of figures

Figure 1.1 Sunflower production in Tanzania: 2005-2022

5

List of Table

Table 3.1 Credit sources accessed in Bahi and Chamwino Summary

21-22

List of Acronyms

AGRA A Green Revolution for Africa

AMC Agriculture Marketing Cooperatives

ASA Agricultural seed Agency

IFAD International Fund for Agricultural Development

MFIS Microfinance Institutions.

NBS National Bureau of Standard

NESP National Economic Survival Programme

REPOA Research on Poverty Alleviation

ROSCA Rotating Savings and Credit associations

SACCOS Savings and Credit Cooperatives Societies

SAGGOT Southern Agricultural Growth corridor

TADB Tanzania Agriculture Development Bank

TCB Tanzania Commercial Bank

URT United Republic Tanzania

VICOBA Village Cooperative Bank

Abstract

Impact of credit has been acknowledged as a key factor in the rural communities regarding the alleviation of poverty and improvement of production for smallholder farmers. However, with the dark side of debt, it is crucial to analyse how the impact of credit affects agricultural sector, specifically on sunflower farmers production and their livelihoods. The study explores how credit- debt influences smallholder farmers with concerns such as the pressure that comes when farmers are indebted, reinforcement of credit discipline and involvement of sunflower farmers production. This research has adopted the three 'theses' on the consequences of rural indebtedness by Gerber (2014) in analysing the extent to which indebtedness increases social differentiation through changes of ownership, undermining of traditional community bond, and increasing market discipline of smallholder farmers. In, additional, the 'moral economy of the peasant' concept was also adopted as a framework to analyse client and patron relationship through the creditor and debtor dyad.

In particular, the findings of the research indicates that credit provision has a nuanced impact on sunflower production. On one hand, it improved the farmers' production and sale within the markets. On the other hand, the thought of defaulting increases workloads and activities in order to ensure timely repayments. Sunflower farmers have had at times, to sell their produce at lower prices and engage more in markets to meet their debt repayment obligations. A notable change in their economic lifestyle and behaviour as debtors is that they prioritize earning profit for loan repayment of loans over their leisure time. Moreover, the community bonds among families with debt have proven to encounter difficulties in maintaining solidarity. However, the research also reveals that the presence and accessibility of technology in terms of mobile phones has expanded the option for sunflower farmers to seek the digital credit loans. This means that debt is overall seen as a positive mechanism that disciplines and empowers smallholder farmers to participate in the market.

Relevance to Development Studies

The importance of credit access has been seen as a major drive by academics and policymakers to increase and improve economic growth and alleviate poverty. In the field of agrarian studies, credit is acknowledged for its promotion in the livelihood of farmers production. However, because of strict compliance in debt repayment, smallholder farmers find themselves subject to new pressure. This paper is relevant because it aimed at understanding the impact of credit and the consequences of debt in the agrarian sphere. It explored how smallholder farmers are affected and influenced by the dual engagement of credit and debt.

Key words

Smallholder farmers, credit, debt, sunflower, production, repayment, interest

Chapter 1: Introduction

1.1 Nature of the problem

In 2016, I was privileged to work with the credit department in a Bank in Northern Eastern Tanzania, in the region of Arusha. During that period, I found that most of the schemes of financing agriculture applicants were provided via group-based schemes either through cooperatives or groups formed by members known as 'vikundi'. The conditions of the loans required a mutual repayment as a group putting them responsible of each other. Defaulting of loans and indebtedness was not a new phenomenon to the farmers applicants, and most relied on agriculture as source of income to repay their loans. The burden of the debt, especially in groups, were shared among the members as per the agreement of the loans. However, some groups and individual farmers were efficient in debt repayment and well disciplined on deadlines while others were not. What happened? Why did some farmers succeed, and others fail? And what are the broader consequences of credit and debt? Framing the questions in this way requires a good exploration of how credit and debt fosters credit discipline while restructuring the farmers behaviours to fit the capitalist ways.

Many studies have shown that commercial banks tends to exclude small farmers from borrowing or from defining themselves the type of agricultural investment they are willing to engage with. The criteria for loan applications, in short, are mostly unfavourable to them. The reason behind is the perception of risk associated with farming, the asymmetric information bias and higher probability of moral hazards(Aditya *et al.*, 2019). At the same time the dynamics of formal credits require collateral as the leverage for providing loans which a majority of farmers fails to possess, pushing them into informal credit such as middlemen, moneylenders or landlord as their source of credit. Informal credit is seen as the quickest outlet for many farmers even though the terms and conditions of the credit affect them deeply compared to the formal credits like the Banks.

As I seek to better understand the different dynamics of credit and debt, I decided to focus on access to credit as a major concern for sunflower farmers influencing their production and the sale of their produce. According to Rugeiyamu et al., (2023) credit is one of the limitations that smallholder farmers of sunflower face as hindrances to their income growth in Tanzania. Likewise, Tibamanya et al., (2022) develops arguments regarding the fact that the lack of credit is among the essential barriers for adoption of improved sunflower seeds amongst smallholder farmers. However, while credit can be useful, serious concerns about the negative effects of credit such as interest rates, repayments method and even indebtedness, may also affect the smallholder farmers' livelihoods. For instance, Murungi et al., (2023, p.793) observed that the imposition of "interest rate ceilings" has a significant impact on credit supply to the Kenyan agricultural sector. In the present study, I will examine to what extent the debt repayment pressure changes economic logic and what they do to address these pressures. While some opt to provide labor to repay their debt, sell their assets and even migrate, others increase their production and adjust their lifestyle. The accumulated credit principal and interest rates may become a heavy burden, causing a general negative outcome (Ismail, 2020). This follows the findings of many studies that have discussed how indebtedness has restructured ownership and control of land, labour and capital(Gerber, 2014).

The paper aims to understand the access to credit and the impact of debt among sunflower farmers in Dodoma, Tanzania. Smallholder¹ farmers in Tanzania comprises of 75% of the farmers population in the agricultural sector, contributing 30% to the country's GDP(Kitole et al, 2024). Given the significance of sunflower in the country's economy, understanding how the dynamics of credit and debt influence on these farmers becomes crucial. Additionally, this paper seeks to examine how informal credits and high interest rates interacts with existing power relations, heightening the risk of indebtedness, thereby compelling farmers to adopt strict credit discipline with all its consequences.

1.2 Historical background

The history of rural credit in Tanzania dates back to 1947 during the colonial era, with the establishment of an agricultural agency Known as the Land Bank of Tanganyika (LBT)(Kashuliza, 1992, p.329). During that period, the colonial system limited credit to certain crops and regions with intention of exporting, and the availability of credit remained to the European settlers and the bourgeoise, excluding support towards the marginalized population of the peasants.(Lugalla, 1997).In fact, the implementation of the taxation policies set by the British, imposed significant pressure on smallholder farmers compelling them to focus on cash crop farming while still engulfed in their subsistence farming practices (Lugalla, 1997). As a result,a majority of farmers resorted to informal source of credit to cope with the heavy taxes from their patrons and the landlords to meet their tax obligation (Lugalla, 1997). After independence, the Agricultural Credit Agency (ACA) became the denominator of credit agency replacing LBT due to the inadequate capital funds and loan recovery difficulties (Lundahl and Msambichaka, 1989, Kashuliza, 1992). In parallel, the agency aimed to improve agricultural productivity and promote rural development by providing financial assistance to small farmers and cooperatives to resonate LBT dispute. However, the high cost associated in administering and processing loans led to financial losses and high loan defaults, as the credit projects were inadequate evaluated resulting to formation of new agency to address the defaults (Kashuliza, 1992). To expediate the process, National Development Credit Agency (NDCA) and National Cooperative Bank (NCB) were formed. The particular features of NDCA were to extend credit through the cooperatives societies to address loans to peasants using its resources and subsidiary from World Bank and International Cooperative Organization funds (Mugisha, 2022).

In the midst of 1970s, the agricultural sector became more deeply intergrade into credit cooperatives system due to the reinforcement of ujamaa villagization in the rural areas. For the most part of the nation, the establishment promoted socialite's modes and relations of production that led farmers to join cooperatives (Mugisha, 2022). The intention behind this was to create a classless society without 'exploitation of man by man' were government prompt cooperatives to outsource fertilizers and Agro- chemicals on credit to farmers(Ponte, 2001, Mugisha, 2022). Collection of loan Repayment was done after the harvest, through a system of

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¹ For the purpose of this study, Smallholder farmers in the context of Tanzania, are farmers who obtain less than 10 acres of land or rent land or customary land, producing crops for subsistence farming and the remaining the sale to the market.,

'deduction-at -source²', whereby cooperatives would deduct the value of loaned inputs, interest and marketing fees from the proceeds of farmers sold produce (Ponte, 2001,). However, the cooperatives remained in the clutches of socio-politically and the effectiveness of the credit access was low due to various issues such as high administration, inefficiencies and poor management over how loans were utilized once they reached the cooperatives(Ponte, 2001). Furthermore, the absence of collateral resulted to low repayment rates which led to defaulting of the loans and accumulated debts as some farmers opted to sell their produce through parallel market which increased tension for cooperatives to obtain credit from the Banks(Ponte, 2001).

Meanwhile, the economic crises that occurred between the late 1970s and early 1980s became a pivotal moment in Tanzania, which led to the rise of debts, changing the credit systems within the agricultural sector. In response, the Tanzania government revised its policies and launched the National Economic Survival Programme (NESP) and Structural Adjustment Programs (SAP). Indeed, the introduction of SAPs enhanced global free mechanisms in agriculture sector "by removing subsidies on farm implements, breaking cartels, by teaching toleration of radical fluctuation" (Mugisha, 2022, p.183). This diminished the state control involvement and promoted private sector such as development of new financial institutions, micro-credit schemes and market-driven credit systems. As noted by Cromwell, the aim of these SAPs was to liberalize the economy by providing better prices for crops exports, to boost food production, and increase the budget allocated in agriculture sector citied in (Meertens, 2000). Changes were noticed in the peasant's economy, since smallholder farmers ceased implementing cash crops cultivation in their produce due to impact of SAPs and liberalization policies ceasing farming support systems and extension services making it difficult for farmers to afford them (Mbilinyi, 2016). In fact, it became difficult for smallholder farmers to access credit and agricultural input through the cooperatives system.

Since the turn of the millennium era, several agri-finance programs have been introduced as part of financial inclusion efforts towards agriculture sector especially for smallholder farmers (Isaga,2018). For instance, the launch of the Agricultural Sector Development Programme (ASDP) in 2006, prompt to address agriculture finance through the investment from the private-sector (Bergius et al., 2018). However, the program faced criticism due to its weak involvement in agriculture sector. As a result, 'Kilimo kwanza' as Tanzania green revolution strategy was introduced in 2009, aiming for modernization and commercialization within the agricultural sector, with programs such as the Alliance for A Green Revolution for Africa (AGRA) and the Southern Agricultural Growth Corridor (SAGCOT) (Mbilinyi, 2016, Bergius et al., 2018). This programs were implemented in different regions in the country with the traditional trades initiative by linking Tanzanian and locked countries in south- eastern Africa (Bergius et al., 2018). This opened criticism as strategies abided by the neoliberal principles, which segregates marginalized peasant and created a space for rural land grabbing (Bergius et al., 2018). So, it is no coincidence that smallholder farmers became the recipients and dependants of the informal sector for their finances solution since colonial times.

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² Deduction-at – source is form of system where crop buyers provide credit to farmers, including specific deductions based on input quantity. The harvest crop was used as mechanism of credit repayment instead of collateral in rural areas of Africa.

In rural credit institutions, credit provision is provided in two outlets which are either formal or informal credit markets. Formal credit market is known as a financial service provided by legal institutions such a bank, microfinance, cooperatives which offer, lower interest rates with strict regulators on repayment and usage of collateral while on the other hand, informal credit markets are influenced and operated by individuals (moneylenders, landlords, rich farmers) who are mostly participants of the same community, characterized by high interest rate, use of different collaterals and serfdom. The credit provision in agriculture sector is embedded by difficult bureaucratic processes, high interest rates and unequally collateral requirements which makes it difficult for smallholder farmers to access credit (Wineman et al., 2020). However, their has been a noticeable increase in credit provision towards the agriculture sector, globally and regional by 13% as well as 44% in Africa that has continued to be seen in real terms between 2013 and 2022 (FAOSTAT, 2023). To this point, access to credit from formal institutions remains low by 3% in agricultural household, leaving 48% of individuals self financing their agribusiness Isaga (2018). The terms and conditions of formal credit tend to "isolate the smallholder farmers chances to acquire loan due to poor collateral and paperwork compatibility from the farmers". (Kumar et al., 2021, p.251).In rural farming system, farmers primarily rely on customary lands to cultivate their produce which makes it impossible for them to own land and even use it as a collateral to access credit. (Stein et al., 2016). For instance, a survey done in Tanzania found that, 5.4 million people have turned to informal loan services such as money lenders as their source of credit since they lacked collateral (Charles and Mori, 2016). Similarly in India, informal credit remains as the main source of credit provision in eastern villages towards the marginal and small farmers (Kumar et al., 2020).

Despite the easy accessibility of informal credit, smallholder farmers face unfair practices from these institutions such as the moneylenders' high interest rates, as they operate within monopoly network (Sher et al., 2024). Eventually the farmers are burdened with debts, unable to repay and improve their livelihoods becoming an instrument of exploitation. This Limits majority of farmers from exploring different market outlets, with intention of selling their produce, reducing their ability to increase their cash income(Sher et al.,2024). As credit imposes time constraints on farmers, they are compelled to focus on short term benefits and "to make profits in order to reimburse the principal as well as paying interest" (Gerber, 2013, p.856). Smallholder farmers production process impact is seen in agricultural practices and market sales which are interlinked with dynamics of credit access and debts repayments (Green ,2022). This shows that even if smallholders' farmers have access to credit to increase agricultural production, the question behind remains on the repayments of loan as the main concern to avoid indebtedness.

1.3 Sunflower production and markets in Tanzania

The history of Sunflower production in Tanzania, dates back to the colonial period where it was primarily grown for consumption (Tibamanya et al., 2022; Rugeiyamu et al., 2023). Sunflower is extensively grown across the country due to its resilience to climate and its adaptability to different agro-ecological zones particularly in the 2000s were improved agrarian practices was noticed. In 2019, smallholder farmers of sunflower occurred as the main cultivators of the crop producing 503,032 tones out of 504.442 tones(National Bureau of Statistics, 2021). The key benefit of sunflower cultivation is its effectiveness in producing oil seeds while generating low

greenhouse gas emissions (Hussain et al., 2018). Tanzania produces Around 61% of its sunflower oil in the central corridor, with Dodoma region being the largest producers followed by Singida and Manyara (Tibamanya et al., 2022). Sunflower has been described as one of the flex crops emerging in the horizon (Borras et al., 2016). The increase demand of this flex crop is influenced by the preference and consumption from both domestic and world markets. Sunflower is used local and exported in dry and processed product, that is seeds, oil and cake. In 2019, Tanzania's sunflower market accounted for less than 1% of global exports, with exports going to countries like, Malawi, Burundi, China, the Netherlands, and Kyrgyzstan (Farm Africa, 2022). However, it can be gleaned that the sunflower production from the aggregated data shows a steep increase since 2015.

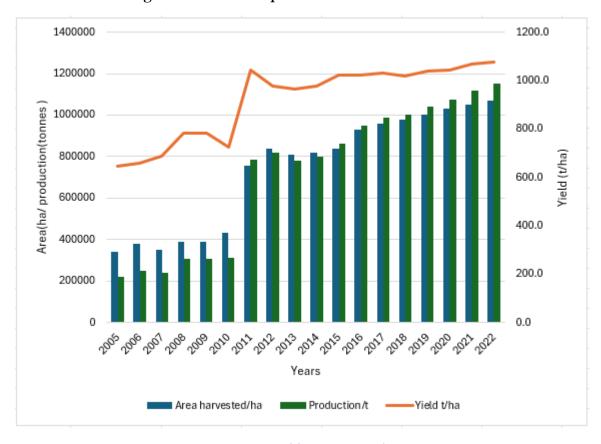


Figure 1.1 Sunflower production in Tanzania: 2005-2022

Source: http://www.fao.org/faostat

When it comes to seeds used for cultivation farmers relays on seeds from their own storage or distributed by the Agricultural Seed Agency (ASA) and other parties such as traders, private seeds companies, the District Agricultural and Livestock Development Office(URT, 2016). To a great extent, there is low usage of improved sunflower seed due to less availability and affordability(Isinika et al., 2021). The source of labour by the smallholder farmers of sunflower "is not mobilized through the labour market" but "it is family labour"(Ploeg, 2013, p.24). The harvesting is done manually by the farmers between may and September, and selling them to nearby traders, Agriculture Marketing Cooperatives (AMCO) and agents who act as the intermediators for local processors of sunflower (Rugeiyamu et al.,2023). However, the engagement of the smallholders' farmers in the market is impeded by external and internal

factors such as storage facilities, market information, credit access and bargaining power.(URT, 2016). The sunflower value chain remains unattainable by a majority of smallholder farmers. Even though it is often seen as "benign facilitator of agricultural productivity and rural income, its power relations are implicit in the term itself" (McMichael, 2013, p.672). The uneven flow of the value chain, impacts smallholder farmers power of negotiation with buyers as prices offered for the products tend to be lower than the market value. Moreover, the market conditions remain unfavourable for them due to the prices dictated by middlemen, lack of market information regarding the marketing systems and awareness of new technologies. According to Isinika et al., (2021) Sunflower seed is marketed through three primary channels:

- ➤ Direct sales to processors; where farmers sell their raw seeds directly to processors, who then distributes the processed products to consumers via traders.
- Sales via traders; farmers sell their raw sunflower seeds to traders who then sell them to processors. The processors handle marketing of the finished products directly to consumers.
- > Ownership by traders; this is where farmers sell their raw sunflower seeds to traders, who utilize the services of processors but retain ownership of the processed goods, such as oil, which they then sell to wholesalers and consumers.

In practice, sunflower market transactions rely on trust rather than formal contracts among farmers, traders and processors. In recent years, marketing and processing of sunflower are predominantly occupied by men, even though during 1990s women were responsible for processing sunflower at the household level (Isinika et al., 2021). The generated oil and cake by small processor are purchased by larger processor for further processing which are then sold in the local market due its affordability and demand for semi- refined oil (Isinika et al., 2021).

1.3.1 Sources of Credit in Sunflower production

Sunflower farmers have experienced improved access to finance from commercial and non profits actors. With the paradigm of financial inclusion, access to credit has been considered as a form of empowerment(Taylor, 2012, p.603). The value chain of sunflower production requires credit inclusion which can either empower or constrain borrowers in their productivity. Sunflower sector has incurred different financial provision in the attempt to improve its efficiency and production with other crops competition such Palm oil, cashew nuts and groundnuts which have been the dominating in the Tanzania market (Dalberg, 2019, Farm Africa, 2022). Tanzania Agricultural Development Bank (TABD), one of the government owned development financial institutions was set-up in 2015 to provide focus on agricultural development through injection of financial provision, addressing issues related to credit access in Tanzania (Dalberg, 2019). TABD has been used as disburser for several credit-based development channels such as Agriculture Marketing Cooperatives (AMCO), unions, SMEs, smallholder farmers, farmers groups(Dalberg, 2019). It is also regarded as an apex institution to coordinate functioning of smallholder farmers credit guarantee schemes (SCGS) on behalf of the government to commercial banks like Stanbic bank, NMB, FINCA Tanzania, CRDB Bank and TPB Bank loaning to agricultural sector(Dalberg, 2019). This guarantees services all crops except tobacco, as banks prefer lacing its establishment more in cash crops since they find farmers lack 'commercial identity' (Dalberg, 2019). Moreover, unclarity of the disbursement of

loans and inputs was seen as challenge in harvest, farmers profitability and loan repayment(Dalberg, 2019).

Savings and Credit Co-operatives Societies (SACCOS) has also gained its popularity among sunflower farmers as a mediator when it comes to financial agency. In Saccos, members are "mainly bonded together by community bond or an occupation bond" (Marwa and Aziakpono, 2015, p.872). Since it is a diverse institution in terms of membership, size and affiliation, farmers find it reliable as a source of credit(Marwa and Aziakpono, 2016). For years, their operation is of cooperate principles, managed democratically by selecting board of directors and managers. However, the expansion of Saccos in different region created openness, flexibility, and diversity in allowing external managers within the cooperatives(Marwa and Aziakpono, 2015, 2016). Resources allocated, and services requires individuals to become a member, save money within Saccos, and buy shares before they are eligible to borrow loans(Marwa and Aziakpono, 2016)). Saccos is primarily entirely financed by members savings, equity, loans from other financial service and pension funds (Marwa and Aziakpono, 2016). The allocation of schemes of loans are dispensed from small to large loans for both marginalized and wealth individuals. These differences over the terms of operation have translated into the growth of Saccos in rural credits as farmers have reduced their dependence in the formal institution such as banks(Marwa and Aziakpono,2015, Katundu, 2020). Also, efforts have been seen through the engagement of extension services by the government in sunflower sector. For instance, SNV organisation support towards the oilseed sector with aim of promoting income for 120,000 sunflower farmers since 2007(Isinika et al.,2021). Other programs such as Rural Livelihoods Development Company (RLDC); International Fund for Agriculture Development (IFAD), marketing infrastructure and one Acre fund have also been the backbone for sunflower production and marketing(Isinika et al., 2021).

1.4 Objectives of the Study

This research explores how the dynamics of credit and debt influence Tanzanian sunflower farmers. In doing so, I will be especially interested in access to credit from different sources and in how debts influence their ability to produce. This research also examines how borrowing patterns affect community bonds and how these patterns relate to the moral economy of rural community. Additionally, the research examines the challenges sunflower farmers encounter and whether these challenges affect their ability to sell their produce and get profits. The practical aim is to suggest ways of improving access to credit and management of their debt.

1.5 Research Questions and Sub-questions.

My research questions and sub questions are as follows-

How do credit-debt patterns influence the sunflower production of smallholder farmers in Dodoma, Tanzania, and with what consequences on their livelihoods?

- To what extent is credit a necessity for sunflower farmers? and what are the sources of credit that they use?
- To what extent is debt a problem among sunflower farmers? How do debt and its power dynamics- affect their participation in the market?

- To what extent are credit/ debt a factor that disciplines sunflower farmers? And how does credit/ debt modify older economic logics?
- How do debt relations influence the 'moral economy of communities of sunflower farmers?

1.6 Methodology

1.6.1 Study area

The scope of the study area is the Dodoma Region which is in the Eastern- central part of Tanzania. It constitutes eight districts which are Chemba, Bahi, Chamwino, Kongwa, Mpwampwa, Kondoa, Dodoma city. Dodoma Region being the capital city of Tanzania, is known for its different agricultural produce such as grapes, Sunflower, groundnuts. It has a total land size of 41,311 km² and shares geographical boundaries with Manyara Region to the north, Singida Region to the west, Iringa region to the south and Morogoro Region to the east and southeast.

Map 1.1

A map showing the study area



Source: (National Bureau of Statistics, 2016)

According to the 2022 Population and Housing census, Dodoma region has an estimated population of 3,085,625 out of which female are 50.97% and Male 49.03% (National Bureau of Statistics, 2022). The agricultural sector in the mainland constitutes of 7,837,405 households Population, Dodoma being leading region with the highest number of 510,148 (National Bureau

of Statistics, 2021). The two districts of Chamwino and Bahi are known for sunflower production which this research focused on. Their source of loans is from rural banks, micro credit, Saccos, government loan, and Traditional credits.

1.6.2 Study Population

The main participants of this research were smallholder farmers of sunflower production in Chamwino and Bahi districts in Dodoma Region and some loan schemes and traditional credits. Most sunflower farmers access loans Largely from banks such as Tanzania Agriculture Development Bank (TADB), Tanzania Postal Bank (TPB), National Microfinance Bank (NMB), CRDB Bank, among others (Farm Africa, 2022). Others get credit facilities from state sponsored schemes such as 10% loan for women, youth and disabilities and other private sector and NGO-led Microfinance institutions (MFIs) such as International Fund for Agricultural Development (IFAD)(Isinika and Jeckoniah, 2021). Saccos, VICOBA, money lenders, family and friends, digital forums among others are private financial institutions that also extend credit facilities to sunflower farmers.

The study population of this research included a total of 12 participants including 7 Men and women of ages 35-60 years old sunflower farmers, majority of whom are married. Besides 5 of them 3 had formal education up to secondary level and others at primary level. The key informants constituted a total of participants including government officer, VICOBA leader, middlemen, Saccos field officer and a moneylender who had experiences of 3-5 years in their respective fields within the two districts of Bahi and Chamwino.

1.6.3 Research Design

This study utilized a qualitative methodology to answer the research questions necessary for the study objectives. This approach was chosen for the purpose of understanding in a deep way the situation and the experiences of the research participants to effectively answer the study's questions. By indulging in the broaden conversation, qualitative research possesses the ability of providing understanding of the participants contextual description of their experiences (Kvale and Brinkmann, 2009). Moreover, "it allows one to identify issues from the perspective of the participants being studied and understand the meanings and interpretations that they give to behaviour, events or objects" (Hennink, 2020, p.10). To analyse the impact of credit influencing sunflower farmers in production and their harvest sale, led to the basis of choosing qualitative research approach since the objectives of this research is to assesses the role of credit and debt in sunflower production, particularly the a) Farmers ways for obtaining credit, b) credit – utilization patterns, c) consequences of debt, and d) the moral economy of the peasant. Additional, secondary data was used to build discussive arguments regarding the dynamics of credit-debt, sources of credit and sunflower production which included existing literature from previous research papers, textbooks, journals articles, websites (Scopus) and other online sources. These two data sources enhance one another, reinforcing the direct feedback by participants in the field.

This study was conducted using a variety of qualitative research tools which includes indepth interviews, observations. As a qualitative research methodology, this research developed a

semi-structured questionnaire for the in-depth interview and key informants as the primary tool to get better responses. The primary focus of utilizing such tools is to understand the complexity of credit-debt being studied, from the viewpoint of sunflower farmers. This opened an in-depth discussion of how the smallholder farmers as borrowers obtain different types of loans, how they use them, their repayment attitudes and the stress linked -to repayment. The complexity of measuring the influence of credit on sunflower farmers reveals both success stories associated with credit facilities and the pressure these facilities present regarding their socioeconomic well-being.

1.6.4 Data collection Analysis

Semi-structured interviews were conducted among the selected participants, Field notes, and audio recording were collected during in-depth interviews. Recordings of the interviews was important because all the interviews were done in the local language, Swahili. This made analysing the information into English quite challenging since the conversation also involved probing questions as per the flow of the interview. The recordings were done and later translated into English for easy writing.

. According to O'Leary (2004, p.195)"in qualitative analysis, understandings are built by process of uncovering and discovering themes that run through the raw data, and by interpreting the implication of those themes for the research questions". The recordings were transcribed and translated, followed by coding of the responses from the field notes. This process involved applying codes to similar responses based on the relative meanings. The coding was done on both sunflower farmers and key informants (KII) responses until no response was left without a code. Codes refers to words that represents symbolically key and meaningful characteristics given to statement in an interview (Williams and Moser, 2019). These codes represent repeated responses from which broader themes were developed to illustrate the patterned responses received from the interviews concerning acquisition of credit, credit utilization, pressure involving debt repayment, the moral economy of patron -client relationship and sell of sunflower productions by the farmers.

1.6.5 Research Assistant

As mentioned previously, this research was conducted with the help of a research assistant, the reason been my inability to be present physical in the study area and the need of interpretation of some parts on vocabularies. The research assistant (RA) is 59 years of age and holds a Degree in Community Development with the of experience more than 20 years working as a research assistant with institutions like Research on Poverty Alleviation (REPOA) and Economic and Social Research foundation (ESRF). I was fortunate to have met him during seminars held in women empowerment and worked with him during my years as Loan officer. My choice of the RA arises from the fact that, the RA has had previous experience and familiarity with the study area. In addition, the RA has knowledge of rural farming which made the facilitation of the interview during the survey easier in obtaining vital information from farmers.

With the information of the farmer I had, I provided the research assistants of which he established the initial contact with the participant and continued to use snowballing technique of recruiting other farmers. Throughout the data collection process, the RA conducted the survey with my support through online WhatsApp calls and we collaborated closely, discussing

any difficulty he encountered through process of survey. The RA assisted in a coordination of all seven interviews I conducted online with the farmers on the field through both normal audio and video calls via WhatsApp.

Ozano and Khatri (2018) suggests that acknowledging RA impact and their positionality is very important, as research Assistants are also active participants within the research. This became important while ensuring transparency and power relations were analysed between the Research Assistant and the participants. Conducting survey of a study entails ongoing engagement with power dynamics that "pertains to researchers and researched, it is also shaped and meditated by the role of research assistants" (Deane and Stevano, 2016, p.221). For research assistant are seen as "insiders in relation to the researched communities with higher socioeconomic status may enforce a peculiar character" (Deane and Stevano, 2016, pp,218-223). The RA in this study, had the power to conduct survey and identify the respondents for the interview. However, the interviews were conducted by me while the RA assisted in coordination of Participants. This followed a crucial understanding the participants responses from the given interviews. The entails of RA own thoughts and advice was also a key part of the process especially when selecting the districts for the interviews.

1.6.6 Limitations

Some of the challenges faced in this study included the inability of being present at the research site, necessitating the use of the research assistant and voice-over internet protocol technology (WhatsApp video). At times repeating of the questions was needed to get clear responses from the participants due to the network. Further, in some instances during the interviews, there were conflicting responses on some question as participants opt to retrieve from answering them of which I respected their privacy. The interviews were done in Swahili, I had to rely on my ability to transcribe and analyse the data which was challenging as some words were contradicting with the required meaning. Additional, budget limitations have also hindered my ability to conduct the research in Tanzania, given the high costs of logistical expenses, international and domestic flights.

1.6.7 Ethical considerations and positionality

Ethical and positionality were thoroughly considered at all stages of this research. According to O'Leary (2004) with power dynamics between a researcher and researched there should be a way of upholding dignity and guaranteeing the wellbeing of the research participants, ensuring protection so that there is no physical or emotional harm that is encountered by them because of the research. The main ethical consideration of this research was the data collection method, which primarily involved distant collection, in particular the challenges in establishing rapport with the participants and the concerns about upholding their right to confidentiality regarding the use of Voice-over internet technology in gathering data. To address these issues, I ensured that informed consent was clearly explained regarding the respondent's rights, confidentiality and anonymity. Participants of this research were informed that this research is basically for the purpose of education as part of the second-degree requirement and regarding the information they provide will not be revealed to third party.

In addition to ethical concerns, I put much thought into my own positionality as former loan officer and as researcher. I addressed this positionality by being transparent about it during the

conversation with the participants and responded honestly to their inquiries about me. However, a challenge arose as some participants were hesitant to share details about their financial situation (whether they have more than one loan) with someone new due to their need of privacy. Also, the participants in this community were reluctant to disclose about their financial status with someone they are unaware of. I had to reassure them that the information was only needed to evaluate their credit- debt relationships with financial institutions, rather than to assess their overall financial condition.

Chapter 2: Laying the Groundwork: Theoretical Framework

This chapter presents the theoretical framework that will help me analyse the findings of this research in accord with the research objectives aimed at assessing the influence of credit provision on the livelihood of sunflower farmers and on their engagement in production and market. Also exploring the impact of credit discipline and power dynamics when acquiring credit while avoiding indebtedness as sunflower farmers.

In exploring this close of interrelationship, reviewing some of the key concepts will give us the theoretical base to understand these phenomena and how they have been defined by different researchers in various contexts. For this reason, this chapter is divided into two sections. (1) consequence of indebtedness (2) The Moral economy of the peasants.

2.1 Consequence of Rural Indebtedness

In agrarian settings, credit is seen as the fundamental drive of rural development where farmers need for agricultural inputs such as seeds, tools and fertilizers are leveraged through credit provision. As noted by Gerber (2015), credit stimulates production and entrepreneurial activities allowing individuals to invest in their businesses without the need for prior savings. Credit provision has become an essential component for generating assets, serving as means of financial inclusions and resolving household's aspirations. As competitive as the economy of today, credit investment is acquired by firms as a stimulant for the survival of their businesses. Additionally, its has been used by individuals as means of tax repayment which moved from "taxes in kind and labor in kind" (Gerber, 2015, p.414). Forcing rural households into capital market due to repayment of taxes(ibid). Despite the different outcomes credit has offered, it is often overshadowed by the issues of indebtedness which tends to distort the livelihood of individuals. Extensive literatures have pointed out the effects of debts in livelihood of individuals especially farmers have led to incarceration in some communities, suicidal acts when properties like lands are confiscated and even individuals end up migrating to new areas (Graeber, 2011; Shah, 2012). The impact of credit and debt is evident in the selection of credit sources that borrower's access and is shaped by factors like the urgency of their needs, social obligations and the perceived trustworthiness of the lenders. However, the credit and debt dual seem to be influenced by the power dynamics between lenders and borrowers, as access to credit goes beyond a simple market transaction. Instead, it relies heavily on the "discretionary power of the creditor", as granting of credit requires a "normative judgment" of debtor's creditworthiness, which cannot be solely based on market metrics (Klein, 2020, p.30). In the sense that credit becomes more of a moral decision that puts the debtors in an unequal relationship with the creditors, who now have both moral and material power over the borrowers (Klein, 2020).

Moreover, interest rate attached to the credit, increases borrower's obligation to repay the principal and interest, generating economic pressure such as economic growth and meeting the repayment deadlines (Steppacher, 2008). As Lazzarato (2012, p.24) describes "interest as finance from the point of view of creditors, security- holders who guarantee they benefit from debt". Likewise, Marx for instance, referred interest as away for capital owners to take share of what workers produce(Marx, 1976). As the economy shifted to market systems, those who lent money and charged interest became the key players of exploitation in ways of capitalism(Marx,

1976). These forces farmers to enter a mode of uncontrollable production and reproduction which formulates a crisis of social reproduction just to repay the debts. Others unsustainable practices and technologies which damages the environment as they cultivate the land beyond ecological limits(Gerber, 2014; Green, 2022). Furthermore, Bernstein stressed the exploitative nature of debt, particularly in situations where farmers end up mortgaging their land or paid increased rents to secured cash for their reproduction requirements leading to "simple reproduction squeeze" (Bernstein, 1979, p.428). Eventually, borrowers prioritize the repayment of debt, pressurizing them to stick to self discipline lifestyle where they "work on the self" (Lazarrato, 2012, p.104). As their action and behaviours are restricted to the level of credit they owe. Their actions reflect a way of life in (consumption patterns, taxes obligation, competition) that is accord with timely of their loan repayment. For this reason, Lazarrato (2012, p.29) outlines that "debt acts as a "capture", "predation," and "extraction" machine on the whole society, as an instrument for macroeconomic prescription and management, and as a mechanism for income distribution". It is this complexity of credit-debt relationship that I use the important research study by Gerber (2014) on the four (4) theses of the consequences of debt as a key concept to unpack how sunflower farmers are affected by indebtedness and the impact it has on their production and marketing.

According to Gerber (2014) rural indebtedness tends to restructure ownership relations among farmers, often resulting in the loss of their land to creditors. When peasants incur debt, they often face the risk of loosing their land to creditors, leading to dependence and accumulation of ownership in the hands of the wealthier (new landowners). These dynamic shifts the relationship of landowners and peasants, allowing creditors to exert greater control over agricultural production increasing inequality (Thesis 1); indebtedness tend to instil market discipline in individuals on prioritizing short-term financial gains to ensure they can repay their loans. This fosters capitalist mentality, where the focus shifts from long- term planning and community welfare to immediate profit-making and cost cutting. This dynamic reinforces a capitalist culture over environmental considerations (Thesis 2); weakens community traditional bonds, when peasants are disposed from there lands from unpaid debt, it increases social tensions, promoting migration and eventually leads to unsustainable farming practices. Such a cycle erodes community connections of rural household (Thesis 3); and functions as one of the mechanisms that drives capitalism. When peasants are in debt of a loan, they tend to produce more to refund back what they owe, including interest. This changes them into capitalist individuals from repaying loan the creates pressure to grow and innovate. Additionally, repayment deadline changes their focus into short- term profit rather than long- term and finding ways to improve efficiency (Thesis 4).

2.2 The Moral economy of the peasants

I use the idea of the 'moral economy' as developed by James Scott in the context of Southeast Asia in the 1970s. This framework will help me unpack how smallholders' farmers are affected by credit and debt obligations vis- a-vis the impact on their production and sell. Graeber noted that even today, "In the secular word, morality consists largely of fulfilling our obligations to others, and we have a stubborn tendency to imagine those obligations as debts" (Graeber, 2011, p.13). This is, in short, a key element of the moral economy of debt. More broadly, the moral economy has remained as a significant influence on the notion of subsistence ethics and patron-

client relationships. According to Scott, the core virtue of peasant's cultures is an ethics reciprocity which governs patron -client relations (Scott, 1976). Communities of moral economy shares values that unite members around a shared vision of good life, even when unrealized (Mauritz, 2014). my primary focus is to examine how subsistence ethics and patron-client relationship in the new era of credit and debt, financialization and the growth of economy.

Scott's discussion of the moral economy highlights that peasants view of fairness and justice in economic situations affect how they behave and react to exploitation. They believed some demands on what produced were acceptable, while others were not(Scott, 1976). Furthermore, the introduction of external financial pressure which may lead to reconfiguration of social norms, as farmers may prioritise repayment to lenders over their commitments to fellow community members. Smallholder farmers tend to face numerous pressure that push them towards the edge of survival, compelling them to sustain their connections with richer farmers and landlord. This dynamic referred to as the patron- client relationship, which is defined as, a critical aspect of subsistence maintenance for peasants where the patron -client relationship involves the patron (landlord or elite) providing for the material needs of the client (tenant or peasant).in return, the client offers labour loyalty and sometimes a share of the harvest (Scott, 1976). Furthermore, reciprocity and the right to subsistence are essential components of the moral economy among peasants, which characterizes the patron-client relationship. The ethic of subsistence maintains that peasants have an inherent right to self - sufficiency, which their social structures need to protect (Mauritz, 2014). The reciprocity ethic, which states that the relationship between peasants and their leaders is based on mutual obligation—peasants respect and support their leaders, who are then expected to ensure justice, protection and support for subsistence needs(Feeny, 1983). This drives us to the dual of credit-debt since its interaction is client-patron whereby a client can request loan from their patron during needy times, in exchange for tenants' harvest. Moreover, majority of smallholder farmers are more driven by the subsistence needs whereas the patrons prioritize in maximising their profits. It remains questionable whether there is fair in the interchange between creditor and debtor especially during inconvenient times and are forced to accept whatever the patrons offer. As Scott comments the idea of a "fair price" or "true value" comes into play when deals made under pressure are seen as unfair (Scott, 1976). Developing this discussion, the focus will be on the 'reciprocity and the balance of change' as discussed by James Scott

From the reciprocity perspective, Mauritz (2014) defines it as a social and moral principle promoting mutual exchange between parties, where one party provides a benefit or service, expecting a returned in the future. In additional, Scott (1976) argues while exchanges in village settlements typically involve comparable values, the obligation of reciprocity is a fundamental moral principle that transcends these transactions. Rural communities' involvement in moral economies are built on trust, reciprocity and mutual support. However, it is also interesting to look into factors, particularly indebtedness in agriculture, that affect the level of reciprocity of a typical peasant. Indeed, Scott clearly stated "if the growth in permanent disparities in power opens the way to what we might call patronage, it also opens the way to exploitation" Scott (1976, p.170). This comes from reinforcement that credit- debt creates dependency of smallholder farmers if they are unable to repay debts due to poor harvest or market fluctuations. Leading to them outsourcing other alternatives that are presented in

exploitative practices which increases their vulnerability as borrowers, losing their autonomy and agency while dedicating their financial necessity to repay debts.

Furthermore, the exploitative practices tend to exacerbate inequalities within the community and undermining the solidarity that is essential for functioning moral economy, as those with access to credit gain power over indebted individuals. This shifts the ethic of reciprocity, as moral- economy views village leadership as patrons who ensures citizens survival (Feeny, 1983). Given this, I became intrigued at reciprocity and social relationship between patrons and clients, the patrons being (creditors, middlemen, community) and clients (peasants, borrowers). Where both parties have expectations of support in credit and debt interactions of smallholder farmers of sunflower considering it as mutual obligation seen to be a moral duty, and any violation of these expectations can lead to social unrest. Linking this to my research where power relations and economic pressure in agriculture sector is significantly rising, it is essential to understand how these factors stimulate indebtedness of smallholder farmers of sunflower,

Chapter 3: Utilization of credit and debt dynamics among Sunflower farmers

This chapter presents an overview of findings while addressing the research questions on How do credit-debt patterns influence the sunflower production of smallholder farmers in Dodoma, Tanzania. The findings were organised into two parts corresponding to the research questions. The first section examines the pressures and obligations that indebtedness imposes on smallholder farmers preventing them from loan repayment defaults. The next chapter will analyse the impact of these pressures and specifically how the discipline of debt contributes to sunflower production by the farmers. The need for sunflower farmers to acquire credit arises from their necessity to purchase agricultural inputs to increase production and sell their produce in the market. The main focus of findings in this chapter revolves around the impact of credit-debt which encompasses four key themes (1) sources of credit utilized by sunflower farmers, (2) repayment pressure encountered by sunflower farmers, (3) the consequences incurred if there is default of loan, and (4) the impact of debt relations on the moral economy

3.1 Sources of credit utilized by sunflower farmers in Dodoma.

Through the interactions with respondents, the diversity in sources of credit is openly recognized among the rural smallholder farmers of sunflower in the Dodoma Region. A majority understood the dynamics and operations of the credits offered as they ensured to acquire loan from institutions which fit their purpose, including Saccos, VICOBA, Government loan, Digital platform, money lenders and Family and friend.

The savings and credit cooperatives Societies (SACCOS)³ are arguably among the most known and used source of credit for rural people in Tanzania. Established in 2004 in Dodoma region, K.K.K.T Arusha Road Saccos operates as a credit business with special assistant from K.K.K.T Lutheran church solely focused on mobilizing savings, receiving contributions and providing affordable credit schemes to communities. Information from key informants indicates that K.K.T. Saccos serves as customer base of 881 members, comprising of 383 male and 498 female respectively. These loans are provided for both individual and group loan with the of inclusivity for both woman and men who engage in loans such as agricultural, transportation, poultry, school, construction land, short loans and digital loans.

"Why do you use Saccos?" was a question I posed to the participant during the in-depth interviews. "It is one institution that we us Men can easily access loans there, unlike Banks which are the formal institutions" said Mr. Chonya, a 56-year-old sunflower farmer with a small processing machinery of sunflower recently opened in Chamwino district (Chonya ,05-08-2024). When the same question was posed to, Amina a 42-year-old Saccos loan officer she said that "Men find it difficult to borrow money from private institutions as many schemes are groups that engage in women empowerment" (Amina,06-08-2024). The preference of providing loan is given a lot of to women who are seen as borrowers that can be trusted, as they are very punctual when it comes to loan repayment. She continued to clarify that "however with men who are serious and have land to cultivate are very committed to loans, as their focus is on acquiring credit for investment" (Amina, 06-08-2024).

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³ These loans are presented in the Saccos website http://www.kkktardsaccos.co.tz the official website of K.K.K.T Arusha Road Saccos.

According to participants interviewed from the fields of sunflower and validation by the loan officers Saccos, the following procedures are followed before loans are offered to the farmers who are members of Saccos.

- 1. Individual Farmers or groups are identified based on their interest of the loan. For a client to qualify, an invitation is given to loan field officers to visit their field areas for assessment. The loan officer visits the farmers on unexpected day as a surprise check and assesses how much loan a farmer should receive. Mr Chonya disclosed that, "Even if I request higher amount of loan, the loan officer has the final say on how much I'm entitled to get as per the survey of my farm and business". (Chonya,05-08-2024).
- 2. The second condition requires each borrower agreeing to repay the loan despite them incurring any loss from their businesses. "With the agreement I'm required to pay loan even if my harvest was low or destroyed which puts me under pressure to perform in my other businesses" (Chonya, 05-08-2024).

Usually, the steps towards the qualification for loans requires a member within the Saccos to purchase 100 shares, totalling Tshs 1,000,000 with each share valued at Tshs 10,000. Additionally, they are required to maintain a minimum savings balance of Tshs 100,000 and must have paid 50% of the total shares value. These savings not only contribute to their financial improvement but also serves as collateral for the loans. The interest rate offered amounts to 2.2% for a loan cycle which various in 3 months, 6 months and 12 months. Every member of the Saccos pays the fixed amount of 50,000 as membership fee. As Mr Chonya a 56-year-old commented "we are not refunded of the membership fee in case we decided to leave the union or if one is chased out" (Ibid). Speaking on the same matter the Saccos loan officer I interviewed admitted of the membership fees condition. This is in line with Pasara et al. (2021, p.51) who entails how Saccos dependence of the capital structure relies on "registration fees, value of contributed share capital and external borrowing."

The mode of access for the VICOBA is not so different from Saccos except with these members contribute their own money. VICOBA from the context of Tanzania, is known as a voluntary savings and loan program designed especially for rural women to encourage savings and provide loan to its members who are unable to acquire formal credit. Even though VICOBA is understood to be village community Bank. Many individuals in Tanzania when describing the social groups of help that consists of savings and loan, 'VICOBA' is the common word being used by individuals to describe such groups in both urban and rural areas. The loans that are offered depends on the ability of the groups vision, agreement and members willingness. For instance, with "Wanawake na Maendeleo VICOBA", there Loans range from Tsh 200,000-400,000 for three months and Tsh 500,000-1,000,000 for six months with interest rate of 10% charged annually. One of the requirements of accessing the loan, it is mandatory for a member to purchase shares 3 times a week, with each share costing 5,000 Tsh resulting in total weekly contribution of 15,000 Tsh every week. These shares accumulated weekly is later shared among the group's members at the end of every financial year. The main aim of this initiative is to allow members to save money for their own benefits. The number of shares contributed also determines how much loan a member is entitled too. This same pattern where debtor's shares serve as collateral is also seen in Saccos agreements. Ms Yasinta, a 39-year-old a housewife and sunflower farmer from Bahi, the leader of VICOBA "W-anawake na Maendeleo" meaning Women

and development disclosed to me that there is flexibility in loaning out to farmers because the values and moral they share as close-knit community. She said that "For us farmers we have a more flexible approach to loan access and repayment terms for our members, recognizing the challenges we face with farming and constraints we encounter" (Yasinta,09-08-2024). When it came to defaulting of the loans, she confirmed that no one has ever defaulted in repaying their loans as majority have other side businesses that supports them. However, if it happens, their shares will be used to offset the loans.

The government loans by the city council known as 10% loan for women, youth and disabilities, are state sponsored loan scheme with intentions of alleviate poverty through Agricultural sector. The schemes offer various credit programs which includes 4%-Women- 4% youth and 2% people with disabilities. These loans are offered to groups⁴ of individuals that have registered as a group within the government systems and are recognized by the districts. This kind of arrangement has been used by many cooperatives where the group members select their credit recipients themselves based on their neighbours' characters and capacity avoiding joint liability arrangements (Bratton, 1986). The amount of loan offered is Tsh 10,000,000 million paid within 12 months with no interest rate charged. Members are eligible of one another, and in case of default all members carry the burden of repayment of the loan. My deep conversation with Ms Ndachi, a 45-year-old sunflower farmer and owner of a local shop (machine for processing the sunflower seeds) borrower from the government in chamwino she said that "Trust and obligation are the foundation of our relationship" in the sunflower community (Ndachi,10-08-2024). However, when faced with issues that requires money, it alters persons character and the foundation of trust with each other particularly as farmers gets distorted. She revealed that "We trusted one of our group members to buy quality seeds in the neighbour region of Singida, instead she ended up fleeing with the loan leaving us with pressure of the debt to repay" (Ndachi, 10-08-2024). Moreover, the conversation with government official Mr. Henry, who works with the ministry of works, women, youth &persons with disabilities, disclosed that, "when we offer the loans the first and foremost agreement as for the groups is them agreeing on carrying the burden of debt on behalf of other group members in case one of them defaults" (Henry,09.08.2024). The pressure of indebtedness produces individuals who are bound to find means and outlets of increasing income to repay. Gerber (2013, pp.847-853) has noted that farmers who are indebted end up adopting "algorithm thinking" adjusting their lifestyle to make sure they remained creditworthy. For instance, a majority of farmers increase their production and engage in income generating activities. Consequently, by defaulting the loans it reduces the chance of the group in accessing more loans from the same institution. Mr Henry revealed that "until the debt is paid, they are not legible for a top up" (Henry,09.08.2024).

Regarding the digital loan credit platforms, they emerged as an Opportunity for enhancing financial provision among sunflower farmers. The initiatives began with the mobile network operators collaborating with banks and other financial institutions to provide accessibility of loans to their customers for instance, M-pawa offered through Vodacom in collaboration with commercial bank of Africa. (Juma et al., 2016). From this study, we look at Songesha which is an exclusive service designed to assist their clients complete an M-pesa

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⁴ Most of these groups are formed by individuals themselves who are familiar with each other.

⁵ A *top-up* is a terminology used in financial institution especially banks to refer a loan offered over and above the existing loan

transaction when they have insufficient funds while sending money. Through this collaboration with FINCA Microfinance Bank, Vodacom app has been able to increase songesha limits and expand the range of transactions even if customers have insufficient funds⁶ Mr Mazengo, a 49year-old sunflower farmer from Bahi said that "I primarily use songesha app to acquire seeds input for sunflower, particularly when I'm low on funds' (Mazengo, 10-08-2024). He elaborated that it serves as a quick solution of acquiring finance without a lot of procedures compared to other institutions. According to Parlasca et al., (2022) loans from Mobile platforms are accessible and instantly provided to farmers in rural areas without formal credit history. In the sense that the functionality of the app serves as an overdraft for members of Vodacom who have been sending and receiving money for years. Unlike other institutions, the need for collateral, assessing one's business, identifying individual's locations does not apply. The mode of collection and follow up repayments of the debt is done through SMS. Although, the uptake of the digital credit within smallholder farmers and in the rural areas has been low since the features of repayment periods associated with these loans are misaligned with cash flow cycles of farmers, who primarily earn income during specific crop cycles(Juma et al., 2016). Mr Mallya, a 35-year-old Vodacom officer said that

"The intake of digital credit in rural areas seems to be low compared to the urban areas, as individuals are comfortable with traditional financial ways of meeting the agents physically in accessing loans than the digital of which they are not very familiar with its functionality" (Mallya,04-10-2024).

The relaying of the traditional financial institutions such as Saccos, come with benefit of grace periods and reversed instalment repayment which farmers find manageable (Juma et al., 2016). The pressure of repayment for the digital credits tends to be different from others. What changes is the fact that farmers are led by there comfortability regardless of the outcome they face. As Mr Mazengo retorted that "I prefer mobile loans even though there is increase in interest rate after the period of repayment has passed, since the reminder from the creditors (through SMS from the app) to repay the debt is bearable." (Mazengo, 10-08-2024)

In relations to Money lenders, some of its operations have similarities with other credit institutions. Money lender credit is arguably one of the useful sources of credit for many smallholder farmers in Tanzania. However, one of the observed concerned by many researchers worldwide in money lending, is the formation of interest rate(Balachandran & Dhal, 2018).Mrs. Chenje, a 47-year-old housewife cultivating sunflower in Chamwino disclosed that, "Accessing loans from Moneylenders when I need it is always available at hand, but the problem is with the interest rates offered" (Chenje,11-08-2024). Through the in depth interview she disclosed to me regarding the loan acquired from the Money lenders which she has been repaying consist of 25% interest rate monthly and not annually from the loan she borrowed. Speaking on the same matter my conversation with a Mr Arnold Money lender revealed that,

"We offer loans with high interest rate based on the fact that the loans given to farmers is not insured and the risk in farming is unpredictable" (Arnold,08-08-2024).

⁶ Information accessed from https://www.vodacom.co.tz, the official website of Vodacom

This developed a more in-depth conversation regarding the question on the late repayment of loans and in case farmers' default. How do they handle such situations? He disclosed to me in case there is a late repayment of loans, additionally charges are increased to the borrower to pressurize them to repay. "When it comes to default, we sale the collateral that the borrower agreed upon on the contract such as cows, machinery and household items (Arnold,08-08-2024).

An insightful conversation by a farmer revealed that even though there are less demands from the lenders to borrowers, she said that "I am forced to endure this conditions that are deceitful" (Chenje,11-08-2024). This aligns with Balachandran & Dhal (2018, p.334) who observed that "small farmers are likely to be exploited by money lenders". Similarly, (Lazzarato, 2012, p.20) finds credit as "one of the most effective instruments of exploitation man has managed to create, since certain people, by producing credit, are able to appropriate the Labor and wealth of others."

Other source of lending that came up during my research included loans from family and friends. Mrs Ndosi 35-year-old businesswoman in local market and sunflower farmer from Bahi said that,

"I took loan from family member without interest rate for the purpose of harvesting the sunflower but the pressure and fear that was created towards me, forced my hands to sell the produce at a lower price to return the debt." (Ndosi,07-08-2024).

The fear of public disclosure of borrower's financial difficulties discussed openly, forces an individual to find resolution to avoid being shamed. For instance, in African context individuals' financial debt can be discussed among family members giving room for them to judge one's short comings and compare them with the fellow relative's success.

Table 3.1 Credit sources accessed in Bahi and Chamwino Summary				
Lending source	Type of credit	Criteria if applicable	Interest rate	Loan Repayment
Sacco's	1. Crop Loans	➤ Members-based	Various from	Monthly repayment
	2. Poultry loans	microfinance with	2.2% to 5%	(Some offer duration of
	3. Equipment loans	function of savings and	annually	repayment in 3, 6 and
	4. Other: Group loans,	provision of loans	depending on	12 months)
	term loans (e.g	Offers small loans to	different	
	building, land,	large loans (based on	Sacco's.	
	education, small	shares accumulated as		
	business loans)	individuals)		
		Requires buying of		
		shares which is specific		
		amount of 10,000 tsh		
		➤ No limit of members to		
		join		
		Loan is given based on		
		field officer assessment		
		(on land)		
VICOBA	Individual Loans divided	> Members-based	Various from	Monthly repayment

	within the group (there is no specific terms on loan usage)	> >	microfinance with function of savings and provision of loans Small loans (depends on members capabilities Limitation of members up to 30 maximums. Cycle ends after one year	5% to 10 % annually on the loan offered	(Some offer duration of repayment 3, 6 and 12 months)
Government Loan	10% loan for women, youth and disabilities (The Local Government Authority allocates ten percent of internal revenue for lending) Funding depends on each local government authority of districts.	A	Registered group and recognized in government systems (a group that has memorandum) Loan is given to women in a group of five members	No interest offered	Monthly repayment within three months
Moneylender	Individual loan or Group Loan (there is no specific terms on loan usage)	A A	Loan is given based on preference of individual and moneylenders float Credit history is checked Collateral is based on value of loans given.	Various 10% -30% depending on the moneylenders (interest charged monthly	Monthly repayment (Some offer duration of repayment 3, 6 and 12 months)
Digital platform	Individual Loans offered by mobile companies such as M-pesa, Airtel, Tigo (inform of an overdraft)	A	Overdraft is given Based on registered membership to the digital platforms. Eligibility of the Overdraft is based on transaction history on the platform (either through sending or receiving) Limitation of Overdraft is reviewed from time to time Amount varies from minimum as 1000 tsh- 3,000,000 tsh	The higher the overdraft loan the lower the interest rate and viceversa. (1day – 16days and above, interest rate varies from 2.50%-17%)	Repayment various from 1 day to 16 days. (going above the days means an individual has defaulted)
Family and	Individual loan	~	Offered based on family	No interest	Depends on family

friends	and agreement towards	rate offered	agreement on the	
	the loans		lending terms	

3.1.1 How Credit is utilized by sunflower farmers as Borrowers.

As stated earlier in the context of this research, Sunflower farmers were studied with the aim of exploring how credit and debt disciplines borrower's and influence their behaviours by ensuring timely repayments of their debts. Accordingly, most of the sunflower farmers I interacted with used the loans for agricultural input, rental of farmlands and harvesting period. During the interviews, the farmers were asked about the status of their production before and after they started accessing loans. Evidence showed that majority of sunflower farmers utilized the loans provided to enhance their production by purchasing seeds, fertilizers and renting lands only when necessary. According to Ms. Ndachi, "Getting a loan from the government schemes has helped me expand my sunflower production by renting a land and purchasing seeds and fertilizers" (Ndachi,10-08-2024). As highlighted by Nordjo and Adjasi (2020), through the Propensity Score Matching (RSM) Model that smallholder farmers who had credit access demonstrated higher rate of productivity compared those without access. Other researchers have also commented on the notion that credit access acts as a catalyst in farmers productivity and motivates them to take risk-oriented ventures to raise income while focusing on their economic growth (Ramasamy and Malaiarasan, 2023).

In the strive to improve their production and livelihood, some farmers have expressed that provision of credit and the profit they incur after selling sunflower has empowered them to take risks of opening other venture, increasing their economic growth. For instance, it has acted as form of empowerment for women in meeting their household expenses and reducing dependence on their husband's income. Ms yasinta a 39-year-old housewife, the borrower from VICOBA said that "After selling my sunflower and repaying the loan, the remaining amount helps me with household expense such as food and school items for my children" (Yasinta, 09.08.2024). Also, the new resolution of digital loan platforms has proven to have impact on the farmers of sunflower production such as Mr Mazengo the borrower from M-pesa who said that, "I intend to borrow again in October for the purpose of renting more land, using the M-pesa platform as it is easier and affordable" (Mazengo,10-08-2024). He elaborated that, the easy process of accessing the digital loans, solves the intended purpose within a short time frame.

When asked whether they took loans for other purpose rather than sunflower. Mrs Mavunde a 41-year-old local businesswoman and sunflower farmer in Bahi retorted in reaction to a question I posed, that "The way debt makes me restless and dries my blood, then how can I really opt for loans without the intended purpose it meant for especially from the Money lenders?" (Mavunde,07-08-2024). According to her, being an aimless borrower creates a cycle of credit indebtedness. Since she is engaged in other ventures, it is through sunflower that she uses and pays back the loan owned. The thought of taking loan without purpose of the intended work becomes a burdened

especially in agrarian setting. My in- depth interview with lending institutions the city council also revealed that, the loans offered are only given to the assessed farmers and groups in the field of agriculture such as 'group woman loan'. Likewise, Amina loan officer from Saccos disclosed that "Farmers are provided with loans for the intended purpose and even if they channel the loan in other businesses, the repayment of the debt monthly will still affect them" (Amina 06-08-2024). For instance, Mrs Mavunde borrower from money lender retorted to the question I posed about channelling the loans on farming to other business, "it happens when I'm in no need of a loan within that period, but my sunflower farmers need the money, I request the loan on their behalf" (07-08-2024).

Some interactions with the sunflower farmers also revealed that farmers can acquire loan for the purpose of re-loaning to their fellow members. This collaborated with the response of Mrs Yasinta leader from VICOBA as she disclosed that "Yes, this is very common as some of the farmers in the group tend to borrow for their fellow group members or even friends who are unable to acquire loan at time of circulation or they are not members of VICOBA" (09-08-2024). The repayment of the loan recognises the borrower and not the user. Every end of the month the user provides the amount of the loan to repay the debt to the borrower without fail. According to her no one has ever defaulted from this kind of arrangement even during the period of COVID as loan repayment was still done.

3.2 Pressure of debt repayment and discipline in sunflower farmers

Crucial as it is, posing the question of indebtedness to the sunflower farmers in a simple way, opened a meaningful conversation with farmers. Some of the sunflower farmers talked abut their different encounters, the struggles and challenges of loan repayments and how their perspectives and behaviour have changed in order to repay their debts. I will be discussing some of these issues of "repayment lifestyle." (Lazzarato, 2012, p.31) of sunflower farmers in Bahi and Chamwino district in this section. From the interactions with Mr. Henry, who works with the ministry of works, women, youth &persons with disabilities understood that debt has shaped the lifestyle of many smallholder farmers in different ways. He said that It is true that loans are beneficial, but there has been a concerning trend in the recent years, where many farmers including those growing sunflower get loans from various private credit institutions (such as money lenders). Unfortunately, due to poor agricultural yields, many farmers struggle to repay these loans. This situation has led to some of the farmers selling of their land or assets and even migrate to other villages and seek refuge in cities or other distant places. Such circumstances have become increasingly common due to loans provided to farmers compared to previous years (Henry,09-08-2024).

During the in-depth interview, Mrs Chenje revealed on the ideal pressure and fear of losing assets from late repayment of loan to moneylenders due to low production of sunflower seeds she incurred in last year harvest. The fear of being in debt forced her to borrow money from the family to repay the debts she owned. "While finding the means to repay the loan to moneylenders, I turned to my relatives for help even though I knew the shame it brought to me" (Chenje,11-08-2024). She disclosed that, the disgrace that comes with asking funds from relatives to cover the debt, makes it difficult to face the family especially when the whole clan are involved in your debt issues.

One of the farmers, Mr Chonya who accessed loans from Saccos commented on how the pressure of debt increased after he had acquired a top- up on the loan, especially since he faced the *Eli Nino* rains from last year November to January, which destroyed the sunflower crops he was supposed to harvest. According to him, he never had peace of mind when the end of month approached "If I had only one source of income as farming I will have been indebted by now" (Chonya,05-08-2024). The small milling business within the village has assisted him in repaying the debt at the end of the month. Having credit discipline and obligation to the loan repayment became his priority in that he restructured the loan repayment with the Saccos after the incident declaring new repayment plans to avoid being indebted.

Some farmers engage their children of age to help them at the fields and selling of their harvest in order to earn more and repay the debt. This came up during the conversation with Ms Ndachi borrower from government loan disclosing that "Most of my consumers are urban individuals who are in need of sunflower oil. I send my son to go and sell while I engage in other chores" (Ndachi,10,08,2024). According to her the debt keeps her on edge on finding other means of earning money more than the sunflower seeds and oil production, by engaging with near by district and urban areas. Sometimes she uses the middlemen from urban areas to sell sunflower seeds "The amount of pay from the middlemen in urban is more reasonable compared to the ones in my area. For instance, 1kg of sunflower could be 10,000 from urban but from my area it is at 5,000 Tsh" (Ndachi,10-08-2024).

. Does a loan with interest or non- interest have different characteristics in terms of repayment pressure? was a question I posed to Mrs Mavunde since her background and experience includes the usage of different source of credit. She said that "There is no difference when it comes to pressure of debt whether interest or non- interest, a debt is a debt, and it has to be paid" (Mavunde,07-08-2024). The biggest issue for many of the borrowers is that they never analyse the people they borrow from especially the informal credit institutions. If there is availability of loan the focus remains on getting it and opting for the easiest way without much of interrogation of the persons character as a lender. She pointed out that, knowing individuals' characteristics as a lender is very important. Whether the loan offered has interest or non-interest, some may be more accommodating as lenders than the others especially when it comes to repayments. She said that, from my experience you might find the lenders with interest rate are more polite and even assists you with finding markets for your products without any string attached and at good prices. At the same time the pressure with non- interest loan becomes riskier, as many who lend without interest-except the government loans-tend to know a person's deep background and are relatively close. (Mavunde,07-08-2024)

Theoretical implications: From the basic perspective, credit is considered beneficial for borrowers when it serves the purpose. Credit means "a promise to repay in a more or less distant and unpredictable future" (Lazarrato, 2012, p.45). Since one ends up "estimating that which is inestimable" from future events and uncertainty time (ibid). It serves as a burden when debt occurs, changing borrowers' behaviour and ways of thinking. Even though the creditors may not necessarily reinforce people's behaviour but they "act as subjective" who mobilize the "innermost depth of the human heart," which orients their behaviour (Lazarrato, 2012, p.134). The obligation of debt forces borrowers to "foresee, calculate, measure and established equivalences between current and future behaviour" (Lazarrato, 2012, p.46). From this research, debt has been seen as a direct promoter of discipline through borrower's lifestyle. According to

Lazarrato (2012, p.104), "debt directly entails life discipline and a way of life that requires work on self". In other words, these characteristics of an indebted man have developed consciously and unconsciously changing them into discipline individuals. This is no different from the description by Gerber of debt fostering individuals into discipline, compelling them "to think and to behave in a particular way in order to secure timely repayments" (Gerber, 2014, p.738). Moreover, the big pressure of debt ends up contributing to shaping of farmers "mental representations and priorities" (Gerber, 2021, p.552). To avoid being in defaults and the consequences of being indebted. Even though the pressure varies, still the fundamental features such as "to remain solvent, to respect time constraints and to make profit" are the same (Gerber, 2021, p.554). The next section of this chapter presents the consequences of being indebtedness when farmers default the repayment of the loans.

3.3 Consequences of indebtedness in case of defaulting loans.

While the role of credit serves as a catalyzer, borrowers are faced with its other side of indebtedness. My interactions with sunflower farmers revealed multiple defects of credit they encountered. Through the in-depth interviews I have engaged, there have been several cases of farmers solidarity within community breaking, selling of assets and forms of exploitative. Some of the farmers have been expelled in farmers groups such as VICOBA by their colleagues for defaulting loan repayment "one of our members was unable to pay loan and her shares were not enough to cover the debt we were forced to remove her from the group" (Mavunde ,07-.08-2024). There have been instances farmers have experienced embarrassment due to loan defaulting, As Ms Chenje elaborated that "There is a period I had defaulted one month loan repayment, and the Money lenders showed up at my home" (Chenje ,11-08-2024). The fear she felt at that moment she saw the moneylenders was unexplainable, especially since her husband was unaware of the loan she owned. Moreover, an interesting experience was explained by Ms Ndachi, a sunflower farmer and owner of a local shop loan, on the penalty she incurred in her previous years when she borrowed loan from the money lenders. She said that

"I was penalized by the money lenders on the loan I took the moment I failed to service two months debt instalments. Seriously I worked so hard to return the money avoid being a slave of the debt" (Ndachi,10-08-2024).

Debts default has also led to auction of personal belongings of the farmers such as lands in order to repay loans. According to Mr. Henry, who works with the ministry of works, women, youth &persons with disabilities, "when it comes to the unpredictable of farming, most farmers are caught off guard by the results of their produce, especially the ones with loans end up in crisis and even selling their lands to cover the debt" (Henry, 09-08-2024). Leading to many of the farmers migrating to the nearby towns and even to urban areas.

In some instances, indebtedness has caused change in the family solidarity and relationships within the community. "Sometimes we are forced to involve the families of the defaulters, which changes relationship and even some lead to divorces" Amina Saccos Loan officer disclosed (Amina,06-08-2024). Even though the intentions of involving the family is mayorly to return the loan, still it affects the perspectives of their families and community overall. For instance, Ms Ndachi revealed to me an incident that involved her neighbour indebtedness led to the family migrating and selling their land to wealth farmers.

On the other side a clear concerned was raised by Mrs Yasinta, the VICOBA leader, regarding the intended use of loans disvaluing the impact of credit towards farmers the moment they find themselves in large debts. She said that "sometimes the main problem is that borrowers often struggle to repay loans due to not fully utilizing the loan for their intended projects, making it difficult for them to meet the deadline for repayments in time." (Yasinta, 09-08-2024). The moment the loan is divided to more than sunflower production and engage in other ventures, it increases the rate of defaulting since the returns or profits of new ventures varies in time. According to Taylor et al., (1986) misallocation of credit by farmers is one of the ways in which the credit impact is unlikely to be seen resulting to less production.

Theoretical implications: In relation to the relationship between credit and debt, borrowers' discipline has contributed to the features of capitalism such as innovations, productivity increase and economic growth. However, through the same dual, it has created source of failures such as inequalities, exploitation, environmental degradation to debtors(Gerber, 2021). It is evident that through indebtedness, community solidarity is undermined while disposing defaulting debtors and fostering social differentiation (Gerber, 2021) Through the interest- bearing loans on farmers, "some gain, some lose some maintain themselves and some are displaced" (Gerber, 2013,p.855). The thought of defaulting for most borrower is not a simple matter, such that it forces the debtors to work hard and do everything they can repay within the time frame(Gerber, 2021). Pushing "farmers to make choices based on short – term cash flow" rather than long term investment(Gerber, 2021, p.552). For many farmers in Sunflower production, defaulting is not an option they consider. These farmers evaluate the financial pros and cons of borrowing money. The pressure of being in debt motivates them to work even more harder, finding new ventures for additional income and earn more money to pay back their loans. This influences their choice to either continue with acquiring credit or switch to different lending institutions.

3.4 The debt relations in the lens of the moral economy

The relationship between credit and debt can lead to different outcomes, even in closely connected communities, due to the complexities of the reciprocity in these financial interactions. This follows a conversation I had with Mrs Ndosi a 35-year-old businesswoman in a local market and sunflower farmer from Bahi who disclosed that "the debt I owned from my family member changed our relationship in many ways' (Ndosi.07-08-2024). The loan became a burden as it forced her to sell the harvested sunflower at a lower price just to pay off the debt she owed. Despite having loan without interest and coming from family, she felt obliged to perform favours when it came to assisting them with harvesting. This mostly seen from the "village settlement where the social pressures of the community reinforce the sentiments obligation" (Scott, 1976, p.168). Even though reciprocity is seen as means of building stronger relationships between individuals especially in traditional communities, it is not always desirable, as the obligation it entails can be a burden(Mauritz, 2014). Additionally, the fear of being neglected by the family increases the pressure of adhering to the terms the lender offered. She said that "I was afraid of the meetings held by my clan community that I ended up selling my harvest to local middlemen at a lower price since the pressure of the debt was unbearable." (Ndosi,07-08-2024). From these interactions, it shows that there is a significant threat towards farmers produce which goes against the safety-first principle in Scott

(1976) of the moral economy approach. Consequently, the erosion of community bond discussed by Gerber (2014) is seen from this context, where debt undermines the community life and increases social differentiation among members of the family, removing them from normalcy.

Moreover, through the analysis of reciprocity between farmers and middlemen, findings show a mutual understanding between them: when it comes to selling of produce, the middlemen were still involved but did not have much power as expected on manipulating the produce prices. Ms Ndachi disclosed that, "I tend to wait for buyers from a far and keep my produce well since the local middlemen offer low prices" (Ndachi,10-08-2024). A majority of produces were aware of the prices offered from other buyers and often ensured that they had more than one option of buyers. "I prefer to sell in the urban areas and cooperatives than engaging with middlemen: the only problem I encounter is connection with market systems", Ms Chenje disclosed (Chenje, 11-08-2024).

Theoretical implications: In a very fundamental way, debt in the lens of the moral economy is viewed to be more than money owned by individuals as it connects the to various social relationships and community values that creditor and debtors share. Since debt is usually an outcome from "wilful consent", debtors are obliged to repay even when the lender is family. As highlighted by Scott (1976), classical patron-client relationships make clients often face demands or burdens from their patrons, but this relationship can still be beneficial for the clients. The borrowers often rely on lenders as clients for financial support. This dependency creates a sense of obligation, similar to how borrowers feel indebted to their lenders. However, there is also often a "secrecy of financial arrangements and understanding about such opacity" between family or community(Guérin, 2014, p.46) which creates conflicts and tension on whether the unpaid loan- was a gift or a loan. This ambiguity may prompt the lender to use it as a leverage for receiving favours that becomes a burden on the debtors (Guérin, 2014). When "the debt is not honoured or is too imbalanced, it births humiliation, shame, exploitation and servitude" (Guérin, 2014, p.44). This creates a drift within the family or community as we know that "reciprocity holds the community together and contributes to the maintenance of civil interaction" (Mauritz, 2014, p.140). In short, Scott clearly states that "the moral idea involved in reciprocity is that one should return 'favors' out of gratitude and that, consequently, equal exchange defines a fair relationship" (Scott, 1976, p.162).

Chapter 4: Dynamics of Credit and Debt and Sunflower production

The general outcome of credit and debt towards Sunflower farmers productivity has been mixed. Clearly, as I discussed in Chapter 3, the multiplicity of credit sources available to sunflower farmers has broadened the understanding of the different mechanisms that farmers encounter and how they cope with repaying their debts. The main source of repayment by the majority of Sunflower farmers remains on their sunflower production and the selling of their produce.

While credit acts as a catalyst of increasing production for sunflower farmers and enabling them to sell their produce, debt was seen as a drive that promoted discipline and made them restructure their lifestyle. They therefore acknowledged that credit/debt requires a diversification of survival mechanisms such as being disciplined as borrowers to avoid defaulting. In this chapter, I discuss (1) erosion of community bond and adoption of a capitalist logic, and (2) the relationship between credit, debt, and economic growth.

4.1 Erosion of community bond and adoption of a capitalist logic

For sunflower farmers in Dodoma, it is crucial to remain solvent as demand for sunflower seed, oil and cake is increasing due to consumers needs. The accumulation of credit for the purpose of productivity by sunflower farmers is seen to have positive effects despite having debts as discussed above. However, without a question the sunflower farmers behaviour and mode of trading as direct producers, have ended up adopting ways of capitalism. According to Wood (2009, p.37) capitalism is a particular way of organizing production and allocation- in a "very specific social form" which differs from other modes. In that, direct producers are "dependent on the market for basic conditions of survival and self-production" (Wood, 2009, p.38). The necessity to produce and sell their products at a price that exceeds their production costs became one of their targets to ensure they incur profit for survival and loan repayments while still competing with others in the market.

Sunflower farmers in Dodoma have an average of two to five acres and are constantly seeking to secure more. They sell their produce in seeds, and litres from processed oil. Certainly, the improvised method of credit used by the Bahi and Chamwino sunflower farmers is inform of cash as credit than the agricultural credit input such as seeds, since their main focus remains on producing quantity, for the purpose of increasing profit as much as they can. They have adopted "maximizing strategies" of receiving profit on the "grounds that it would give them the best return for their input such as cutting cost and increasing productivity" (Wood, 2009, p.41). The idea of being trapped in cycle of debt and financial pressure was alarming to them (Mahmud, 2012). As Lazarrato (2012, p.31) explained "the power of debt leaves you free and it encourages you and pushes you to act in such a way that you are able to honour your debts." A part of the explanation from farmers was that, remaining in the good books of the creditors and meeting the time frame of the credit repayment is an important component of than the pressure they receive for repaying their debts. As Gerber (2013, p.853) noted, "credit produces time pressure imposed by period for 1 which the credit is granted".

Moreover, one farmer acknowledged that individualism, within the community, increased as farmers are working hard for their economic growth. Mrs. Mavunde a 41- years-old borrower from money lenders said that,

"I find myself prioritizing on sunflower production and my 'kioski'. Nowadays as community we are unable to engage and assist each other on farming as majority of us opt to higher labour during harvest" (Mavunde, 07-08-2024).

As highlighted by Gerber (2021, p.552), "credit dissolves traditional bonds between community members by individualizing economic responsibilities within dyadic relations". So, it is no coincidence that the impact of credit on sunflower farmers depends and remains on their ability to maximize profit, to remain in the good books of creditor, and to repay debt, which significantly influences their production and sales of sunflower.

In discussing the state of sunflower sales from the farmers, certainly there is an improvement of farmers being knowledgeable regarding market prices offered on sunflower produce. Mr Andrea, a 42- year-old middlemen of sunflower, said that "If a farmer wants to sell sunflower seeds, they contact other and discuss on the markets prices with ease using mobile phones and through community meetings," (Andrea,08-08-2024). The presence and accessibility of technology in terms of mobile phones has expanded the options for sunflower farmers to weigh on the prices offered within the market through the information they gather from fellow farmers. He acknowledges that exploitation and unfairness regarding prices have reduced tremendously since farmers are able to gather information compared to previous years. While the notion of middlemen having power over the peasants' produce was common for centuries, especially when credit was involved, my findings from two districts points towards a different direction. Mr Jackson, 49-year-old sunflower middlemen from Bahi, said that "I avoid completely connecting myself on issues such as credit with farmers because it does not end well with risks involved in farming; I prefer being the middlemen who buys and sells and get commission from the buyers", (Jackson,08-08-2024).

Additionally, not economic choices made by sunflower farmers depend on the highest prices offered. Some of their choices and decisions on whether to sell their produce to middlemen, cooperatives or the local market take place regardless of the prices offered. For instance, sunflower farmers who obtain credit from Saccos and government loan preferred engaging in the local market, as it helps them build opportunities and establish new connections with other trades. In contrast, some sunflower farmers found that involving middlemen and cooperatives is more rewarding than engaging in the local markets. As highlighted by Poole et al. (2013), choices made by individuals and families are shaped by community values influenced by reward offered by external parties like private institutions.

4.2 Credit, debt and economic growth.

Despite the great effects of credit improving the sunflower farmers production, the following question remains at what point do credit markets move from being an opportunity to being a problematic imperative to accumulate in the in a close-knit community of sunflower farmers which are guided by traditional values. My findings suggest that the existence pressure for economic growth is part of the "indebted man" that we often see in the field of agrarian studies. But some of my respondents do not speak of a pressure for growth but of willingness to grow.

For instance, Mr Chonya a sunflower farmer from a Saccos said that "I take credit mostly to double the sunflower production as my aim is to grow economically" (Chonya, 05-08-2024). Whether the channel used by farmers is through the informal credit or formal credit, still the goal is to acquire credit with its conditions of which many smallholder farmers are willing to adhere too.

In the Dodoma region, however a noticeable increase of credit usage in sunflower production has explicit ties with the necessity to grow economically. In the centre of many debates, credit is seen as a boost that helps farmers increase production and their subsistence. The growth imperative they all identify is related to the idea that there "is not enough money in the market systems to make profitable production" (Strunz et al, 2015, p.12). By that, they mean that the channel of credit is used as an investment for the purpose of solving the inaccessibility of money, since it is known as one of the instruments in increasing production. To them, access to "finances does not only follow growth; finance is seen as the lead for their economic growth" (King and Levine, 1993, p.730). Thus, debt is experienced as a driving force by some farmers who have no choice but to overwork their way through the clutches of the debt, producing as much as possible, thereby ending up growing.

5. Conclusion

In response to the growing demand of sunflower in the country, Tanzanian government recognizes the significance of implementing agricultural credit schemes to empower farmers in increasing their production and improving their -livelihoods. In my paper, I have sought to explore how credit and debt influences sunflower farmers production and the integration with the markets selling of their produce. It aimed to address four issues related to credit provision; sources of credit and utilization, consequences of debt towards farmers, the morality between the creditors and debtors/ middlemen and the impact it has on their sunflower produce and sale.

Through a close lens, the findings underscore the effectiveness of credit on sunflower farmers in general. It is evident that the growth of sunflower production requires access to credit for purpose of agricultural inputs such as seeds and fertilizers. Following the significant efforts that sunflower farmers are making to improve their production and income, access to credit has increased their participation in selling their products whether to middlemen and cooperatives or local markets. Credit has thus become a vital contributor to their households. A majority of respondents indicated that credit promoted their ability to change their spending ways and focus on accumulating profit to improve their livelihood as well as repaying debts. Credit has enabled some women to increase their independence from their husbands, allowing them to contribute to the matters of their household such as paying school fees for their children. Additionally, through access to credit, some farmers were able to open small businesses such as 'Kioski'. While others mentioned the fact that the need for economic growth led them to acquire credit to increase production and sale their produce However, the thought of defaulting the loans, strict dates of repaying debts and penalties have forced the sunflower farmers to juggle their lifestyle to fit the ways of the debt repayments.' On the other hand, some farmers acknowledged the pressure of debt repayment as positive influence for them to work harder. Through the provision of credit, many sunflower farmers have had to adopt a capitalistic logic which enforces short-term return, solvency and growth. Moreover, norms of morality displayed with credit and debt as client and patron relationships generated mixed effects. The community bond that was seen in years has changed since sunflower farmers prioritize their economic growth and debt repayment creating differences towards their families and community bond.

Furthermore, thanks to Information technology (IT) as a majority of sunflower farmers are knowledgeable of prices that the markets offer compared to the previous years, reducing their chances of being manipulated by the middlemen when it comes to selling of their products. Consequently, sunflower farmers participation to market has proven to be determined also by their decisions and choices of whether to participate in the market or engage with the middlemen and cooperatives. In an attempt to unpack the dynamics of credit and debt, I have tried to look at the close relationship between credit impact and debt repayment influencing sunflower farmers production and expansion of capitalisms drifting the community bond that farmers have. Essentially the connection between credit and debt a remains dual imperative that work hand in hand in the livelihood of smallholder farmers as long as provision of credit is introduced.

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Appendices

Appendix A: List of participants

Participants	Role	Date of interview	Location
Joseph Chonya	Sunflower farmer / Business owner	August 5 th 2024	Chamwino
Yasinta Emmanuel	Sunflower farmer/ VICOBA leader	August 9 th 2024	Bahi
Neema Ndachi	Sunflower farmer/local shop owner	August 10 th 2024	Chamwino
Caroline Chenje	Sunflower farmer/housewife	August 11 th 2024	Chamwino
Janet Ndosi	Sunflower farmer/local market businesswoman	August 7 th 2024	Bahi
Aneth Mavunde	Sunflower farmer/ local market businesswoman	August 7 th 2024	Bahi
Yusuph Mazengo	Sunflower farmer	August 10 th 2024	Bahi
Amina Rashid	Saccos loan officer	August 11 th 2024	Dodoma
Henry Daniel	Government officer	August 09 th 2024	Dodoma
Jackson Ndemi	Middlemen	August 08 th 2024	Chamwino
Arnold Josphat	Money lender	August 08 th 2024	Chamwino
Dennis Mallya	Vodacom Agent	October 4th 2024	Dar-es- salaam

Appendix B: Indicative Questions

The questions used in conversations with farmers are preliminary and based on people's responses to facilitate a more organic conversation.

Questionnaire/ Interview Guide		
Partici	pant No Date	
Dodom	aTime startedTime ended	
from the	ne is, I am a research assistant for a research project by a graduate student ne international institute of Social Studies. As part of completing her master's in ment studies, i am doing investigation on how credit- debt provision influences market ation among smallholder farmers in Dodoma, Tanzania.	
through the resear your par us will b	rticipation in this research is completely voluntary. If you decide to participate, i will go questionnaire. This takes approximately 30 minutes to complete your participation in arch. You indicate your voluntary Participation by answering the questions. You can end rticipation or refuse to answer individual questions at any time. All information you give be kept confidential. We do not share personal information from this research with We will use this this information to understand more about the influence of credit in	
Will you	help us by participating of the questionnaire? a) (YES) b) (NO)	
Informa	ation of the participant/ household	
3. 4. 5. 6. 7. 8. 9. Part 1. I	Name (Optional):	
11.	Where did you acquire this credit or loan? a. Farm employer/ Landlord b. Family, relatives, friends, or neighbours c. Money lenders	

	b. VICOBA		
	c. ROSCA		
	d. Cooperatives or unions (Saccos)		
	e. Government		
	f. Digital loan (M-pawa, Tigo Nivushe, Airtel Timiza)		
	g. Others:		
1.	Currently, how much interest do the credit providers charge? (based on the answer		
	above)		
2.	What are the usual constraints that you encounter when accessing loans?		
	a. Short loan term(maturity)		
	b. High interest rates		
	c. Lengthy application process		
	d. Excessive collateral requirements		
	e. High risks- uncertain of own ability to pay interest and repay principal.		
	f. Issues with other members of group credit/loans		
	g. Other (please elaborate)		
3.	How does the influence of creditors/loan providers power dynamics influence your		
	decision making in sunflower production and selling?		
Part 2	2. Consequence of Debt		
4.	Based on your experience, has debt affected your ability to invest in sustainable		
	farming practices to improve more productivity of sunflower?		
	01 1 1 7		
5.	Has the current level of your debt hindered or increases your transition from subsistence		
٥.	farming to a more market -oriented approach?		
	initiality to a more market offended approach.		
6.	In what ways has indebtedness affected your access to markets and market opportunities		
0.	for sunflower products?		
	for sumower products:		
7.	What do you do to get out or repay this credit/debt?		
	a) Acquire other loans to pay previous debt (other financial institutions sources)		
	b) A member migrates to neighbouring towns to look for other jobs.		
	c) Look for other sources of income (apart from farming)		
	d) Work more in the farm to produce more and increase income (more time)		
	e) Sell livelihood assets (land)		
_			
Part 3.	Market participation		
8.	Where do you sell your produce of sunflower?		

a. Money lenders

a) Local market

	a) Middlemen
	b) Cooperatives
1	c) Processing companies
1.	Has credit provision played a role to enter the markets value chain of sunflower?
2.	Have you experienced challenges in negotiating fair prices or terms in the selling due to your indebtedness.
3.	Have you been unable to participate fully in the market or faced challenges in selling your sunflowers because of your debts?
4.	To what extent does debt impact your willingness to take risks and explore new market avenues for sunflower products?
Key inf	formants
Part or	ne Credit providers
5.	How do you assess the creditworthiness of sunflower farmers before providing loans?
6.	Are their any schemes/contracts that you have agreed upon with smallholder farmers of sunflower?
7.	In your experience, what causes farmers to get more debt? What are the consequences of not paying back the debt?
8.	What measures do you have in place to prevent over-indebtedness among sunflower farmers?
Part to	wo Middlemen/ Market traders
9.	What are the forms of purchase do you engage with the smallholder farmers?
10.	Do you engage in any form of credit with smallholder farmers while purchasing the sunflower product?
11.	Do you observe any changes in the production or marketing strategies of farmers due to debt pressures?
12.	How do you operate with smallholder farmers when it comes to market information?

Three Role of the Government

l.	In your experience, has credit forced smallholder farmers of sunflower households to migration or selling lands or behaviours that may not be environmentally sustainable?
2.	Has there been any difficult situation between the farmers and credit providers especially money lenders? What was it about?
3.	How does the government monitor and regulate unfavourable credit practices in the sunflower sector?