

AGRICULTURAL FINANCING IN NEPAL: EVIDENCE FROM FARMERS IN KANCHANPUR

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Certification of Authorship

I hereby corroborate that I have researched and submitted the final draft of dissertation entitled “AGRICULTURAL FINANCING IN NEPAL: EVIDENCE FROM FARMERS IN KANCHANPUR”. The work of this dissertation has not been submitted previously for the purpose of conferral of any degrees nor it has been proposed and presented as part of requirements for any other academic purposes. The assistance and cooperation that I have received during this research work has been acknowledged. In addition, I declare that all information sources and literature used are cited in the reference section of the dissertation.

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ABBREVIATIONS

GDP	:	Gross Domestic Product
IFC	:	International Finance Corporation
ADB	:	Asian Development Bank
BFI	:	Bank and Financial Institutions
ACG	:	Agricultural Credit Guarantee Scheme
PMAMP	:	Prime Minister Agriculture Modernization Program
ZTBL	:	Zari Traqiati Bank Limited
VDC	:	Village Development Committee
MS EXCEL	:	Microsoft Excel
IBM	:	International Business Machine

ABSTRACT

This study examines the status of agricultural financing in Nepal. The objective is to identify and analyze the effect of agricultural financing and its effect in earning and employment generation of farmers' in Kanchanpur District.

Descriptive research design is used to analyze and evaluate the data collected from different Municipalities and VDCs. Sample of 398 farmers' is taken to conduct this thesis. Data collection is conducted using multiple choice as well as short questionnaires. The data was analyzed using Microsoft Excel and IBM SPSS, employing statistical tools such as descriptive statistics, and Inferential statistics. The research framework established relationship between the dependent variables and Independent variables.

The results indicate that there is a significant positive impact of Agricultural financing in employment generation and earning of the farmers' in Kanchanpur District. High interest rates in agriculture loan and lack of proper managed market make farmers' loose their confidence to take loan.

It is recommended that the policy makers and government should focus on providing proper managed market to farmers' as well the interest rates charged on agricultural loan should be reduced. Farmer's should be taught about the importance and impact of taking agricultural loan to grow their productivity which could lead to good earning and generation of employment.

CHAPTER I

INTRODUCTION

1.1 Background of the Study

Agriculture is the main occupation of Nepalese people. About 50.4 percent of the total population are engaged in the Agriculture sector (Census, 2021). Agriculture contributes about 24.1 percent in the Gross Domestic Product (GDP) of Nepal (Economic Survey, 80/81). Nepalese agriculture thrives on the cultivation of a diverse range of crops, including rice, wheat, maize, millet, tea and pulses. Being crucial part of Nepalese economy agriculture sector faces numerous of problems, challenges such as fragmentation of the fertile land, low productivity, lack of fertilizers, lack of proper irrigation facility, climate change. Government of Nepal is promoting modern agriculture by providing subsidies, infrastructures and support for organic farming.

Kanchanpur lies in the Terai region of Nepal which is also called as the bread basket of Nepal. Different types of crops can be cultivated in this region such as Rice, wheat, pulses, sugarcane, maize and many more. About 86,170 farmers live in this district of Nepal (Agricultural census, 2021). Kanchanpur adopts mainly traditional type of farming which is not sufficient to produce large amount of agricultural production. This study is conducted to show Kanchanpur has the potential to increase the agricultural production if sufficient financing support is provided in agriculture sector.

Agriculture not only provides food, supplies to Nepalese citizens but it has generated significant amount of jobs. Development of agricultural sector helps to develop the industrial sector in county. Agriculture is important for the poverty reduction and sustainable development of Nepal. Agricultural development in Nepal is very important to provide daily needs to the people, increase trading, slow down imports, solve the problems of unemployment and provide raw materials to the industries.

The rationale to develop and modernize the agriculture sector is significant as it provides livelihoods to many people in rural areas where main source of income is subsistence farming and generating cash crops. Also, agriculture is the economic background of our

country it requires increased food productivity at a lower cost as well as food security, safety and sustainability while also conserving the environment. Therefore, the agriculture sector deserves the topmost priority (IFC, 2022).

The economy is still in the growing phase. The growth of agriculture sector drives the economy. The data shows that both the economic growth and agriculture sector growth remained significantly low over the period. During the latest one decade period, agriculture sector grew by 2.9 percent (Economic survey, 2079/80). Some major factors behind this lingering growth in agriculture are insufficient financing, inadequate irrigation facility, use of technology, expensive labor cost, unavailability of seeds and fertilizer, marketing and agriculture training, shortage of labor, lack of interest of new generation towards agriculture.

The insufficient funding is one of the main problems that is stopping commercialization of agriculture. To shift the agriculture development process into modernization financing is the most important factor. Agriculture finance is critical for the Nepalese farmers it helps to increase the production and productivity. Varieties of seeds, fertilizers, insecticides, modern inputs can be used if farmers are provided with credit system that offers loans at a reasonable rate of interest. Banks and financial institutions, Cooperatives, family and friends are the main source of financing for Nepalese farmers. There are several efforts from government and central bank to enhance the agriculture financing as banking system has to lend a fix portion of its loans to agriculture, subsidy has been given in agriculture financing, microcredit and deprived sector lending.

Farmers require credit to procure seeds and other inputs, as well as to harvest, process and market and transport their crops. Natural disasters, decline market prices, low yields, lack of buyer and loss due to poor storage condition are just some of the factors that can result in lower revenues. Fall in revenue often leads to high default in agricultural loans. The inadequate or lacking of proper training on loan repayment by farmers can lead to high loan repayment default rates by this means causing financial institutions to be running away from extending credit facilities to farmers. The bank should provide financial literacy to farmers so they could invest in their farming and learn about timely repayment of the loan.

Hence the study on the availability, use and cost of agriculture financing and its effects is critical for stakeholders for modernization of agriculture sector in Nepal.

1.2 Problem Statement

Agriculture serves as backbone of Nepal's economy. However, the sector faces persistent challenges in accessing inadequate financing, hindering its growth and modernization. Despite various efforts to improve agricultural financing, numerous obstacles remain unresolved, necessitating a focused examination of the issue at hand.

Mishra, (2024) stated that prioritizing agricultural financing in Nepal is crucial for achieving economic growth, ensuring food security, reducing poverty, and fostering sustainable development. This requires a collaborative effort from government, financial institutions, and stakeholders to address challenges and unblock the sector's full potential for the benefit of the country's people and economy.

Mahendar, (2021) Agriculture Credit helps farmers invest in the creation of assets to generate output and income through the deployment of science, technology and modern business management methods. Agricultural households have remained dependent on non- institutional sources, although to a certain extent.

Gupta, Gautam and Bhandari, (2016) examined that the nature of financial activity is of fundamentally different variant in rural areas than that of urban areas. To what needs does financial inclusion cater to and the tools of credit creation in both the settings. Urban credit needs are determined by the demands of industrial activity with purposes of generating seed capital to starting business expansion capital replenishment and to cope up with shocks in the external economic environment. The condition under which industrial activity takes place is relatively stable as compared to rural agrarian habits. They are organized in condition that their inputs are transformed into outputs with the time lags, lower production and sales outcomes being highly uncertain due to swings arising from volatile commodities markets. In such an environment, the ability to make long term investments by the rural households and to take calculated risk along with stable consumption pattern to transfer variable and resources inflow and outflow.

Sharma, (2022) Small businesses are similarly challenging for Nepalese banks to serve profitability. Complex lending procedures, improper goods, and pricing strategies that do not satisfy the needs of small borrowers are the main barriers to growing bank loans for small enterprises. Small enterprises and giant corporations have extremely diverse characteristics. Banks must reduce transaction costs and provide a large number of high

quality loans in order to serve small businesses profitably. However, Nepal's banks are finding it challenging to serve small businesses profitably for a variety of reasons. Small company financing procedures are overly complicated, making the process excessively long and costly for both entrepreneurs and banks. Many small businesses find that the most popular bank product, overdraft is improper since it does not appropriately reflect the costs of supporting them. It demonstrates that a lack of financial awareness is a significant barrier to entry.

Many smallholder farmers and rural entrepreneurs in Nepal encounter barriers when attempting to access loans and other financial products from formal banking institutions. These barriers include stringent collateral requirements, high interest rates, and complex application processes, which often exclude marginalized communities from accessing credit. A significant portion of Nepal's agricultural population lacks sufficient financial literacy and awareness to effectively manage finances, understand loan terms and utilize financial products optimally. This lack of knowledge contributes to poor financial decision-making and impedes the adoption of innovative financial solutions.

The inadequate development of agricultural infrastructure, including irrigation systems, storage facilities and transportation networks, undermines the productivity and market access of Nepalese farmers. The lack of infrastructure investment reduces the attractiveness of agricultural financing for financial institutions and constraints the sector's growth potential. The cost is too much for the farmers to pay back the agricultural loans from informal sources. Financing from institutions that are interest-friendly are still struggling to develop business models to reach small farmers in remote locations. Lack of adequate collateral, unpredictable earning structures and knowledge about modern farming are major problems of agricultural financing. Also, the farmers in rural areas do not have an easy access to agricultural production. Farmers have to bear high interest rates while taking loan from microfinance and rural development bank. The agricultural sector has been receiving the least level of credit facilities from banking sector.

Considering the current scenario where the agricultural financing and commercialization is so much neglected, a long term, well prepared plan for its development is required, for which, proper study of the financing, input, process and the sum total of its productivity is very important.

It is still unknown about the status of agricultural financing in Nepal. The accessibility, proper utilization and cost of financing issues are less discussed. The impact of agriculture financing on farmer's income and employment generation in Nepal are not much discussed. The discussions on these issues help to take the necessary steps to modernize the agriculture sector.

The research questions are as follows:

- What is the status of Access, Quality of Service, Cost of service, Employment generation and Earning in Kanchanpur District?
- What agricultural financing change the employment creation and Earning of farmers of Kanchanpur District?
- What are the possible solutions of agricultural problems faced by farmers of Kanchanpur District?

1.3 Objectives of the Study

- To examine the status of Access, Quality of service, Cost of service, Employment generation and Earning.
- To examine the effect of agricultural financing in employment creation and earning of farmers in Kanchanpur District
- To explore the possible solutions of agricultural problems faced by farmers of Kanchanpur District.

1.4 Hypothesis

Towards the study of the given objectives, the following hypothesis are formulated.

H1: There is significant association between agriculture financing and earning.

H2: There is significant association between agriculture financing and employment generation.

1.5 Rationale of the Study

Agriculture is the backbone of the national economy that helps to fulfil the food requirement in the country as well as create job opportunities. Nepal is developing country and rapidly developing in the many financial aspects but one of the pillars to

develop country is leaning behind. To modernize agriculture sector sufficient financing is needed. However, it is tough for the rural areas farmers to get loans. Regardless of some limited informal financing sources, farmers have been experiencing tough accessibility to the formal financing and consequently have to pay a heavy interest rate.

This study can help to search some possible alternatives to smoothen the financing process for the farmers, identify the reasons behind dissatisfactory rate of formal financing in agriculture despite many efforts made by government and Nepal Rastra Bank, encourage them to use financing facilities provided by the banks, and draw the possible solutions to offer to the contemporary issues in agriculture.

The findings of the study may be equally helpful to evaluate the factors that are creating obstacles in expanding the credit to agriculture sector and focus on some of the policy issues that can help to increase such credit facilities.

1.6 Limitations of the Study

This study aims to know the factors that affect the use of formal financing by farmers in the agricultural sector of Kanchanpur district. There are some research limitations in the study. They are as follows:-

- This study is conducted by student for the educational purpose so that it could not be used as the proof or can be used to make policies.
- Sample taken to conduct this study is only from one district so it cannot be taken as base for the entire country.
- Primary information collected through the interview and self- administered questionnaire has been used for the purpose of study.
- The research covers only crop farming, vegetable, livestock and poultry.
- It has only covered the accessibility, uses and cost aspect agriculture financing and its effect on income and employment.
- There may be recall bias in response of farmers.

CHAPTER II

LITERATURE REVIEW

This chapter examines and analyzes the theoretical and empirical literature on the subjects regarding agricultural finance. Prior studies have been taken into consideration in order to discover the research gaps in the study. A short summary and research gaps are also included in the section.

Various literatures were reviewed and examined by extracting information from variety of resources available in the academic world. It mainly included popular ideas, reports, prior researches and articles published in the field. A quick summary of exciting studies relevant to the purpose of the research has been presented in this section.

2.1 Agriculture Sector of Nepal

According to Economic survey, (2022/23), the production of Nepalese agricultural sector depends heavily upon annual average monsoon rains. Over the last five decades, population growth has increased and put the pressure on productivity. One result of this pressure has been a decreasing of the average size of land and holding from 1.1 hectares to 0.7 hectares. According to the Nepal Labour Force Survey of 2008, 73.9 percent of the population was engaged in agricultural sector but in 2018 the proportion has decreased to 60.4 percent.

Agriculture is the backbone of Nepalese economy. It is the largest sector and major part of Nepalese economy. It considers one- fourth of the nation's GDP and provides employment for two-thirds of the population (IFC, 2022).

According to Economic Survey, (2022/23), the sector's GDP has mainly affected by favourable/ unfavourable conditions in the climate. During the past two decades, Nepal's agricultural sector's production has increased by 3.2 percent. The increase in expansion of outputs of main grains and vegetable crops has aided the agricultural sector's expansion. Furthermore, the availability of seeds and fertilizer as well as the climatic conditions were pivotal factors contributing to the growth. Agricultural contribution to GDP (Agriculture, forest and fisheries) was 32.7 percent in fiscal year 2011/12 but it has gradually dropped in recent years and is expected to remain at 24.1 percent in fiscal year 2022/23.

2.2 Role of Agriculture in Economic Growth and Poverty Reduction

Poverty reduction is a major focus in public policy in most developing countries. The agricultural sector is critical to the country's overall development. The sector is critical for increasing income, generation of employment opportunities, alleviation of poverty and improving living standards of the people.

Afolabi, Ikperfan, Osuma, Evbomwan, (2021) Credit is essential for the revival and development of agrarian sector. To allow the agrarian sector get access to complete benefit of the multiple incentives and face challenges head on, credit to the agricultural sector has to be adequately funded, disbursed and monitored to avoid mismanagement of funds as this will enable the funds to be easily accessible to the farmers. Improving the agricultural sector is a necessary condition for increasing food security and it is compulsory that this be carried out in the framework of suitable monetary and fiscal policies to ensure more macroeconomic stability. Increase in investment in agricultural sector will discourage import, encourage export and positively impact economic growth in the long term.

2.3 Agriculture Financing

Baidhya, (2019) Agricultural credit is a critical component of every agricultural development program. For a long time, private moneylenders were the primary source of agricultural financing. However, this source of finance was insufficient, extremely costly and exploitative. To address this, a multi- agency approach involving cooperatives, commercial banks and regional rural banks has been implemented to give farmers with more affordable, timely and enough loans.

Increase in the farm efficiency as against limiting resources i.e. hiring of irrigation water lifting device, labour and machinery. Agricultural financing in Nepal is in growing phase. Access to finance is a crucial factor for the growth and development of agriculture in Nepal. However, the sector remains under funded and undeserved particularly for small holder farmers who represent the majority of farmers in the country. According to the Nepal Rastra Bank, (2023), agricultural credit constitutes only 13.1 percent of the total credit portfolio of commercial banks in the country.

2.3.1 Agricultural credit and Finance

Pandey, (2022) The poor credit expansion is the major reason for poor development on agriculture. Despite of government regulations, the bank and financial institutions are reluctant to invest in agriculture. The commercialization, mechanization, competitiveness, import substitution and export promotion is only possible if there is optimum investment in agriculture sector. The bank and financial sector, cooperatives, microfinance institutions and other registered financial institutions providing the financial services in Nepal are instructed by government to invest in agriculture as priority sector. However, the higher operational cost of bank and financial institutions branches, poor physical infrastructures, and some credit policies like credit ceiling, short grace period for perennial crops, group based and collateral free loan etc. has hurdled bank and financial institutions to invest in agriculture. The complex agriculture production cycle, high risk and un intensified agriculture insurance, subsistence farming, long paper procedure, demand of high value collateral are challenges for agriculture credit system. Similarly, the lack of financial awareness had made farmer unaware about subsidy loan, and other loan related facilities planned for them. Thus in order to increase the investment in agriculture both bank and financial institutions and farmers are needed to be motivated with some relaxation on credit policy, categorization of farmers according to credit volume demand, intensification of insurance, relaxation of credit ceiling for commercial farmer, warehouse financing, scientific land categorization for collateral and regular monitoring of banks and financial institutions either they are providing loan to the actual farmers or not. Likewise, the farmer friendly technologies, awareness campaign related with financial literacy, insurance, development of physical infrastructures, and branchless banking should be promoted to enhance the agricultural credit. Agriculture is completely different enterprise than other trading and business. The biological cycle is completely different for different commodities. Hence, the existing Nepal Rastra Bank directives and credit policies may not address the agriculture. To prioritize the agriculture and increase the agriculture credit, separate agriculture credit policies and agriculture credit directives should be prepared which will assist both farmers and bank and financial institutions in credit issues. Furthermore, there will not be conflict between agriculture and other enterprises regarding terms, conditions and other provisions of credit.

Gurudas, (2021) Commercial banks have become a significant source of account in rural areas since nationalization, and banks financing plays an important role in raising farmer's

yield and farm business income as it empowers farmers to purchase quality inputs. The descriptive analysis of data illustrates the information required for eligible borrower with regard to bank, Time lag in loan sanctioning and Loan disbursement, Proportion of crop loan to agricultural loan, Percentage achievement and Percentage default in agricultural lending, including borrowers to avail Agricultural loan is also an initiative taken by regional managers of various banks.

2.3.2 Source of Agricultural Finance

Agricultural finance is becoming more important today than ever before. To increase production and productivity, variety of seeds, fertilizer, insecticides and fungicides must be used in appropriate way. But these modern inputs must often be purchased on cash payments.

Agricultural credit becomes more important particularly when the agricultural development process is shifting towards modern methods and packages of practice. Commercial banks and regional rural development banks are also involved in disbursing credit to the agricultural sector. According to the Nepal Rural Credit Review study conducted by Nepal Rastra Bank, the share of the informal finance is supplied by various agencies (Kullabs, 2022).

1. **Non Institutional Sources:** The main sources of non institutional agricultural finance are money lenders, landlords, traders and private borrowings.
 - **Money Lenders and Landlords:** Money lenders have always been the primary source of short and long- term financing for Nepalese farmers. They lend money to farmers for both productive and non- productive purposes. Their loan approval procedure is flexible and the loan has a set repayment schedule. Money lenders are somewhat lenient in terms of document execution and security requirements.
 - **Traders and Private Borrowings:** They give farmers short-term loans for productive purposes before the harvest, on the condition that they (the farmers) sell their crops to them at predetermined prices which are usually relatively low compared to market prices at harvest time. Food grains like paddy, wheat as well as cash crops like cotton, jute, tobacco, cardamom, and sugarcane get benefit from this sort of financing.
2. **Institutional Sources:** The main suppliers of the institutional agricultural financing are:-

- **Cooperative Societies:** The establishment of credit cooperative in 1956 in the Rapti valley of Chitwan district marked the beginning of institutional credit to the rural sector in Nepal. Credit cooperatives, on the other hand, were not formally established until 1959, when the cooperative society Act was passed. However, the cooperative bank was established only in 1963 with the goal of providing credit support of cooperatives (Kullabs, 2022)
- **Agricultural Development Bank(ADB):** ADB was established in 1968 as the development bank in line with the ADB Act of 1967 with the objective of bringing about at national level all round development in the agriculture sector.
- **Commercial Banks:** A major source of agricultural financing is commercial banks. In Nepal, there are 20 commercial banks. Following the implementation of the priority sector loan program in 1974, they began providing agricultural finance. Agriculture, cottage industry, and services are the three sub sections under which priority sector loans are divided.
- **Grameen Bikash Bank:** Grameen Bikash bank was established in 2014 A.D after the merger of five regional rural development banks the Grameen Bikash Bank is primarily located in the Terai belt rural districts. Members of the group act as guarantors on each other's loans.

2.3.3 Access to Financing in Nepal

According to Nepal Rastra Bank, (2024), various policies has been measures, ranging from incentive to few forced measures to broaden financial access. As a result, the number of branches of banks and financial institutions has been expanding substantially. The numbers of local level without branches of commercial have come down to 0. The total numbers of deposit accounts in BFIs are 46,407,673 and loan accounts are 1,546,277 as of mid march 2024.

Choudhary, Baskota, Khanal & Gyawali, (2020), The involvement of financial institutions in extending access to finance is equally critical. Basically, their priority and focus, major objective, internal company capacity, institutional financial strength, business autonomy, and technical dependency are some of the elements that influence access to finance. If these elements are solid, viable and long-term, they help with access to money and vice versa.

Development vision Nepal P. Ltd., (2018) One reason that creates problem in accessing financial services is limited familiarity with the formal financial sector and a perception that family and friends are safer delivery mechanism, rather than to a lack of alternatives. By far the most common sources of informal loans are family and friends. This could be related to the fact that informal lenders disburse loans significantly more quickly. Furthermore, then compared to the collateral requirements of financial institutions, informal suppliers demanded less physical security. Financial institutions lending methods are terms are extremely complex and time-consuming, resulting in them struggling to meet people's demands on time. Banks likes huge enterprises, require the same paperwork and information (such as corporate records). Because small firm frequently does not have the in house sources require to develop such documents, they must employ outsiders. This adds extra costs, time, and meetings for the businesses and the hanks and makes such lending unnecessarily time consuming and costly for both the businesses and the banks.

2.3.4 Agricultural Financing Policies:

Agricultural financing policies refer to government interventions aimed at increasing farmer's access to credit and other financial services. In Nepal, agricultural financing policies include the Agricultural Credit Guarantee Scheme (ACGs) and the Prime Minister Agriculture Modernization Project (PMAMP) among others. These policies are intended to address the financial constraints faced by smallholder farmers, promote productivity, and facilitate market-oriented agricultural development.

Access to agricultural financing is a critical issue in Nepal, particularly for smallholder farmers. Numerous studies have identified the factors that limit farmer's access to finance including collateral requirements, high interest rates, and lack of credit history. Additionally, the limited outreach of financial institutions, especially in rural areas, makes it difficult for smallholder farmers to access formal financial services. To address these challenges, the government has introduces policies such as the ACGs and PMAMP, which provide credit guarantees and subsidies to encourage financial institutions to lend to smallholders farmers.

2.3.5 Impact of Agricultural Financing

Several studies have examined the impact of agricultural financing policies in Nepal. For instance, a study by Bhatta, (2019) found that the ACGs had a positive impact on farmer's access to credit, with loan disbursements increasing by 42% over a three-year period. Similarly, a study by Maharjan (2018) found that the PMAMP had a positive impact on agricultural productivity, with farmers adopting modern technologies and practices that increased their yields and incomes.

Access to agricultural financing is a critical issue in Nepal, particularly for smallholder farmers. Several studies have identified factors that limit farmer's access to finance, including the lack of collateral, high-interest rates, and lack of credit history. Lack of financial literacy and credit history made it challenging for farmers to access credit.

According to Economic Survey, (2022/23) the share of population depends on the agricultural sector is gradually declining due to the modernization and commercialization of agriculture as well as the expansion of services on the non- agricultural sectors. According to Nepal Force Labour Survey of 2008, 73.9 percent of the population was engaged in agricultural sector but in 2021 the proportion has decreased to 50.4 percent.

Unified Directives, (2080) Provision has been made for commercial banks to gradually increase the volume of investment and have to disburse 15 percent of their total loan.

Hibbett, (2018) Another research entitled "Importance of Financing for Nepalese Agriculture and Economic Development" revealed that Nepal lack sufficient banking access to the rural agriculture sector. As a result of informal sector exploiting farmer by charging higher borrowing rates, aggregate interest rates resulting lower investment and production in the sector. He came to the conclusion that greater financial access leads to lower interest rates and higher productivity and vice versa.

2.4 Empirical Review on Agricultural Financing

Agriculture is a key sector in many developing countries and agricultural financing is crucial for its growth and development. Empirical studies have examined different aspects of agricultural financing, such as the impact of credit on agricultural productivity, the determinants of credit demand, and the effectiveness of different financing mechanisms.

The literature review will provide an overview of some of the key empirical studies in this area.

2.4.1 Impact of Credit on Agricultural Productivity

Several studies have investigated the impact of credit on agricultural productivity. Similarly study by Dulal, (2023) found that the access of Agricultural credit had a positive impact on the food production in Nepal.

Similarly, another study by Islam, (2020) found that the timely finance to agricultural production can increase productivity and can fulfill the huge food demand for the higher population in Bangladesh.

Similarly, another study by Chaiya et. all., (2023) found that access to credit had a positive impact on the productivity of small farmers in Pakistan. Understanding the factors that determine credit demand is important for designing effective agricultural financing policies. Several studies have investigated this issue.

Chaiya et. all., (2023) Empirical studies have provided valuable insights into different aspects of agricultural financing, including the impact of credit on agricultural productivity, the determinants of credit demand, and the effectiveness of different financing mechanisms. These studies have highlighted the importance of designing appropriate policies and mechanisms to ensure that farmers have access to the financing they need to support their livelihoods and contribute to the growth and development of the agricultural sector.

Chaiya et. all., (2023) smallholder farmers are a significant contributor to the agricultural sector in developing countries. However, access to credit is often a significant challenge for these farmers, limiting their productivity and income. Empirical studies on agricultural financing provide valuable insights into the factors that influence smallholder farmer's access to credit the impact of credit on agricultural productivity and the effectiveness of different financing mechanisms.

Chaiya et. all., (2023) Formal financial institutions offer lower interest rates than microfinance institutions and government- sponsored credit programs. They also provide larger loans, which can be beneficial for farmers looking to scale up their operations. However, they require collateral which smallholder farmers often lack, making it difficult

for them to access credit. Microfinance institutions provide credit without collateral, but their interest rates are often high, making it challenging for farmers to repay the loans. Government-sponsored credit programs offer credit at low-interest rates, but they are often bureaucratic and ineffective, making it difficult for small holder farmers to access credit.

Chaiya et. all., (2023) Factors influencing smallholder farmer's access to credit is influenced by several factors, including social factors, institutional factors and environmental factors. Social factors include farmer's education, income and assets. Farmers with higher levels of education, income and assets are more likely to access credit. Institutional factors include availability and accessibility of credit institutions and their policies. Environmental factors include weather conditions, land quality and location. Farmers in areas with favorable environmental conditions are more likely to access credit.

Chaiya et. all., (2023) Access to credit has a significant impact on smallholder farmer's agricultural productivity and incomes. Farmers who have access to credit can purchase inputs such as seeds, fertilizers and machinery, which can increase their productivity and income. They can also invest in irrigation systems, which can improve crop yields and reduce the risk of crop failure due to drought or other weather-related issues. Moreover, farmers can use credit to invest in value addition activities such as processing and marketing, which can increase their income.

Chaiya et. all., (2023) Empirical studies on agricultural financing provide valuable insights into smallholder farmer's access to credit, the impact of credit on agricultural productivity and the effectiveness of different financing mechanisms. Access to credit for smallholder farmers is influenced by various factors, including social institutional and environmental factors. Credit has a significant impact on agricultural productivity and farmer's income. Policymakers and practitioners can use the findings of these studies to improve smallholder farmer's access to credit, increase agricultural productivity and enhance farmer's access to credit, increase agricultural productivity and enhance farmer's income.

2.4.2 Impact of Credit on Agricultural Productivity and Farmer's Income

Various empirical studies have also explored the impact of credit on agricultural productivity and farmer's income. These studies have shown that access to credit has a significant positive impact on agricultural productivity and farmer's income. Farmers who have access to credit can invest in inputs such as seeds, fertilizers, and machinery, which can increase their productivity and income. They can also invest in irrigation systems, which can improve crop yields and reduce the risk of crop failure due to drought or other weather-related issues. Furthermore, farmers can use credit to invest in value addition activities such as processing and marketing, which can increase their income.

2.4.3 Effectiveness of Different Financing Mechanisms

Chaiya et. all., (2023) Various empirical studies have also explored the effectiveness of different financing mechanisms for smallholder farmers. Studies have shown that formal financial institutions, such as banks, offer lower interest rates than microfinance institutions and government-sponsored credit programs. However, smallholder farmers often lack the required collateral to access to credit from formal financial institutions. Microfinance institutions provide credit without collateral, but their interest rates are often high, making it challenging for farmers to repay the loans. Government-sponsored credit programs aim to provide credit to smallholder farmers at low-interest rates, but their effectiveness varies depending on the policies and regulations governing the program.

2.4.4 Effectiveness of Agricultural Credit Programs

Several studies have evaluated the effectiveness of agricultural credit programs in promoting agricultural productivity and rural development. A study by Rahman and Hassan, (2017) on the impact of agricultural credit on smallholder farmers in Bangladesh found a positive relationship between credit accessibility and agricultural productivity.

2.4.5 Financing Agricultural Value Chain

Studies have highlighted the significance of financing the agricultural value chain to promote agricultural productivity and reduce poverty. A study by Sijabat, (2020) on the role of agricultural value chain finance in Indonesia found that financing the value chain

improved the efficiency of input distribution, production and marketing of agricultural products.

2.4.6 Constraints to Agricultural Financing

Several studies have identified the constraints to agricultural financing, including high transaction costs, inadequate collateral, and information asymmetry.

2.4.7 Role of Technology in Agricultural Financing

Technology has played a significant role in promoting agricultural financing and reducing transactions costs.

(Zari Traqiati Bank Limited) The borrowers allocated more land to all types of crops and fruits than non-borrower's income was significantly increased. However, majority of the sample respondents complained about the interest rate charged on these loans and the procedure for obtaining credit from ZTBL.

Will, Prehn, Pies, and Glauben, (2016) concluded that financial speculation does not have and adverse effect on the functioning of the agricultural commodities markets. Rather, they express the view that the increase in trading volumes that has accompanied the increasing involvement of index traders (CITs) is strengthening the information function of the markets. In addition, it is noted that financial speculation contributes to expanding the hedging options available to procedures of agricultural commodities, and thereby has a positive effect on the supply volumes (Pies et al. 2015).

Wagan and Nononar, (2016) stated that the total revenue and the variable cost for agricultural finance borrowers were a little bit high then non borrowers, it is because of availability of capital, some farmers borrowing agricultural finance and providing inputs on time and in proper way to get better production. Based on the survey of borrowers and non borrowers, the results shows that most of the farmers agreed that agricultural financing was for improving living standard and helpful for household and rural development.

It is concluded that agricultural finance enables farmers to get best agricultural production by providing timely inputs required agricultural production. It is concluded that agricultural finance enables farmers to get best agricultural production by providing timely inputs required for agricultural production.

Table 2.1 Summary of Empirical Review

S. N	Authors	Title	Research Objectives	Variables	Methodology	Findings	Research Gap
1	Dulal, (2023)	Impact of Agricultural Credit finance on Food Production in Nepal	-Analyze the structure and pattern of agriculture credit in Nepal. -Examine the impact of agricultural credit and cultivated land area on food production.	-Dependent Variable: Food Production - Independent variables: Agricultural credit, cultivation land area -Moderating Variable: Government policies and financial sector growth	Descriptive and empirical research design	-Agricultural credit financing has increased year over year, driven by government priorities and financial sector growth - Positive impact of agricultural financing on Nepal's food productivity.	1. Limited to food crops, exclude cash crops, livestock, or other agricultural products. 2.Data confined to NRB-licensed A, B and C class financial institutions. 3. Reliance on secondary data; potential errors in data sources could impact study outcomes 4. Lacks qualitative analysis of farmer-level challenges or real life applicability of agricultural credit policies.
2	Islam, (2020)	Agricultural Credit	Analyze the impact of	Independent variables:	Descriptive	Government expenditure	- Limited

)	and Agricultural Productivity in Bangladesh	agricultural credit on agricultural productivity .	Agricultural Credit, government agricultural expenditure Dependent variable: Agricultural Productivity	analysis	on agriculture has a stronger impact on productivity than agricultural credit. - Timely financing in agriculture can enhance productivity and meet food demands for growing population.	explanatory variables included in the analysis. - Relied on low-frequency data with a small sample size. - Further research could use modern methodologies and larger datasets for better insights.
3	Chaiya, Chitralada, Sikan dar, Pichat e, Pintho ng, Shaha b E, Saqib, and Niaz Ali, (2023)	The Impact of Formal Agricultural Credit on Farm Productivity and its Utilization in Khyber Pkhtunkh wa Pakistan	- Analyze the impact of formal agricultural credit on farm productivity in Khyber Pakhtunkhwa, Pakistan. - Evaluate how agricultural credit is utilized by farmers.	Independent Variables: Access to formal agricultural credit Dependent Variable: Food Productivity Control Variables: Farm size, Input costs, and adoption of modern agricultural practices.	Quantitative Research	-Formal agricultural credit positively impacts farm productivity by enabling access to quality inputs like seeds, fertilizers, and irrigation systems - Credit utilization improves farm income and production efficiency, leading to overall agricultural sustainability.	- The study focuses only on formal credit; informal credit sources remain unexamined. - Limited geographic focus on Khyber Pakhtunkhwa; findings may not generalize to other regions - Further

							research is needed on long-term sustainability and repayment challenges.
4	Rahman, s, & Hassan, M.K., (2017)	-Impact of Agricultural Credit on Smallholder Farmers' Productivity in Bangladesh	-Examine the impact of agricultural credit on the productivity of smallholder farmers.	<p>Dependent variable: Agricultural Productivity</p> <p>Independent Variables: Access to agricultural credit Amount of credit received</p> <p>Control Variables: Socioeconomic factors , Input using</p> <p>Moderating Variables: Infrastructure availability</p> <p>Instrumental Variables: Institutional factors.</p>	- Quantitative analysis	-Access to agricultural credit has significant positive effect on the productivity of smallholder farmers. - Credit helps increase investments in inputs like seeds, fertilizers, and irrigation, leading to better yields and income.	-Focused only on productivity; does not account for repayment challenges or socio-environmental factors. - Limited geographical focus within Bangladesh. Further studies could explore long-term impacts and credit access barriers.
5	Sijabatt,(2020)	The Role of Agricultural Value Chain Finance in Indonesia	To examine how agricultural value chain finance influences the efficiency of input distribution, production and marketing of agricultural	<p>Dependent variable: Efficiency in agricultural input distribution, Production, and marketing</p> <p>Independent Variables: Access to value chain financing; credit</p>	Descriptive and qualitative analysis	Value chain finance improves input accessibility, optimizes production processes, and enhance marketing efficiency. - Contributes to better resource	- Limited to specific value chains; findings may not generalize to other crops or regions. - The study does not address

			products.	availability; market connectivity.		allocation across the agricultural sector.	long-term sustainabil ity of financing mechanis ms.
6	Zari Traqiati Bank Limited, (2018)	Role of Zarai Traqiati Bank Limited in Agricultur al Developm ent	- To explore the role of Zarai Traqiati Bank Limited in supporting agricultural developmen t in Pakistan	Independent Variables: Access to agricultural credit from ZTBL - Loan amount disbursed - Types of loans offered. Dependent Variable; -Agricultural Productivity - Income of farmers -Land allocated for farming. Moderating variables: -Interest rates charged on loans -Loan application process	Descripti ve research design	ZTBL's financing programs improve agricultural productivity by providing loans for inputs like seeds, machinery, and infrastructure . -Increase in land allocated for farming and higher income for borrowers -Complaints about interest rates and complex loan procedures.	The research gap highlights the need for a deeper analysis of ZTBL's specific loan programs, regional variations in credit utilization, and the long-term impact of agricultura l credit on farm productivit y. Future studies should also compare ZTBL's impact with other financial institution s and consider non-credit factors influen g agricultura l developme nt.
7	Will,	Is	To examine	Independent	Literatur	-The effects	-

	M.G., Prehn, S., Pies, I., & Glaub en,T., (2016)	Financial Speculation With Agricultural Commodities Harmful or Helpful? A Literature Review of Empirical Research.	whether financial speculation in agricultural commodity markets has positive or negative effects, based on existing empirical research. -The study aims to synthesize findings to better understand the role of speculation in commodity price volatility and market stability.	Variable: Financial speculation in agricultural commodities. Dependent Variables: Market outcomes such as price volatility, market efficiency, and stability.	e review	of financial speculation on agricultural commodities are mixed. -Some studies suggest speculation contributes to market liquidity and price discovery. -Others indicate potential for increased price volatility under certain conditions. -The impact depends on market structure regulatory frameworks, and external factors like supply shocks.	Inconsistent findings across studies highlight the need for more precise methodologies. -A lack of consensus on causal relationships between speculation and market volatility. -Limited research on the long-term effects and regulatory implications of speculation.
8	Wagan, S. A., Jingdong, P. Shuanxi, D., & Noonari, S., (2016)	Significance of Agricultural Finance in Agriculture and Rural Development of Pakistan: A Case Study of Qumbar Shahdadkot.	-To evaluate the role of agricultural finance in improving agricultural productivity and promoting rural development in Pakistan. -To assess the impact of financial	Independent Variable: Agricultural Finance Dependent Variables: Agricultural Productivity, Rural Development .	-Case study approach -Data collection - Quantitative and Qualitative Analysis	-Agricultural finance plays a critical role in boosting productivity by enabling access to better inputs and technologies. -Financial services contribute to rural development by improving farmers'	-Limited understanding of how specific financial policies impact small-scale farmers versus large-scale producers. -Need for deeper analysis of

			services on farmers in the Qumbar Shahdaddock region.			income levels, enhancing infrastructure, and reducing poverty -Challenges like inadequate access to credit and high-interest rates were identified as barriers.	institutional inefficiencies in agricultural financing in Pakistan. - Insufficient data on long-term outcomes of agricultural finance in rural development.
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Research Gap:

Agricultural financing is a crucial thing to increase growth and productivity in farming. Previous studies had largely focused on national level policies, the role of government subsidies, and the influence of financial institutions in supporting agriculture. However, there is few studies in region specific challenges, particularly in the far-western regions, where agricultural practices are influenced by unique socio-economic and environmental factors.

While studies have explored farmers' access to credit and the role of microfinance institutions in other regions of Nepal, there is insufficient research on the barriers and opportunities specific to farmers in Far-west regions. Furthermore, the effectiveness of existing financing schemes in addressing the needs of smallholder farmers remains underexplored.

This research aims to address this gap by investigating the current state of agricultural financing among farmers in Kanchanpur, identifying region-specific challenges, and assessing the effectiveness of financial schemes in meeting the needs of local farmers. By valuable insights to policymakers and stakeholders to improve agricultural financing system in Nepal.

CHAPTER III

RESEARCH METHODOLOGY

This chapter provides information about research plan and design, Population and sample, nature and source of data and information, methods of data analysis, research framework. This chapter also includes the descriptions of variables, measurement and data analysis technique.

3.1 Research Design

This study employed descriptive research design which explores the issues related to access, quality and uses in agricultural financing. Also, it explores the impact of agricultural financing on income and employment in research areas. Some of the challenges of agricultural financing have been explored.

3.2 Population and Sample

The population of farmers involved in commercial agriculture, vegetable farming and poultry in around 86,170 in the study area (Agricultural census, 2078). There are 7 Municipality and 2 village development committee in Kanchanpur district.

The formula for sample size determination is as below:

$$n = \frac{N}{1+N*(e)^2}$$

Where, n=the sample size

N=the population size

e= 5 percent level of significance

The population size of farmers involved in commercial farming, vegetable farming and poultry is almost 86,170. Hence, the size of sample for farmers based on above formula is 398.

3.2.1 Sampling Design

In this research mixed sampling methods is used to collect data. Cluster sampling is used to form cluster to collect data from 7 Municipality and 2 VDCs' of Kanchanpur District. For collection of data following cluster is formed:-

Table 3.1 : Formation of cluster

Cluster	Population	Sample size	Collection
Krishnanagar Municipality	12538	58	58
Suklaphanta Municipality	10166	47	47
Bedkot Municipality	10216	47	47
Bhimdutta Municipality	16632	77	77
Dodhara Chandani Municipality	8029	37	37
Laljhadhi VDC	4192	19	19
Punarbans Municipality	10811	50	50
Belauri Municipality	9431	44	44
Beldandi VDC	4155	19	19
Total	86170	398	398

Where,

$$\text{Cluster formation} = \frac{\text{Population of Cluster}}{\text{Total Population of Farmers in kanchanpur}} * \text{Total Sample Size}$$

Another sampling method used to collect data is Purposive Sampling Method. This method is also known as judgmental, selective, or subjective sampling. It is a form of non-probability sampling in which researchers rely on their own judgment when choosing members of the population to participate in their surveys. In this survey after the formation of cluster various wards of Municipalities and VDC are visited by researcher and collected the data from the farmers who visited ward office. Time taken to collect these data is about Shrawan 28 to Kartik 2 about 2 months.

3.3 Nature and Source of Data

The primary Data have been used for the purpose of the study. Primary data were collected directly from the respondents by developing questionnaires for farmers. Questionnaires were designed to cover all the objectives of the study. The primary source of data of this study was a well structured questionnaire which served as the primary instrument for gathering information. Those structured questionnaires contained multiple choice questions, open-ended questions. These questions were prepared in such a way that those objectives of the study are met.

3.3.1 Study Area

The study was carried out among the farmers who have taken agriculture loans from commercial banks, development banks, finance companies, microfinance financial institutions and cooperatives as well. The study is conducted within the 7 Municipality and 2 village development committee of Kanchanpur district where the maximum numbers of farmers and financial institutions are situated which could be helpful to track down the information about agriculture financing.

3.3.2 Primary Data Collection

After the determination of sample size, Cluster sampling has been used to form a cluster to collect data. Then Purposive sampling method is used to collect the primary data. For this purpose field survey was conducted researcher visited various ward offices of every Municipality and VDCs during this time and collected data from the farmers who visited office during that day. During the survey, the means of gathering the data and information is included both questionnaire and Interview techniques that has been used in order to collect the data for the study. Questionnaires were designed in such a manner which can cover all the objectives of the study. For the illiterate respondents, the questions were written in Nepali as well and responses collected from them were recorded.

3.3.3 Reliability and Validity

Validity refers to how well a measurement truly represents characteristics that exist in the phenomenon being investigated and reliability is a measure of internal consistency. The main purpose of the validity and reliability is to determine whether data is trustworthy or not. The reliability and validity of the research plan and design was checked by the discussion with experts. In order to assure external validity, measures were taken to

collect a sample that is representative as possible. A comprehensive literature review was done in order to grasp the major variables that can affect the use of financing.

The final questionnaire was constructed around several dimensions that were represented in the research framework. Moreover, the questionnaire was prepared using simple and understandable language by targeting the respondents.

Reliability refers to the correlation of an item, scale or instrument with a hypothetical one which measures what is supposed to. Expert advice and feedbacks were taken as a tool for measuring reliability and validity of our data. The questionnaire was prepared by taking solid advice from contemporary agricultural experts.

3.3.4 Instrument of Data Collection

In this research questionnaire with multiple choice questions are provided to the respondents to get the appropriate response of the respondents.

3.4 Methods of Analysis

A structured questionnaire has been tabulated in excel. The tabulated data has been analyzed using ratio, percentage and average. This research used statistical package for social science (SPSS) to analyze and interpret data. To analyze the data collected from field survey is analyzed using descriptive statistics and Inferential statistics :-

Descriptive Statistics: Descriptive statistics is the tool used to summarize and describe the data that are collected. Various descriptive tools are used in this study such as mean, standard deviation, and skewness.

Inferential statistics: Inferential Statistics is used to analyze the results and to draw conclusion through the use of statistical tools. Inferential statistics help to analyze the data that is summarized by descriptive statistics. Under the inferential analysis, hypothesis test was done using the mean of the items of each corresponding variables. Paired T-test is used as an inferential statistics to analyze the data summarized using descriptive statistics.

3.5 Research Framework and Definition of Variables.

Based on literature review above, a conceptual framework is shown in the figure below. Statement of problem as made earlier has been used as basis for creating a conceptual framework. This framework shows the relationship of agricultural financing with

independent factors. This relationship can be very helpful in finding out the reasons for less access to means of financing in Nepal by the farmers who are the important component of agriculture financing.

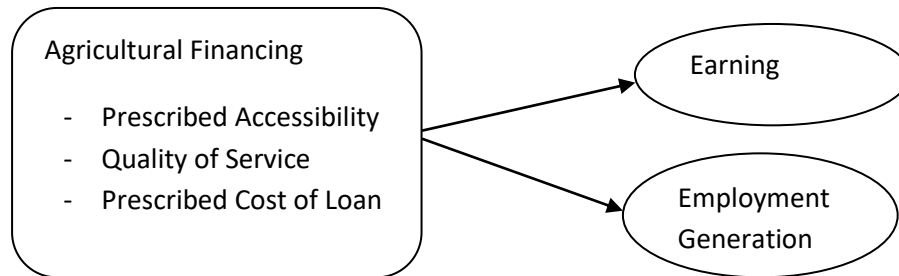


Figure 3.1 Conceptual framework for use of agricultural financing

3.5.1 Definition of Variables

Independent Variable

For the purpose of this research, the independent variable is use of agriculture financing which is dependent upon various dependent variables like earning and employment.

- **Agricultural Financing:** The study aims to access the use of agricultural financing by farmers in Kanchanpur district. Agricultural financing is a key driver for the commercialization of agriculture as it allows the farmers to start a new business, improve production efficiency, meet the capital need of farms, adopt improved technologies and cope with shocks in the external economic environment (Upadhyay et al., 2020). It has been sub divided into four components which are accessibility, quality of services, cost of loan and source of financing.

Dependent Variable

They are the factors that are influenced by the independent variable. In this research, dependent variables like income and employment have been created which are as follows:

- **Earning:** Earning is one of the influencing factors affecting the use of financing by the farmers. They provide useful insights into the quality of life of the farmers. The manner in which the farmers handle their income through either savings or investments is a crucial factor. It shows the effectiveness of financing.
- **Employment Generation:** Employment is an important aspect of financing. It plays a crucial role in choice of employees and their cost. Various costs associated with

financing are working hours, compensation, cost of hiring and firing. It is equally necessary to know the number of employees that are being used or the farmers is sole worker.

CHAPTER IV

RESULT AND DISCUSSION

As an important part of graduate research report, this part includes the results of the survey and analysis performed. This chapter contains the analysis, discussion and interpretation of the results based in data collection. The aim of this chapter is to analyze and interpret the data collected during the study and present the results of the questionnaire survey. This chapter includes detailed analysis and interpretation of the data from which concrete results of the use of agricultural financing on agricultural business. This chapter presents the results based on the analysis of the data with the help of IBM SPSS statistic software and Ms- Excel which was used to generate various tables and figures to explain results. The results are analyzed using descriptive statistics, inferential statistics, hypothesis testing and discussion.

This chapter is divided into two sections. The first section deals with the respondents profiles. Based on the responses collected through survey, three major statistical analysis were done. The major analysis included demographic profiles of the respondents such as age, gender, educational level and source of income as well as other general information of the respondents. And the second section deals with descriptive analysis such as mean value, standard deviation and coefficient of variations of the corresponding items of the research variables that are analyzed in order to find the uses of agricultural financing. Finally, hypothesis test are discussed in order to meet the objective of the study and to answer the research questions of this study.

4.1 Demographic Details

In this part, descriptive analysis of the sample respondent taken from the study is described. The details of demographic profile of the respondent in this study include gender, age, educational level, marital status and other source of income as well types of agricultural business the respondents are involved in.

Table4.1: Respondents Profile

Variables	Categories	Frequency	Percent
Gender	Male	207	52
	Female	191	48
Age	Below 40	152	38.2
	40-50	203	52
	50-60	37	9.3
	Above 60	6	1.5
Level of Education	Master's Degree	20	5
	Bachelor's Degree	72	18.1
	Intermediate	178	44.7
	SLC	77	19.3
	Below SLC	35	8.8
	Illiterate	16	4
Marital status	Married	304	76.4
	Unmarried	75	18.8
	Divorced	8	2
	Widow	11	2.8
Major source of income	Employment	27	6.8
	Agriculture	346	86.9
	Services	7	1.8
	Business	4	1
	Other	14	3.5
Types of agriculture	Crop Farming	257	63.2
	Livestock	16	4
	Vegetable Farming	81	20.2
	Poultry	50	12.6

Source: Field survey

The data from table 4.1 shows that the demographic profile of the respondents involved in this study. Among the 398 respondents majority of participants are male which is 52% and remaining 48% are female respondents which shows that male are dominating agriculture sector.

Mostly respondents having age between (40-50) are involved in the agriculture which is about 52% of total respondents. Which show that maximum numbers of working manpower are involved in agriculture sector which could help in the growth of agriculture sector.

Out of total respondents most people who are engaged in agriculture sector are having intermediate level of education which shows that educated people are also involved in agriculture sector. People who are married mostly engaged in this sector making agriculture major source of their income. Agriculture is not been commercialized because

mostly people are farming just to feed their family not for earning money from agriculture sector. Plantation of cash crops and pulses are very low. And most of the populations still use traditional methods to cultivate crops which do not give higher growth in production of crops.

4.1.1 Area of Land for Crop Farming

The statuses of land holding of total respondents who are engaged in crop farming are mentioned below. From the data given in Table 4.2 it can be understood that small number of farmers have large land area but skewness is low so it is close to normal distribution. The land is not sufficient for production of large amount of crops the land is fragmented in small parts so that the crops produced in the farm can be utilized by single family.

Table 4.2: Area for Crop Farming

Particulars	N	Minimum	Maximum	Mean	Standard deviation	Skewness
Land Area	336	1	80	23.68	11.666	0.266

Source: Field Survey

4.1.2 Number of Livestock

The total of 83 respondents had livestock. There were a minimum number of 1 livestock and maximum 200 of them. From the given table 4.3 it meant that more number of farmers had significant less number of livestock than 13.19.

Table 4.3: Number of Livestock

Particular	N	Minimum	Maximum	Mean	Std.	Skewness
Number of Livestock	83	1	200	13.19	25.394	5.538

Source: Field Survey

4.1.3 Number of Poultry

The total of 98 respondents had poultry farming. From the given table 4.4 we know that many farmers having poultry had less than 546 chickens. It shows that many farmers are having poultry farming in small quantity which would not help them earn lot of money nor they could produce employment.

Table 4.4: Number of Poultry

Particulars	N	Minimum	Maximum	Mean	Std.	Skewness
Poultry	98	1	5000	546.57	738.412	2.673

Source: Field Survey

4.2 Accessibility of Finance to Farmers

In this part we see the access of finance to farmers. We have asked some questions such as if they have borrowed loan or not? If borrowed then form which bank? What are the other sources of financing? How long does it take to get loan? What is the size of loan? If they received same amount applied for or not? If they do not get loan as applied then what amount did they received? What was the reason behind not getting applied loan? What types of loan did they took? Is borrowing from bank is easy? If they have attempted to take loan? Why do they not getting loan?

Table 4.5: Accessibility of financing

Variables	Categories	Frequency	Percent
Have you borrowed loan from bank	Yes	119	29.9
	No	279	70.1
Source of Credit	Commercial Bank	94	78.99
	Development Bank	9	7.6
	Finance Companies	4	3.4
	Microfinance Companies	12	10.1
Other source of financing	Saving and credit cooperatives	13	4.2
	Relatives	186	60
	Saving and own resources	106	34.2
	Others	5	1.6
Time to get credit	Less than 1 week	27	22.7
	1-2 weeks	60	50.4
	2-3 weeks	19	16
	3-4 weeks	7	5.9

Source: Field Survey

From table 4.5 it is seen that maximum number of farmers are not taking loans from bank and financial institutions. Only about 29.9 percent of respondents had taken loan from banks. Out of 119 respondents that have taken loan had have loan from commercial banks. Still large amount of respondents are taking loans from friends and relatives. The respondents that have taken loan have experienced that it took 1-2 weeks to get loans from banks and financial institutions in maximum. From the above data we can know that still large numbers of farmers are far from taking loans from bank and financial institutions.

4.2.1 Size of Loan Taken

Table 4.6: Size of Loan Taken

Particular	N	Minimum	Maximum	Mean	Std.	Skewness
Size of Loan	119	1	100	9.55	10.737	5.360

Source: Field Survey

From table 4.6 we come to know that there are large numbers of population that are taking less than 9 lakhs of loan from banks and financial institutions.

Table 4.7: Credit facilities received

Variables	Categories	Frequency	Percent
Received same amount	Yes	93	78.2
	No	26	21.8
Percentage of credit received	100 percent	93	78.1
	75 percent	9	7.6
	50 percent	10	8.4
	25 percent	7	5.9
Reason for not receiving full amount	Insufficient collateral	12	46.15
	Small farm size	14	53.85
Types of credit facilities	Long term credit facilities (More than 5 years)	21	17.6
	Intermediate credit facilities (1 to 5 years)	91	76.5
	Short term credit facilities (Less than 1 year)	7	5.9
Ease of Borrowing	Easy	79	66.4
	Difficult	40	33.6

Source: Field Survey

From table 4.7 we come to know that maximum numbers of farmers applying for credit are receiving the amount that they applied for. The farmers that are not receiving amount they applied for is because of small farm size or insufficient collateral. They mainly receive loans up to 5 years. Maximum number of respondents who received loan from banks thought that it is easy to get agricultural loans.

4.3 Quality of Service

In this part we have asked some questions to respondents to know the quality of service provided by bank and financial institutions are good or bad. So to know that we have prepared some questions such as Did the loan provided by bank and financial institutions match your requirement? Have you utilized all loan amount in farming? Do bank handle queries and problems effectively? Do bank provide fast and easy services? Do you think information provided by bank are trustable?

Table 4.8: Quality of Service

Variables	Categories	Frequency	Percent
Loan provided from bank match your requirement	Yes	99	83.2
	No	20	16.8
Utilized all loan on farming	Yes	102	85.7
	No	17	14.3
Do bank handle queries and problem effectively	Yes	113	76.4
	No	35	23.6
Do bank provide fast and easy service	Yes	107	73.8
	No	38	26.2
Do you think information provided by bank trustable	Yes	120	82.8
	No	25	17.2
Are employees of bank friendly and courteous	Yes	116	80
	No	29	20

Source: Field Survey

From the table 4.8 we come to know that maximum number of respondents that have received loans from bank and financial institutions have matched their requirement and have invested in farming. They think that the bank and financial institutions handle their queries and problems effectively and efficiently also they provide fast and easy services to their customers. They also believe that the information provided from bank and financial institutions are trustable. The employees of bank and financial institutions provide friendly and courteous service to their customers which make customers to consume their services.

4.4 Cost of loan

In this segment we tend to know that the cost of loan for farmers. For this we have prepared some questions such as what is the interest rate that bank charged for loan? What was the documentation charge? What are the interest rates in loan that has been taken from friends and relatives?

Table 4.9: Cost of Loan

Particular	N	Min.	Max.	Mean	Std.	Skewness
Interest rate	119	5	25	13.66	2.773	0.686
Document charges	119	1	100	6.773	11.13	5.853
Interest rate from relatives	211	3	36	23.64	6.875	-0.133

Source: Field Survey

From the above table we come to know that most of the farmers that have taken loan bank and financial institutions have taken below 13.66 percent interest rate. And they have paid lower than 6 thousand for their documentation charges. And most of the farmers that have taken loan from friends and relatives are paying higher interest rate with the average of 23.64 percent.

4.5 Impact of Agricultural Financing in Employment and Income

In this part we researched to know that if the financing in agriculture helped in employment generation and income generation for the farmers.

Table 4.10: Annual Turnover Before Taking Loans

Particular	N	Min.	Max.	Mean	Std.	Skewness
Turnover before taking loan	112	1	90	35.96	24.76	0.237
Turnover after taking loan	112	2.5	100	42.049	27.84	0.196

Source: Field Survey

From table 4.10 we know that farmers before taking loan had significantly low annual turnover of 35.96 lakhs per annum but after taking loan from bank and financial institutions their annual turnover was raised up to 42 lakhs per annum.

4.5.1 Employees

The number of farmers having employees were 51, not having employees were 347 out of 398 respondents. Which show that most of the farmer involves their family member in agriculture because the land is divided into small parts. So that family members can easily cultivate crops without need of any employees. Agriculture is not commercialized in Nepal so people who are involved in agriculture just cultivate crops to feed their family that is also one of the main cause maximum numbers of farmers not having employees. Farmers could not gain much profit from their crops so they cannot afford to have employees for their help.

Table 4.11: Employees

Number of Farmers	Frequency	Percent
Having Employees	51	12.8
Not Having Employees	347	87.2

Source: Field Survey

4.5.2 Employees Before Taking Loan

Seeing the employment generation due to agricultural financing was another important objective of the study. Out of the total respondents, 51 of them had kept employees on a regular basis. The minimum number of employees employed was 0 and maximum was 20. With the average of 3.10 and standard deviation from mean is 3.454 as 2.924 was skewness which mean farmers preferred to employ significant fewer employees than average.

Table 4.12: Employees before Taking Loan

Particular	N	Min.	Max.	Mean	Std.	Skewness
Employees before taking loan	51	0	20	3.10	3.454	2.924

Source: Field Survey

4.5.3 Employees After Taking Loan

Out of the total respondents of 51, minimum number of employees employed by the farmers was 1 after taking loans and maximum was found out to be 25. Average numbers of employees utilized were 4.86. It is deviated 4.49 times from the mean. Similarly skewness was measured 2.595 which indicated more farmers used to preferred to use below than average of 4.86 employees.

Table 4.13: Employees after Taking Loan

Particular	N	Minimum	Maximum	Mean	Std.	Skewness
Employees after taking loan	51	1	25	4.86	4.49	2.595

Source: Field Survey

4.6 Challenges Faced by Farmers and Their Solutions

4.6.1 Problems of Agricultural Sector

The data in Table 4.16 represents one of the multiple choice questions answers whereby the respondents were asked to respond for the problems that are associated with agriculture such as low market price for agricultural outputs, crop diseases, lack of improved seeds, deficiency on irrigation facility and timely unavailability of inputs such as seeds, fertilizers, pesticides, high prices of agricultural inputs, high prices of ingredients to feed livestock and poultry of the farmers, high bargaining powers of the agricultural mediators, labor shortages, lack of proper advices from agricultural experts, lack of effective training programs for the farmers etc. 100 percent participants felt agriculture faced severe problems. There were total 398 responses. Lack of capital was responded by 22, lack of improved seeds 40, deficiency of irrigation facility 19, unavailability of fertilizer 13, crop diseases 31, lack of market 235 and low market price 38.

Table 4.1: Problems of Agricultural Sector

Problems of Agricultural Sector	Frequency of Responses	Percent
Lack of Capital	22	5.5
Lack of Improved Seeds	40	10.1
Deficiency on Irrigation Facility	19	4.8
Unavailability of Fertilizer	13	3.3
Crop Diseases	31	7.8
Low Market Prices	38	9.5
Lack of market	235	59

Source: Field survey

4.7 Inferential Statistics

Inferential statistics is used to analyze the results and to draw conclusion through the use of statistical tools. Under the inferential analysis, hypothesis test was done using the mean of the items of each corresponding variables. For our inferential analysis, the researcher has used paired T-Test.

4.7.1 Paired T-Test

Paired T-Test is a statistical procedure to determine whether the mean difference between two sets of observations is 0. In a paired sample T-Test, each subject or entity is measured twice, resulting in pairs of observations. In this study, paired T-Test is useful in order to measure, for example, before and after measurements for a group of people. For this kind of study, the distribution of differences between the paired measurements should be normally distributed.

In order to perform the paired T-test, we need two variables. One variable defines the pair for the observations. The second variable is a measurement. Sometimes, we already have the paired differences for the measurement variable. Other times, we have separate variables for before and after measurement for each pair and need to calculate the differences. To apply the paired T-test to test for differences between paired measurements, the following measurements need to hold:

1. The subjects must be independent. The measurement of one subject do not affects measurements for any other subject.

2. Each of the paired measurements must be obtained from the same subject. For example, the before and after number of employees used by farmers in their farm.
3. The measured differences are normally distributed.

Two hypotheses have been formulated for the purpose of studying the effect of agricultural financing in income and employment generation such as:

H1: There is significant association between agricultural financing and earning.

H2: There is significant association between agriculture financing and employment generation.

Following tables below show the proper impact of agricultural financing in both areas.

Table 4.2: Paired Sample Test Paired Differences

	Particulars	Mean	Std. Deviation	Std. error mean	t	d.f.	Significance (2-tailed)
Pair 1	Turnover now - Turnover before	-6.107	4.590	.434	-14.081	111	.000
Pair 2	Employees now - Employees before	-1.765	1.632	.229	-2.224	50	.000

Source: Field Survey

The above table shows exactly how both pairs correlate in the paired test with before and now relationship. The above table clearly shows that since 2 tailed significance of annual turnover between before and now is less than 0.001 which means earning has been in an increasing trend and employees before and after taking loan has 2 tailed significance less than 0.001 which means employment generation is also in increasing trend.

4.8 Qualitative Analysis

It is a study that focuses on theoretical and qualitative part of data. It mainly deals with extracting a theme out of any given data in order to get a suitable conclusion for the research. In this particular study, the researcher has asked respondents to answer for possible and suitable suggestions in order to improve the condition of agricultural

financing in the research area. For that intended purpose, we have collected some major suggestions that farmers have asked if financial institutions could provide to them for their personal benefits. Following are the major solutions and advices that farmers have given to the banks and financial institutions for their own benefits in easing the agricultural improvement process. The suggestions are grouped into various forms as per the importance and weight of the suggestion in the long run. It provides valuable insight regarding understanding the issues regarding agricultural financing such as the following:

1. **Lower Interest Rates:** Interest rate should be managed. Bank should provide lower interest rates to the farmers for purchasing fertilizers, seeds and other facilities. Loan at low interest rates with low collateral demand by the banks should be made available to the farmers.
2. **Proper Market Facility:** Local market should be promoted rather than to import agricultural products from other countries. Proper marketing facilities should be provided for the enhancing local agricultural outputs. Bank should be helpful to farmers to tackle with transportation costs by helping with inflation rates through discounts and reduction of service costs. Market prices for products of agriculture should be increased. Competitive pricing should be practiced among farmers. Specific attention on farming such as cheap machineries and good market prices for agricultural outputs should be provided by the banks to farmers.
3. **Better Loan Facilities:** Manage loans and subsidies effectively. Managing false claims of agricultural loans and subsidies on lands and areas used otherwise. Loan should be easily advanced and investment in agrarian business should be increased. Easy loan interest rates for agricultural loan provisions. Easy loans to modernize qualitative agricultural flow and services etc. Easy financing, lower interest rates, easy payment schedules and cooperative treatment. Women- centric loans should be provided at subsidized interest rates along with better service and facility to loan seekers. Loans should be given as per the requirement of farmers by the banks. Finally, loan receiving procedure should not be time consuming and should be made less tedious to the farmers.
4. **Technological Training:** It is necessary to provide and teach farmers about the new technology and encourage the retired officer to get involved in farming. Banks should provide technical know-how to farmers along with amenities at lower prices. Modern machineries according to the needs of time should be financed by the banks.

Improvements in technology and farming method training to farmers. Technology of loans should be improved.

5. **Increase accessibility of Agricultural Loans:** It is mandatory to increase and improve the access to financing facilities in the agricultural sector to improve the seeds and other facilities to banks and financial institutions. Footsteps of India should be followed to provide tractor to farmers, seeds, irrigation etc. Banks should act as a strong provider of agricultural inputs at suitable market prices. Proper plans and policies should be encouraged to uplift the life of farmers. General attitude towards farmers should be improved by the banks.
6. **Better Customer Services to Farmers:** Timely solutions to problems of liquidity and farmers project should be handled well. Quick and customer friendly services should be provided by the banks to the peasant farmers. Monetary incentives should be introduced and encouraged along with subsidies. Speedy and effective services should be provided by the banks. Proper guidance for the agricultural sector along with provision of facilities is needed. Proper handling of the services of bank and problems of farmers by the employees of the banks. Finally, proper trust building mechanisms should be improved along with increment in the agricultural sector by the banks.
7. **Other Suggestions:** Agricultural goods value must be evaluated by government and minimum support price of agricultural commodities should be fixed. Timely availability of fertilizers should be made by government. Better medicines to crops and modern irrigation related facilities should be provided. Specific attention on increasing the revenues of farmers should be given. Better protection and insurance facilities to peasant farmers from natural disasters. Modern machineries according to the needs of time should be financed by banks. Hence, these are the suggestions that the farmers have provided to banks and financial institutions for the enhancement of farmers in Kanchanpur District.

4.9 Discussion

Very few studies have been conducted in Nepal to analyze agricultural credit and its impact in agricultural productivity and access to agricultural credit. It is found that respondents are more concerned regarding interest rate, management of market price, price of agricultural outputs, accessibility of services, employment generation and income increment of farmers. Also, to analyze the part further there were some researches made

on the similar topics with different researchers and the findings bringing different outcomes.

Regarding the demographic profile, the study focused on major Ten demographic components such as gender, age, marital status, educational details, source of income, Area of land, types of agricultural business, number of livestock and number of poultry. Following are the major findings:

- Gender wise distribution of the respondents indicated that most of the male are involved in agriculture that is 52% of total respondents.
- Out of the 398 respondents people of age between 40-50 are mostly involved in agriculture then other age groups.
- The population who are involved in agriculture are mostly educated. People having intermediate are mostly involved in agriculture.
- Married people are mostly involved in agriculture which is 76.4% of total respondents.
- Among 398 respondents, overwhelming number of respondents 86.9% were involved in agriculture as their major source of income.
- Among total respondents, about 62.7 Percent of respondents are involved in crop farming which shows that majority of population are engaged in crop farming.
- Most of the farmers are having land area less than 23.68 kattha.
- Farmers who are engaged in livestock farming has average of 13.19 livestock.
- Farmers who are engaged in poultry farming are having chickens about 546 chickens.
- There are only about 30 percent of farmers who have borrowed loan from banks which shows that people have less access to agricultural financing.
- Majority of respondents have taken loan from commercial banks because it has less interest rate than other banks and is easily accessible.
- Other than bank and financial institutions majority of respondents have taken loan from friends and relatives.
- Most of the respondents have indicated that banks and financial institution took about 1-2 week for loan processing.
- According to the research report most of the respondents have taken loan less than 9.55 lakhs.
- About 78.2 percent of the respondents who have applied for the credit had received the same amount of credit which they had applied for.

- Respondents who did not get full amount of credit applied for out of them 7 got 25 percent of loan applied for, 10 got 50 percent of credit applied for and 9 got 75 percent of credit they applied for.
- 53.8 Percent of respondents did not get full amount of credit due to small farm size and remaining 46.2 percent of respondents did not get due to insufficient collateral.
- Many respondents has taken intermediate (1-5 years) types of loan.
- Among 119 respondents 66.4 percent of respondents feel easy to take loans from banks and financial institutions.
- Among 119 respondents 83.2 percent of respondents felt that the loan provided from banks and financial institutions matched their requirement.
- Out of 119 respondents 85.7 percent of respondents used their credit in farming remaining 14.3 percent used that credit in other sector also.
- 76.4 percent of respondents felt staff of banks and financial institutions handle queries and complaints very effectively.
- 73.8 percent of respondents felt that bank and financial institutions provide fast and easy services.
- 82.8 percent of respondents felt that the information provided by bank and financial institutions is accurate and up to date.
- 80 percent of respondents felt that employees of bank and financial institutions are friendly and courteous.
- Positive skewness suggests that a small number of loans have higher than average interest rates.
- The mean documentation charge is 6.773 but the high standard deviation and skewness indicate a highly uneven distribution. While most charges are low, there are outliers with very high fees.
- The slightly negative skewness(-0.133) suggests that rates are distributed nearly symmetrically but with a slight concentration at the higher end.
- High standard deviation indicates high variability in turnover values among the borrowers but positive skewness shows that some few higher turnover values pulling the mean upward.
- High standard deviation indicates high variability even after taking loans but slightly positive skewness suggests that more balanced improvements in turnover among borrowers.

- Out of 398 respondents 347 respondents do not have any employees only 51 have employees to assist them in farming.
- Strong positive skewness suggests that most numbers of farmers that have given employment has employees lower than 3.
- Strong and positive skewness suggests that most of farmers have less than 4 employees even after taking loan.
- Most of respondents suggests that lack of market is the major problem in agriculture sector which shows that there is high barriers in selling goods that are produced by farmers.
- About 63.3 percent of the respondents suggests that management of market prices could solve their problems. In their views ensuring stable and fair market prices for agricultural products could solve their problems.

Table 4.16 Summary of Hypothesis

Statements	Decision
There is significant association between agricultural financing and earning	Accepted
There is significant association between agricultural financing and employment	Accepted

Rimal, (2014) did a research on "Credit flow of Commercial Banks and their impact on Agricultural Production in Nepal". Agricultural credit per cultivated area which is the major explanatory variable is positive and significantly impacts the agricultural production of the country during the study period. The other variables are positive but not significant i.e. the consumption of fertilizer and improved seeds during peak cultivation period and consumption of such inputs mainly in the plain region of Nepal which are easily accessible and traded from the free border. Wagnn et al., (2016) performed research on significance of Agricultural Financing in Agricultural and Rural Development of Pakistan. The findings of research shows that agricultural finance was helpful for improving household income, useful for improvement in living standard of people and it was useful to access better education and health as it enables farmers to better access to nutritional diet in the study area. The farmers were also facing difficulties in getting agricultural credit facilities from the all sources i.e. government institutions or banks, as well as non- institutional sources of finance. Also farmers complained that the procedures and documentations in agricultural finance are very lengthy while getting finance from

institutional sources. Farmers also complained about high interest rate and not having easy accessibility to financial institutions.

Ayegbe and Ikani, (2013) observed that unregulated private money lenders are still a major source of financing in agricultural sector of Nigeria. The main obstacles to agricultural loans from the formal sector include high interest rates, unnecessary collateral requirements, bureaucratic delays, late loan approvals, and loan approval delays. They demand that banks and other financial institutions create lending products and services that are tailored to the risks and cash flow patterns of the agricultural industry. Banks should open new locations in rural areas and refrain from placing unnecessary restrictions on farmer's access to credit.

Roberts, (2017) also performed a research on "An analysis of Determinants of access to and use of credit by smallholder farmer in Suakoko District, Liberia." Result of the study shows smallholder farmers may not be adequately financed or have adequate collateral given the low level of credit access. The result of the study indicates that all credit sources in the study area were semi-formal. Result also established that respondents borrowed from saving and credit cooperation, farmer's society, friends and relatives and money lenders etc. According to the information gathered, government does not give credit to smallholder farmers in the area. The only microfinance bank giving out credit to farmers in suakoko has been closed since the war and banks suakoko have not started giving out agricultural credit.

Khan and Jehanzeb, (2008) had carried out a case study on impact of agriculture credit on farm productivity and income of farmers in Northern Pakistan. In this study they found that the loan was properly utilized by the sample borrowers. Due to which the borrowers in the area enjoyed edge over the non-borrowers in terms of area, crop yield, employment and income. The borrowers allocated more land to all types of crops and fruits compared with the non- borrower's income was significantly increased.

Will, Prehn, Pies, and Glauben, (2016) concluded that financial speculation does not have an adverse effect on the functioning of agricultural commodities markets. Rather, they express the view that the increase in trading volumes that has accompanied the increasing involvement of index traders (CITs) is strengthening the information function of the markets. In addition, it is noted that financial speculation contributes to expanding the hedging options available to producers of agricultural commodities, and thereby has a

positive effect on the supply volume. With the limited time to research on the topic and the sample size, the result is just not similar with the previous results. The result of this research serves as there is association between income, employment and agricultural financing. However, most of the sample respondent complaints about the interest rate charged on these loans and the procedure for obtaining credit from 41 131,(Zari Tragiati Bank Limited, 2018).

CHAPTER V

SUMMARY AND CONCLUSION

This chapter includes the summary and conclusion drawn from the data analysis and hypothesis testing in previous chapter using several statistical tools. This chapter is divided in three sections. The first part summarizes the study and general overview of the research findings. The second part gives the conclusion drawn from the study. The last part of this chapter suggests the recommendations as well as suggestions.

5.1 Summary

The main purpose of this research was to study the agricultural financing and its significance in agriculture sector of Kanchanpur District. Research mainly focused on three elements of agriculture financing: income, employment and agricultural financing. This study is based in primary survey. For the survey, 398 respondents provided the data through the questionnaire provided to them. So, findings are completely based on the data and facts provided by the respondents.

Descriptive and inferential analysis was done with the help of IBM SPSS statistics software. Frequencies, Percentage, Mean, Standard deviation, Paired T-test testing was done to reach the concrete results. Suggestions were asked to farmers regarding ways in which banks and financial institutions in order to carry out thematic study by processing a theme out of all their suggestions to banks and financial institutions in order to succeed in forming a qualitative study and to add cushion to support the descriptive study.

The research was causal –comparative in nature. The overall research method was conducted through the collection of primary data. The major findings of the study are as follows:

5.2 Conclusion

This study is conducted to know the effect of agricultural financing in employment generation and earning of the farmers' in Kanchanpur District. To conduct this research various similar types of research works were analyzed. In this study we collected the data to analyze the status of farmers' to access agricultural financing, quality of service they are receiving, the cost of loan they get to pay, and is it impactful to raise their earning with employment generation.

Descriptive research design has been used to conduct research. Data are collected using mixed sampling method. Various questionnaires were formed to collect the data from farmers in Kanchanpur district. Various descriptive tools such as mean, standard deviation and skewness is used to summarize and describe data. Inferential statistics is used to conduct hypothesis test.

After the collection of data we analyzed those data to examine what effects was done by agriculture in employment generation and earning. We found that there is positive relation between agricultural financing and employment generation and earning.

5.3 Implications

It is necessary for policy makers to improve education system so that the small farmers are equipped with the skill and knowledge to effectively access credit at less cost and use them wisely in order to generate more income. The more educated the household head, the more they will tend to use modern technologies and also credit which will bring about increase productivity. Also, the bank and financial institutions should provide readily available and accurate payment information for the borrower, and proper valuation of collateral.

Implications to Policy Makers:

- Farmers are getting as much credit as they need even by paying high interest rates. Thus, policy makers should ensure that the farmers get as much credit. They need credit as subsidized interest rate. It will enhance their access to improved seeds, use of fertilizer and pesticides, better irrigation facilities and mechanized methods of production which will ultimately increase the productivity of the farmers.
- Agricultural credit has helped to enhance the agricultural productivity of the farmers in the study area. With such a credit facility, farmers will have a better access to improve seeds, fertilizer, pesticides and better irrigation facility. Thus, farmer friendly agricultural credit services should be provided by the government of Nepal to improve agricultural and rural development. It will help the women of the rural area attain a higher level of technical efficiency and higher farm productivity.
- The study also recommend that Nepal Rastra Bank should be focused and directed financial system on urban-area and deepen their services in providing agricultural

credit in time and facilitate the agricultural production system of the rural areas of the country.

- Agriculture loan recovery is challenging for bank and financial institutions, so financial education, suitable credit policies, and efficient loan monitoring policies should be implemented to create a more successful credit system. The loan recovery approach must be flexible and realistic. Fear of the bank's recovery process among the rural poor should be minimized through education and the bank's image in rural life should be presented as a friend, philosopher, and guide.
- Government should introduce policy in the favor of farmers such as timely availability of inputs; seeds and fertilizers, appropriate price of outputs, control monopoly of mediators.
- Technical support of agriculture can be provided to farmers. Besides, the insurance in agriculture sector is not effective like health insurance. However, the crops and livestock insurance directives 2013 was introduced by the insurance board Nepal with focus on crops(Apple, Banana, Paddy, Potatoes, vegetable, among others), livestock and poultry, making it mandatory for all the non- life insurance companies to come up with insurance policies for these product.

Implications for the Future Researchers:

- This research included agricultural financing obtained from institutional sources i.e. banks and financial institutions so further studies that may include both institutional sources as well as non- institutional sources financing.
- Although this research included only four types of agriculture business, researcher can further make study by including more types of agriculture businesses.

REFERENCES

- Afolabi, M., Ikpefan, O. A., Osuma, G. O., & Evbomwan, G. (2021). Credit is essential for the revival and development of the agrarian sector. *International Journal of Multidisciplinary Sciences and Advanced Technology*, 2(1), 44–53.
- Ayegba, O., & Ikani, D. I. (2013). An impact assessment of agricultural credit on rural farmers in Nigeria. *Research Journal of finance and Accounting*, 4(18), 80-89.
- Baidhya, S. (2019). Agricultural credit in India: The critical role of financial institutions. *International Journal of Agricultural Economics and Rural Development*, 6(10), 878-882.
- Bhatta, S. (2019). *Impact of Agricultural Credit Groups (ACGs) on farmers' access to credit: A case study in Nepal*.
- Central Bureau of Statistics. (2021). *Population Census 2021*. Government of Nepal.
- Chaiya, C., Chitralada, S., Sikandar, S., Pinthong, P., Saqib, S. E., & Ali, N. (2023). The impact of formal agricultural credit on farm productivity and its utilization in Khyber Pakhtunkhwa, Pakistan. *Sustainability*, 15(2), 1217.
- Choudhary, D., Banskota, K., Khanal, N., & Gyawali, P. (2020). The role of necessity to finance for smallholders' seed business growth in Nepal. *Development in Practice*, 19(1), 1-12.
- Development Vision Nepal P. Ltd. (DVN). (2018). *Inter Provincial Dependency for Agricultural Development*. Department of Agriculture, Lalitpur, Nepal: Ministry of Agriculture, Land Management and Cooperative.
- Dulal, A. (2023). *Impact of agricultural credit finance on food production in Nepal* (Master's thesis, Tribhuvan University). Patan Multiple Campus.
- Gupta, V., Gautam, T. K., & Bhandari, B.D. (2016), Choice of agricultural credit services by Nepalese farmers, *ageconsearch* (pp, 3-10), San Antonio, Texas: Southern Agricultural Economics Association(SAEA).

- Government of Nepal, Central Bureau of Statistics. (2008). *Nepal Labour Force Survey 2008*. Government of Nepal, Central Bureau of Statistics.
- Government of Nepal, (2023), *Economic Survey 2022/2023*, Singhadarbar, Kathmandu: Ministry of Finance.
- Hibbett, K,(2018), The importance of agriculture in Nepal, *The Borgen Project*, 1(12),5-17.
- IFC. (2022). *Agricultural Sector Development Reports*. IFC Nepal Office.
- Islam, M. M. (2020). Agricultural credit and agricultural productivity in Bangladesh: An econometric approach. *International Journal of Food and Agricultural Economics (IJFAEC)*, 8(3).
- Kullabs. (2022). *History of credit cooperatives and the establishment of cooperative banking in Nepal*. Kullabs.
- Maharjan, S. (2018). *Impact of the PMAMP on agricultural productivity in Nepal: Adoption of modern technologies and practices*.
- Mahender, P. (2021). *Agricultural finance by SBI in Telangana state: A case study of Medak district* (Doctoral dissertation, Osmania University). Vivek Vardhini College of Arts, Commerce, Sciences & P.G. Studies. <http://hdl.handle.net/10603/435045>
- Ministry of Agriculture and Livestock Development. (2023). *Agricultural Development Strategy*.
- Ministry of Finance. (2023). *Economic Survey for Fiscal Year 2022/23*. Government of Nepal.
- Mishra, A. K. (2024). Government Investment in Agriculture and Policy Recommendations . SP Swag: Sudur Pashchim Wisdom of Academic Gentry Journal, 1(1), 1-10.
- M.K., S, Khan, H., & Jehanzeb, (2008), Impact of agricultural credit on farm productivity and income of farmers in mountainous agriculture in northern Pakistan: a case study

- of selected villages in district Chitral, *Sarhad Journal of Agriculture(Pakistan)*, 24(4), 714-718.
- Naik, D.G., 2021. *A Study on Agricultural Financing in the State of Goa* (Doctoral dissertation, Goa University).
- Nepal Economic Forum. (2023). *Addressing the gaps in agricultural financing: An analysis of Nepal's banking sector*.
- Nepal Rastra Bank, (2023), *Banking and Financial Statistics, Banks and Financial Institutions Regulation Department*, Kathmandu: Nepal Rastra Bank.
- Nepal Rastra Bank. (2023). *Monetary Policy 2023/24: Agricultural credit and financial sector overview*.
- Nepal Rastra Bank. (2023). *Monetary Policy 2023/24: Focus on agriculture and financial sector development*. Kathmandu: Nepal Rastra Bank.
- Nepal Rastra Bank. (2023). *Unified directives for commercial banks (2080)*. Nepal Rastra Bank.
- Pandey, R. (2022). Agricultural credit and the challenges of financial institutions in Nepal. *Nepal Journal of Economics*, 15(2), 56-71.
- Rahman, S., & Hassan, M. K. (2017). Impact of agricultural credit on smallholder farmers' productivity in Bangladesh. *Journal of Rural Development*, 45(2), 45-58.
- Rimal, N.S. (2014), Agricultural credit flow of commercial bank and impact on agricultural production in Nepal, *Scholars Journal of Arts, Humanities and Social Sciences*, 3(4),125-139.
- Roberts, L.C., Otieno, D.J., & Nyikal, R.A. (2017), *An analysis of determinants of access to and use of credit by smallholder farmers in Suakoko District*, Liberia, University of Nairobi, Department of Agricultural Economics, Suakoko, Liberia.
- Sharma, Y.P. (2022), Agricultural self-sufficiency: Ensuring sustainable economic development in Nepal. *Prithvi Academic Journal*, 5(1), 196-203.

- Sijabat, R. (2020). The role of agricultural value chain finance in Indonesia. *Journal of Agribusiness and Rural Development Studies*, 15(4), 45-58.
- Upadhyay, N, Gairhe, S, Acharya, Y, Ghimire, Y.N. Timsina, K.P., & Acharya,A(2020), Credit's use in performance and its determinants on farm household: A case of Chitwan district of Nepal, *Journal of Agriculture and Natural Resources*, 3(2), 140-149.
- Wagan, S, A., Jingdong, P., Shuanxi, D, & Noonari, S.(2016), Significance of agricultural finance in agriculture and rural development of Pakistan “ A case study of Qumbar Shahdadt, *European Journal of Business and Management*,8-16,89-94.
- Will, M.G., Prehn, S., Pies, I., & Glauben, T,(2016), Is Financial speculation with agricultural commodities harmful or helpful? A Literature Review of empirical research, *The Journals of alternative investments*, 18(3),84-102.
- Zari Traqiati Bank Limited, (2018), Role of Zarai Traqiati Bank Limited in agriculture development, *Agricultural research and technology open access journal*, 14(1), 1-6.

ANNEX

Questionnaire for Farmers

Dear Respondents,

I am an MBA student of Shankar Dev College, Tribhuwan University. As a partial fulfillment of the academic requirement of the University, it is required to conduct a research. This research is being conducted on the financing of agriculture sector: A case study of Kanchanpur District for my MBS degree program. I would like you to spare your valuable time for answering to the questionnaire below. The questionnaire is purely for an academic purpose and the details provided will be kept confidential.

Sincerely,

Saurav Raj Puri.

Section A: Personal Data of the Respondents

1. Gender
 - a) Male
 - b) Female
 - c) Prefer not to say

2. Age
 - a) Below 40
 - b) 40-50
 - c) 50-60
 - d) Above 60

3. Level of Education
 - a) Illiterate
 - b) Below SLC

- c) SLC
- d) Intermediate
- e) Bachelors Degree
- f) Masters Degree

4. Marital Status

- a) Married
- b) Unmarried
- c) Divorced
- d) Widow

5. Major Sources of Income

- a) Employment
- b) Agriculture
- c) Service
- d) Business
- e) Others

6. What type of agricultural business are you involved in ? तपाईं कस्तो कृषि व्यवसायमा संलग्न हुनुहुन्छ ?

- a) Crop Farming
- b) Livestock
- c) Vegetable Farming
- d) Poultry

7. How much area of land did you plant vegetables/crops this year? (यो वर्ष कति जमिनमा तरकारी/बाली लगाउनु भयो ?

- a) Up to 5 Kattha
- b) 5-15 Kattha
- c) 15-30 Kattha
- d) above 30 Kattha

8. How many numbers of livestock do you have? (तपाईंसँग कति संख्यामा गाईवस्तु छ?)
.....

9. How many numbers of poultry do you have? (तपाईंसँग कुखुराको संख्या कति छ?)
.....

Section B: Accessibility

10. Have you borrowed fund from bank?(बैंकबाट ऋण लिनुभएको छ ?)
a) Yes
b) No

11. If loan taken from which bank you have taken loan? (ऋण लिएको भए कुन बैंकबाट ऋण लिएको हो ?)
a) Commercial Banks
b) Development Banks
c) Finance Companies
d) Microfinance

12. What are the other source of fund?(कोषको अन्य स्रोत के हो?)
a) Saving and Cooperatives
b) Relatives and Neighbours
c) Saving and Own Resources
d) Other

13. How long does it take to get credit from Bank and Financial Institutions? (बैंक तथा वित्तीय संस्थाबाट ऋण लिन कति समय लाग्छ ?)
a) Less than 1 week
b) 1-2 weeks
c) 2-3 weeks
d) 3-4 weeks
e) more than 1 month

14. What is the size of loan you have taken? (तपाईंले लिएको ऋणको आकार कति छ?)
- a) Up to 5 lakhs
 - b) 5-10 lakhs
 - c) 10-25 lakhs
 - d) More than 25 lakhs
15. Did you receive the same amount or credit applied for? (के तपाईंले मागे जति कर्जा प्राप्त गर्नुभयो ?)
- a) Yes
 - b) No
16. If no, what percent did you receive? (यदि मागे जति कर्जा प्राप्त नगरेको भए कति प्रतिशत प्राप्त गर्नुभयो ?)
- a) 25 Percent
 - b) 50 Percent
 - c) 75 Percent
17. If no, why didn't you get the full amount? (किन तपाईंले मागे जति कर्जा प्राप्त गर्नुभएन ?)
- a) Long term Loan
 - b) Intermediate Loan
 - c) Short Term Loan
18. What types of loans have you taken from Banks and Financial Institutions? (बैंक तथा वित्तीय संस्थाबाट कस्ता कर्जा लिनुभएको छ ?)
- a) Yes
 - b) No
19. Do you think borrowing from Financial Institutions is easy? (के तपाईंलाई वित्तीय संस्थाबाट ऋण लिन सजिलो छ जस्तो लाग्छ?)

- a) Yes
- b) No

Section C: Quality of Services

20. Do you think that loans provided by Bank and Financial Institutions match your requirement? (के तपाईंलाई बैंक तथा वित्तीय संस्थाहरुबाट उपलब्ध गराइने ऋण तपाईंको आवश्यकतासँग मेल खान्छ जस्तो लाग्छ ?)
- a) Yes
 - b) No
21. Have you utilized all loans amount in farming? (के तपाईंले ऋणको सबै रकम कृषिमा प्रयोग गर्नुभयो?)
- a) Yes
 - b) No
22. Do you think that staffs of Bank and Financial Institutions handle queries and complaints very effectively? (के तपाईंलाई लाग्छ कि बैंक तथा वित्तीय संस्थाका कर्मचारीहरुले जिज्ञासा र गुनासोहरुलाई धेरै प्रभावकारी रूपमा सम्हाल्छन् ?)
- a) Yes
 - b) No
23. Do you think that Bank and Financial Institutions provide fast and easy service. (बैंक तथा वित्तीय संस्थाले छिटो र सजिलो सेवा दिन्छन् भन्ने लाग्छ ?)
- a) Yes
 - b) No
24. Do you think that Information provided by Financial Institutions is accurate and up to date. (के तपाईंलाई वित्तीय संस्थाहरु द्वारा प्रदान गरिएको जानकारी सही र अप टु डेट छ जस्तो लाग्छ?)
- a) Yes
 - b) No

25. Do you think that the employees of BFIs are friendly and courteous? (के तपाईंलाई बैंक तथा वित्तीय संस्थाका कर्मचारीहरु मिलनसार र विनम्र छन् भन्ने लाग्छ ?)

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Section D : Cost of Loan

26. How much interest rate you are paying for loan? (ऋणको लागि कति ब्याज तिर्दै हुनुहुन्छ?)

.....

27. How much cost have you spent for documentation to take loans? (ऋण लिनका लागि कागजात बनाउन कति खर्च गर्नुभयो ?)

.....

28. What is interest rate of loans borrowing from cooperatives, relatives and landlords ?(सहकारी, आफन्त र जग्गाधनीबाट लिएको ऋणको व्याजदर कति छ ?)

.....

Section E : Impact on Income and Employment

29. What was your annual turnover before taking loans? (ऋण लिनु अघि तपाईंको वार्षिक कारोबार कति थियो ?)

.....

30. What is your annual turnover after taking loans?(ऋण लिएपछि तपाईंको वार्षिक कारोबार कति हुन्छ ?)

.....

31. Have you increased number of employees after taking loans for farm? (कृषिका लागि ऋण लिएर कर्मचारीको संख्या बढाउनुभएको छ ?)

- a) Yes
b) No
32. What was your number of employees before taking loan? (ऋण लिनु अघि तपाईंको कर्मचारी संख्या कति थियो ?)
.....
33. What is your number of employees after taking loan? (ऋण लिएपछि तपाईंको कर्मचारी संख्या कति छ ?)
.....

Section F : Challenges Faced By Farmers

34. What problems are you facing in agriculture? (कृषि क्षेत्रमा के कस्ता समस्याहरू भोग्नुभएको छ ?)
- a) Lack of Capital
 - b) Lack of Improved Seeds
 - c) Deficiency of Irrigation Facility
 - d) Unavailability of Fertilizer
 - e) Crop Disease
 - f) Lack of Market
 - g) Low Market Price
35. What should be done in order to solve the problems faced by the farmers like you? (तपाईंजस्ता किसानले भोग्नुपरेको समस्या समाधान गर्न के गर्नुपर्छ ?)
- a) Agricultural Loan as Subsidized Interest Rate
 - b) Subsidy on Improved Seeds
 - c) Irrigation Facility
 - d) Timely Control on Crop Disease
 - e) Management of Market Price

36. What are your suggestions to improve agriculture financing? (कृषि क्षेत्रमा वित्तीय लगानी सुधार गर्न के सुझाव दिनुहुन्छ ?)

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