

**ROLE OF SIKKIM STATE COOPERATIVE BANK LTD.
IN FINANCIAL INCLUSION**

A Thesis Submitted

To

Sikkim University



In Partial Fulfilment of the Requirement for the

Degree of Doctor of Philosophy

By

Madan Chhetri

Department of Management
School of Professional Studies
Sikkim University

Gangtok-737102


India

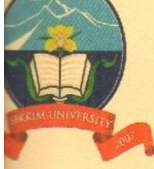
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I, Madan Chhetri, do hereby declare that the thesis entitled '**Role of Sikkim State Cooperative Bank Ltd. in Financial Inclusion**' submitted by me to Sikkim University, Sikkim for the degree of Doctor of Philosophy is original piece of work carried out by me under the supervision of Dr. Pradip Kumar Das. I further declare that it has not been submitted by me fully or partially for the award of any degree, diploma, associateship, fellowship or other similar title or recognition.

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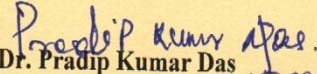
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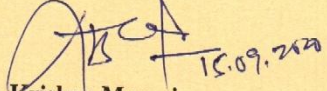
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All the assistance and help received during the course of investigation have been duly acknowledged by him.

We recommend this thesis to be placed before the examiners for evaluation.


Dr. Pradip Kumar Das
(Supervisor) 15.09.2020

Assistant Professor
Department of Management,
Sikkim University, Gangtok

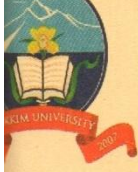

Dr. Krishna Murari

Associate Professor & Head
Department of Management,
Sikkim University, Gangtok

HEAD
Department of Management
सिक्किम विश्वविद्यालय
Sikkim University

6 माईल, सामदुर, तादोंग, गंगटोक - 737102 सिक्किम, भारत
दूराभाष : 00-91-3592 - 251067, 251403, फैक्स :- 251067/251757

6th Mile, Samdur, PO Tadong 737102, Gangtok, Sikkim, India
Phones : 00-91-3592-251067, 251403, Fax - 251067/251757
website : www.sikkimuniversity.in/www.sikkimuniversity.ac.in
Email : sikkimuniversity@gmail.com



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Submitted by **Mr. Madan Chhetri** under the supervision of **Dr. Pradip Kumar Das**, Assistant Professor, Department of Management, School of Professional Studies, Sikkim University.

Madan Chhetri
15.09.2020

Signature of the Scholar
Madan Chhetri

Pradip Kumar Das

Countersigned by Supervisor
Dr. Pradip Kumar Das

I. Chandel

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दूराभाष : 00-91-3592 - 251067, 251403, फैक्स :- 251067/251757

6th Mile, Samdur, PO Tadong 737102, Gangtok, Sikkim, India
Phones : 00-91-3592-251067, 251403, Fax - 251067/251757
website : www.sikkimuniversity.in/www.sikkimuniversity.ac.in
Email : sikkimuniversity@gmail.com

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Madan Chhetri
Research Scholar

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CHAPTER 1

INTRODUCTION

This chapter outlines the framework of the thesis, overviews the structure for research of the thesis and discusses the methods of research in terms of research plan, data sources, research instruments, population and sample size, method of sampling and the analysis tools. Further, this chapter is divided into different sections, explaining the significance, scope and objectives of the study. The chapter also gives a framework on the structure in terms of chapterisations along with the limitations of the study.

1.1 Background

Indian banking system has seen a long history of development over the periods of time. The Government of India and the RBI had given more thrust on the development of robust banking system with a view to support planned economic development in the country. The planning of the Government of India had stressed more on the availability of financial products and services to the masses with a view of inclusive growth. So, banking system had been identified by the Government as an important agent which could play the major role towards the holistic development of the country. With the identification of this role of the banking system, the policy framework had been formulated by the Government from time to time to ensure the adequacy of financial services for the various segments of the society.

With the development of information and communication technology, the Indian banking system has seen a paradigm shift from the earlier purely man-power based to

machine based. With the recent development of the banking technology, the banking system has been in a position to extend its coverage of operations in a broader spectrum. However, the accessibility of the facilitations of such technology in terms of financial products and services is beyond the scope of few section of the population. Hence, the idea of financial exclusion is the crucial point which makes a considerable portion of the society beyond the scope of accessing the basic financial products and services, such as the basic saving accounts, loan facilities, financial awareness services, insurances and payment settlement facilities.

In a country, availability and accessibility of financial products and services is considered as the important determinants of the economic well-being of the households. In the present scenario, the concept of financial inclusion exceeds the boundary of the periphery of the earlier concept where a person having the bank account used to be considered as financially included. A well structured financial system of any country is considered in empowering individuals for the protection from economic shocks and thereby contributing towards the economic development of the whole. Further, for the low income and disadvantaged groups of the society, financial inclusion acts as a means of improving their economic condition as well as living standards in the society. A well defined financial system and poverty are correlated where financial inclusion of the poor means the reduction in the poverty and leads towards the inclusive growth. “A well developed financial system helps the poor and disadvantaged groups to bring into the mainstream of the economy and also help them in contributing personal economic development” (Ramji, 2009).

A country like India in which large chunk of people are depending on agriculture or poor need for financial inclusion which can deliver the basic banking services such as

saving, credit, insurance and other financial products at low or affordable cost is considered to be the key for both economic and social reason. The source of financial exclusion basically lies on the lacking of financial inclusion as the considerable portion of the world masses do not have the access of formal financial services across the world and nearly half of the adult population of the world does not have a bank account or does not access to formal financial services such as opening an bank account, credit facility and deposit facility (World Bank, 2013). Financial exclusion includes in four vital areas such as saving, credit, transaction banking and insurance (World Bank, 2005). Hence, merely opening a bank account may not establish the position of financially included. Again, the report of the National Sample Survey Organization's 59th round survey (2003) on the parameters of financial inclusion may not be a true reflective indicator. If financial products and services are denied to the genuine claimants then that is the case of financial exclusion which demands re-engineering of existing set up of financial system from the end of financial institutions, making them tuned with the expectations and capability of the people of the country.

1.2 Financial Inclusion and inclusive growth: Its meaning and definitions

Definitions

According to the definition given by K.C. Chakrabarty, financial inclusion refers to making access of right kind of financial products and services, like bank accounts, payment settlement facility, credit and insurance facility etc. for the under-privileged and low income groups of the society from the end of formal financial institutions.

As per Nupur Acharya, financial inclusion in the real sense needs to be interpreted as to ensuring the availability of financial products and services for each and every individual. The range of products and services, demonstrated here are bank account with the options as per suitability, payment settlement, loan facility, overdraft facility and insurance facility etc.

“Financial Inclusion is no longer a side issue in the global economic debate. It now has a permanent and important place in the global discussion on economic development and stability” – **Alfred Hannig**

“Financial Inclusion ... is not just about opening of saving bank accounts; it includes creation of awareness about financial products and offering of advice on money management and debt counseling” – **CrisilInclusix**

Financial Inclusion is a key path to poverty alleviation. In defining financial inclusion, it is important to see it as a progression and a hierarchy of financial needs which begins with the most basic needs, such as a secure account for holding payment transaction funds and bill payment and moves to more complex ones such as borrowing and insurance.” – **T J Sehadri**

The governments of the developing countries have been found in considering financial inclusion as an instrument for socio-economic development. However, the Indian government requires that all the banks have to dedicate a certain proportion of their lending to ‘priority’ sectors such as agriculture, social sector, and marginal sector for their socio-economic development. Moreover, this makes the financial inclusion process much more effective and also improves the overall efficiency of the financial system.

Inclusive growth is an approach to economic development which is fuelled by market-driven growth and the government acts as facilitator. It not only just responds to immediate macro-economic concerns but also is a long-term strategy, extending across sectors and strata and focuses on productive employment rather than just income redistribution. Ultimately, inclusive growth empowers individuals in making them able to reap the benefits of globalisation and also be able in resisting from future economic shocks. It is therefore critical to poverty reduction approach.

Government of India's approach from the early 1970's towards nationalisation of banks and its activities indicated a new momentum for financial inclusion. The Union Budgets from 2011 to 2014 pointed its initiatives for financial inclusion on a larger scale. Generally speaking, financial inclusion interprets people's inclusiveness to the facilities like bank account, credit account, insurance and remittance facilities etc. at affordable costs.

Financial inclusion has obtained a remarkable momentum in the recent times in India as economic planning has been executed with the concept of inclusiveness. Therefore, financial inclusion interprets the easy accessibility of financial products and services not only to the well-off class, but also to the poor and under-privileged sections of the society at affordable costs. Inclusive growth/development refers to ensuring that all the phases of development (designing, implementation, monitoring and evaluation) include the whole population of the economy (ShakunPalharya, 2009). Development is not simply an aggregate of economic activity but an assessment of the inclusiveness of economic growth with emphasis not only on the equitable distribution of economic gains but also on the security, empowerment, sense of full participation that people may enjoy in social life (World Bank, 2006). Hence, financial inclusion is an

exclusive approach towards the achievement of sustainable economic growth and is indicative of obtaining inclusiveness in a nation.

As per the statement of the Planning Commission (2007) the word “Inclusion” needs to be seen as a procedure where the financial institutions should work as representatives to include the excluded and also they are not only expected to focus into the policies for development through welfare measures, but also should concentrate in the growth process. The Eleventh Plan year plan defined inclusive growth as a “growth process which yields broad-based benefits and ensures equality of opportunity for all”. It stands for “equitable development” or “growth with social justice”.

Banking is a key driver for FI/Inclusive Growth. In Sikkim particularly, commercial banks and co-operative banks are the only leading players in the formal banking arena. Informal financial agencies comprising money lenders and private banks also play a significant role in providing financial services. This study proposes to examine the role played by Sikkim State Cooperative Banks Ltd. (SISCO Bank Ltd.) operating in Sikkim towards the improvement of FI status of its customers. Appropriately, the study is captioned “A Study on the Role of Sikkim State Cooperative Bank Ltd. in Financial Inclusion” in the state of Sikkim.

Inclusive Growth (IG) focuses on economic growth which is a necessary and crucial condition for poverty reduction. IG adopts a long term perspective and is concerned with sustained growth (World Bank, 2009). According to World Bank approaches:

(a) For the achievement of long term sustained growth, the nation should focus on the development of all the sectors in a broad based manner. Therefore, the issues of

structural transformation for economic diversification take a front stage. Some countries may be an exception and continue to specialize as they develop due to their specific conditions (e.g. small states).

(b) It should also be inclusive of the large part of the country's labour force, where inclusiveness refers to the equality of opportunity in terms of access to markets, resources and unbiased regulatory environment for businesses and individuals. IG focuses on both the pace and pattern of growth. How growth is generated is critical for accelerating poverty reduction, and any IG strategies must be tailored to country specific circumstances. IG focuses on productive employment rather than income redistribution. Hence the focus is not only on employment growth but also on productivity growth. IG has not only the firm, but also the individual as the subject of analysis. IG is in line with the absolute definition of pro-poor growth, not the relative one. IG is not defined in terms of specific targets such as employment generation or income distribution. These are potential outcomes, not specific goals. IG is typically fueled by market-driven sources of growth with the government playing a facilitating role.

(c) Inclusive growth is a blend of an outcome and practice. It facilitates everyone to take part in the growth process to enjoy the benefits of the same. Therefore, it can be said that participation and benefit sharing are complimentary to each other.

1.3 Financial exclusion (FE)

FE is identified as the denial of the basic financial services in a section of the population, particularly the poorer, marginalized and socially disadvantaged groups. In spite of the many progressive actions taken by Government of India, the Reserve

Bank of India and financial service providers, there are still considerable efforts to be made across India to ensure access to banking services. Henceforth, financial exclusion has become a key policy concern, because the choices for operating a household budget, or a micro, small and medium enterprises, without formal financial services can be expensive. FE is considered as the significant issue towards the outcome of social exclusion. FE also puts an issue in achieving the efficiency in the economy in the Indian context as because 69 percent of the Indian population is living in the rural areas without the access of basic banking services. Poor financial assistance in the agricultural sector has forced the rural population to move from agriculture to industry and service sector. Therefore, the definition of FE has shown a broader perspective as the failure in accessing basic financial products and services from the end of marginal farmers, landless labourers, and people of unorganized sector, urban poor people, migrant labourers and women masses. Various factors contribute in the outcome of FE, like low level of income, lack of awareness, illiteracy, social exclusion, poor infrastructural facilities, and easy availability of informal credit.

There is no single factor which acts as hindrance towards financial inclusion. There is the lack of institutional credit in the rural areas as compared to urban areas in India. Some of the causes of low expansion of institutional credit in rural areas can be risk perception, high level of transaction cost, the density of population and difficult terrain and much more. Another reason may be the low level of income of the rural masses where money incomes of a larger proportion used for the consumption of various goods and they are unable to save more. Their capacity to take a loan is small as a result bank reluctant to give them a loan at frequent interval. As a result of this, they are unable to take a loan from the formal credit sources and they are forced to

take loan from the informal sources. They sometimes unable to pay loan in time. Inability to pay loan in time due to uncertain monsoon or low price of the products in the market cause rural people to sell their asset. Non-availability of know-your - customer (KYC) requirement (document requirement for opening an account or taking a loan from financial sources) is considered to be the one of the barrier of the financial inclusion or having the bank account specially for the rural people. Access to easy, affordable and safe credit by the poor and lower income group are recognized as the most important condition for reducing income inequality and poverty and give the way for the economic growth of the country. Financial inclusion of a lower section of the people by creating the better opportunity of equal opportunity can enable economically and socially excluded people to take part in the economic development of the country and protect themselves from economic shocks.

1.3.1 Causes of Financial Exclusion

The causes of Financial Exclusion can be broadly identified in two categories, as the demand side and the supply side.

A. Demand Side Barriers

- i. Low income
- ii. Transaction cost
- iii. Financial services being very complex in nature
- iv. Easy access to alternative credit
- v. Low literacy level
- vi. Legal identity
- vii. Sophisticated financial terminologies
- viii. Terms and conditions

ix. Psychological and cultural barriers

x. Disincentives for the consumer

xi. Cost of maintaining an account

B. Supply Side Barriers

i. Perception among banks about rural population

ii. Miniscule margin in handling small transactions

iii. KYC requirements

iv. Unsuitable products

v. Staff attitude

vi. Poor market linkage

vii. Lack of interest from commercial banks

viii. Poor credit record

In India, both demand and supply side factors have an important bearing on the usage of financial or banking services.

1.3.2 Consequences of Financial Exclusion

There are three dimensions of consequences that financial exclusion has on the affected people:

a) Firstly, financial exclusion can generate financial consequences by affecting directly or indirectly the way in which the individuals can raise, allocate, and use their monetary resources.

b) Secondly, a wider dimension of financial exclusion can be identified as socio-economical consequences *i.e.* groups which are socially excluded are also mostly found financially excluded.

c) Finally, a last dimension can be identified as the social consequences generated by Financial Exclusion.

1.4 Progress of Financial Inclusion in India

The RBI and the Government as well are conscious of the need of banking the unbanked since 1955. As such, these two agencies are putting efforts in extending financial inclusion. The measures initiated by the government include nationalization of banks starting from the State Bank of India in 1955 and other banks in 1969 and 1980; having a network of rural cooperatives and regional rural banks; and organizing loan melas of the 1970s and 1980s. The effort of the RBI can be seen in the provisions of priority sector lending initiated from 1970s. In recent years, concerted efforts were made from November 2005, when the scheme of 'no-frills' account was announced but formal thrust came from 2008 after the adoption of recommendations from the Report of the Committee on Financial Inclusion (GOI, 2008).

RBI's cautious policy on financial inclusion had been to ensure a balance between equity and efficiency as well as ensuring financial health of banks and preserving their lending capacities. RBI adopted an approach which was neutral to the use of technology by individual banks. Consequently, according to the RBI in January 2013, banking facility had reached more than two lakh villages with nearly 80 per cent outreach through the business correspondent model and nearly 10 crore savings bank deposit accounts including erstwhile no-frill accounts were opened during 2010 to 2012. In recent years, after the launch of Pradhan Mantri Jan Dhan Yojana (PMJDY) in August 2014, the reach of banking sector has been extended to nearly 95 percent of households. After the launch of Pradhan Mantri Jan Dhan Yojana (PMJDY) in 2014, the sector of banking has tremendously extended to an extent of 95% of households.

A view has been consented unanimously in the recent years that financial system depends largely on financial institutions such as banks. But there is the consensus that bank is not able to cover the lower group of the population into their ambit such as marginal labour, pensioners, women, unorganized sector workers such as artisans, self-employed (Dev,2006). In Indian context, financial development has seen as the main factor of economic growth (Bhattacharya and Sivasubramanian, 2003; Sahoo and Patra, 2006). It is often seen that lack of formal credit lead to the higher dependency in the informal source of credit as a result of this, farmer sell their land and also the emergence of bonded labour (Chakraborty, 2007). Therefore, delivery of banking services at an affordable rate to all section of the society is considered to be urgent for both economic as well as social reason. The Five-Year Plan (GOI, 2006) postulates that access to financial sources especially the formal financial sources allow the poor to make an investment and reduce their vulnerability to shocks. Due to a low level of investment, there is a considerable reduction in the productivity of people and reduces the profitability of the banks and government necessitated reforms in the financial sector in order to increase the investment and increase the income of the people (Kumar et al., 2005). In the Indian financial system, banking is considered as the important component of the FI but this concerns about the various issues like bank are not able to bring the vast section of poor people into an umbrella of the financial services. Under the 11th five-year plan Reserve Bank of India (RBI) has taken various initiatives to enlarge the financial services to the vast mass of disadvantaged and low-income groups. The share of priority sector in total bank credit is 31 percent in the year 2001 and which is 43 percent in the year 1990, which show a decreasing trend and again it was increased to 35 percent in the year 2006. The RBI has used financial inclusion mantra in order to lift poor people from poverty. In the

report of the RBI, it has been highlighting the banks to achieving greater financial inclusion to make available a basic no-frill banking account to those who do not have. K.C Chakraborty, the Chairman of the Indian Bank is the person who introduces the FI in the year 2005. The RBI permitted financial institution such as the commercial bank in the year 2006 to make use of other organisation for the inclusion of people into the usage of the financial system. Reserve Bank of India's vision for 2020 is to open nearly six hundred million new customers' accounts in the different financial institution (RBI, 2006).

The government of India also announced Pradhan Mantri Jan Dhan Yojna (PMJDY) to provide a bank account to nearly 75 million people by January 26, 2015. Various programmes have been initiated by the RBI in order to achieve higher financial inclusion such as No Frill Account, Business Correspondence Model, Relaxation on Know your Customer, Electronic Benefit Transfer, Generalized Credit Card and the opening of banks in unbanked areas in the country. One common measure of financial measure is adult population having a bank account. In India about 59 percent of the adult population is financial included and remaining 41 percent of the population has no access to banking. In rural areas, the coverage is 39 percent against 60 percent in urban areas. North Eastern and eastern region of the country is lagging behind in the access of banking. Access to formal credit by rural population is still low at 14 percent of the adult population. Rural credit in India is only about 9.5 percent which shows very less in number and financial inclusion is most important in this region. According to the government of India estimated in 2008 out of 203 million households in the country 147 million are in the rural areas, 89 million are farmer households; about 51.4 percent of farm households have no access to any source of

credit, even formal or informal. 73 percent have no access to formal sources of credit (Reserve Bank of India, Report on Financial Inclusion, 2013).

1.5 Overview of the Study Area

According to the 2011 census, Sikkim is the least populous state in the country with a population of 611460 and ranked second after Goa in land area with 7096 sqkms. In terms of land area, it is ranked in second after Goa with an area of 7096 sqkms and almost the entire area is mountainous. The distribution of population in the four districts of Sikkim is uneven. North Sikkim has a population density of 10 persons per sqkm with a total area 4226 sqkm occupying the largest area of the state. Similarly, the east district of Sikkim has a population density of 297 persons per sqkm with a total area of 954 sqkm. The world's third highest mountain Khangchendzonga (8586 metres) is located in Sikkim itself. Sikkim is considered to be a rich tourist spot. Sikkim has many mountain peaks, 84 Glaciers, 315 Glacial lakes like Tsomgo, Gurudongmar and Khecheopalri, but in most of the part due to rocky and high slopes makes agriculture, transportation and communication difficult, (Human development report - 2011). Sikkim has also diverse climatic conditions with the existence of rich biodiversity. Sikkim shares its boundary with the countries like China, Nepal and Bhutan which has strategic benefits in terms of trade and commerce and hence rightly moving with the 'Act East Policy'. As per the Human Development Report (2011), the status of GDP and the per capita income of Sikkim is considerably low if compared with the rest of India and this is because of the low level of agriculture production and limited manufacturing and production establishments.

The closest state of Sikkim is Bengal in the west. The economy of Sikkim is based on animal husbandry and agriculture. About 11 percent of land is used for the

agricultural practices in Sikkim. Agriculture of Sikkim is basically of mixed variants which do not suffice to the commercial level. As per the census 2011 workforce participation rate in economic activities is around 50.3 percent with 53.3 percent in rural areas and 41.9 percent in urban areas. As per the census of 2011, the population growth of Sikkim is 12.9 percent out of which the total male population is 321661 and female population is 286027. The sex ratio of Sikkim is 889 females per thousand males. The literacy rate of Sikkim stands at 82.3 percent in which male has 87.3 percent and female 76.4 percent (2011 census).

Sikkim was originally populated by three tribes namely Chang, Naong and Mon and in the later part Lepcha people started inhabiting the land. The origin of Lepcha people is undetermined but it is believed that they came from the Brahmaputra valley, though another section believes that they came from Tibet and Burma. The Namgyal dynasty ruled the state of Sikkim for a long period. Sikkim was a princely state under the Namgyal dynasty at the time of India's independence of 1947. In the year 1970 political situation of the Sikkim changed and as a result Sikkim was merged with India in the year 1975. The first elected chief minister of Sikkim was Kazi Lendub.

1.5.1 The Economy

The economic progress recognizes the rural orientation in the economy of the State of Sikkim and its high agricultural dependence along with creating new opportunities outside agriculture. Since its merger with the Union of India, Sikkim has achieved commendable progress in all areas. The progress and status of economic development of any state is reflected through Gross Domestic Product (GDP) and Per Capita Income of the State. Sikkim's Net State Domestic Product (NSDP) for the year 2012-13 showed the highest figure at around Rs 1, 42,600 which was almost twice the all

India average of Rs 68760. From the year 2004-05 to 2011-12, the per capita income of the state is recorded almost more than double which is Rs. 26690 and Rs. 70477 respectively.

The growth performance and structural changes in the State Domestic Product in the last three decades reveal the development process and relative contribution of different sectors (Agriculture & allied activities, power, industries, tourism and others) which are the driving force in the economy of the State. Though Sikkim is considered as the landlocked state, now the scenario has changed and lots of developments have taken place in Sikkim. It is notable that Sikkim has become the pharmaceutical hub and subsequently employment opportunities of the local people have increased.

The State's economy grew at a compound annual rate of 6.52% during 1993 – 1994 to 2003 – 2004, down from 10.53% achieved during 1980 – 81 to 1991 – 92. The compound annual growth rate from 2004 – 05 to 2011 – 12 stands at 16.77%. The primary sector has shown impressive growth in the year 1980s, after which it was stagnant. The secondary sector grew at a compound rate of 8.86% during 1993 – 94 to 2003 – 04, an improvement from 6.74% growth during 1980 – 81 to 1991 – 92. The rise in the growth is mainly contributed by construction, electricity, gas and water supply. But the manufacturing, which is supposed to be the backbone of this sector, has registered only 0.85% compound annual rate of growth during 1993 – 94 to 2003 – 04. During 2004 -05 to 2011 – 12, manufacturing & electricity, gas & water supply showed sharp growth of 53.19% and 37.49% respectively, since investment climate has become relatively favourable, especially in the pharmaceutical sector and power generation.

The tertiary sector grew at an impressive rate of around 14% during 1980s and has sustained its growth rate. The good performance of this sector was mainly guided by the growth of public administration, transport, storage and communication, banking & insurance and tourism.

1.5.2 Evolutionary phases of Banking in Sikkim

With the emergence of Sikkim as the twenty-second state of the Indian Union on 26th April, 1975, the question of having satisfactory institutional arrangement in the State to catering the various banking needs assumed importance. In 1975, State Bank of Sikkim had two branches and one branch of State Bank of India (Gangtok branch established on 26.2.1966) was functioning in the state. However, the State Bank of Sikkim which is a pioneering bank in Sikkim does not come under the jurisdiction of the RBI and does not have many of the national and international banking functions including foreign exchange facilities.

The study team on institutional arrangements for agricultural credit in Sikkim proposed to have an Agricultural and Industrial development cum commercial bank in Sikkim. It has also recommended to have the cooperative form of organisation for financing needs of the agricultural sector at the base level. As a result, the State Bank of India was the first commercial bank to have a branch in Sikkim on 26.02.1966. Further, it assumed lead responsibility for Sikkim from June, 1985 and the state's first ever credit plan was launched in 1986.

Now, large number of banks is operating in Sikkim. The lead bank of Sikkim is State Bank of India with 32 branches, located in all over Sikkim. The State Level Bankers Committee (SLBC) is a forum which manages and executes the banking activities in

Sikkim. SLBC, Sikkim comprises of the members of the RBI, Commercial Banks, State Co-operative Banks, NABARD, and the central as well as state representatives. SLBC is responsible for checking the District Credit Plans and also in the preparation and implementation of State Level Credit Plan. As per the report of SLBC (2010), it has been found that most of the people depend on the informal sources for their credit requirements at the village level, which signifies the inability of the formal financial institutions to bring people into the platform of financial Inclusion.

1.5.3 Financial Literacy

There is no such type of data available in the secondary level but the present study tries to establish the financial literacy activities through the primary survey conducted in different areas. It has been seen that there was a lack financial knowledge among the surveyed households but presently the Government as well as the financial institutions is engaged in providing financial awareness to the people by opening different institutes in different places of Sikkim. Financial literacy among the poor is very low and they are not able to use financial products and services on regular basis.

The State Level Bankers' Committee, working in Sikkim from 1985, is a platform for the organisation and execution of different programmes through financial literacy campaign in the different parts of Sikkim. The State Level Bankers' Committee in Sikkim comprises the members from all the commercial banks, cooperative banks, and RBI, NABARD and state government officials with other invitee members also.

1.5.4 Infrastructure Facilities

Infrastructure facilities, such as electricity, roads, education, are very much essential ingredients towards the achievement of all round advancement in terms of both

socially and economically in a particular area. Sikkim, being a hilly state, stands at a crucial position as reflected in the Economic Survey (2006-2007) as “Limited market access, underdeveloped communication system, restrictions on free movement of people, goods and services and most importantly the recurrent natural calamities have all very adversely affected the development process”.

The local government has initiated different progressive steps through infrastructural development programmes towards the achievement of all round improvement of the people of Sikkim. ‘Bharat Nirman’ is a kind of such key initiative taken in the state of Sikkim for the overall development for rural infrastructure. The other initiatives have also been undertaken for the enlargement of connectivity among the people of Sikkim, through PMGSY scheme, extension of mobile network and internet connectivity to each and every part of the state.

In order to boost the entrepreneurships in the villages of Sikkim, the State Government has initiated various programmes to provide opportunities to the people. Basic importance has been given to rural enterprises in order to reduce the income disparities among the people. These incentives have been in addition to the already existing Central Government incentives. Industries like cottage, handlooms and handicrafts and khadi industries have been encouraged to increase the production of local or traditional goods.

1.5.5 Education Facilities

It was the British administration which introduced the modern system of education with the establishment of English schools in different parts of Sikkim. During the period of British administration three types of school were established apart from

Lamaistic education imparted in the monasteries. There were Government schools, Missionary schools and the village schools maintained by the thikadars of the village. When Sikkim became the 22nd State of India, education in the State was still in a nascent stage. However, after joining the mainstream, Sikkim witnessed a rapid and phenomenal expansion in education. In 1975, the number of Government schools rose to 211 while the number of privately managed schools remained at 56. In the later part of the 20th century, Sikkim witnessed a steady rise in the number of schools, colleges and other institutes in the form of consolidation of modern education in the State. At present, one Central University, four private Universities and one State University are supporting the higher educational needs of the State.

Literacy is one of the most important demographic characteristics that are normally used to describe the educational attainment in any society. With the increase in educational facilities, the literacy rate in Sikkim has substantially improved. The literacy rate in Sikkim was 68.81% during 2001 which has increased to 82.2% in the year 2011 (Census of India, 2011). Hence, with the objective of carrying out the State's commitment of improving the educational system, the State government laid emphasis on the quality of education and establishes nationally acceptable standards and practices in order to ensure the uniform progress and development of education in the state of Sikkim.

1.6 Progress of Financial Inclusion in Sikkim

Sikkim has good banking network spread all over the four districts of the State. As on 30 June 2014, there were 27 banks (22 Public Sector Banks and 6 Private Sector Banks) having 95 and 18 branches respectively. Sikkim has two cooperative banks, one of which is SISCO Bank Ltd. having 14 branches spreading over different

districts of Sikkim. Lead bank of Sikkim is State Bank of India; it has 32 branches all over the state. There are 74, 28, 15, and 10 different banks in East, South, and North and West district respectively. The share of public sector banks was recorded as 86.4 percent whereas private sector bank is 9.13 percent (SLBC Report, 2014). Although the share of the cooperative has only 4.40 percent which is much lower than the public sector banks. The share of Public Sector Banks and Private Sector Banks in advances portfolio was 80.54 percent and 17.11 percent respectively in the year 2012-13, whereas the share of a cooperative bank has been only 2.35 percent (SLBC Report, 2014). The CD Ratio extended by the banks operating in the state for the current year, was poor and stood at 40.10 percent while CD Ratio of both the Public Sector banks and State Cooperative bank stood at 30.40 percent and 39.70 percent respectively, the CD Ratio of private sector banks was encouraging and stood at 131.67 percent (SLBC, Report, 2013). After taking into account the outside credit, the CD Ratio as on 31, March 2013 stood at 74.60% against 64.60% as on 31.3.2012. The CD ratio of commercial banks stood at 76.20% as on 31.3.2013 as against 64.57% as on 31.3.2012. (SLBC, Report, 2013.)

Among all the mountain states in the north-east, Sikkim stands at its best position in terms of financial inclusion where all the blocks of Sikkim come under banking establishments. Banking facilities through branch penetration and business correspondent model have reached in 43 villages with the population 2000 and more in Sikkim. In the year 2010, the Government of Sikkim introduced 'Universal Financial Inclusion Scheme' to foster the financial inclusion status in the state of Sikkim and as a result most of the gram panchayat units in Sikkim have been facilitated with the transactions of MGNREGA payments through bank.

1.7 Profile of SISCO Bank Ltd.

Sikkim State Cooperative Bank Ltd. (SISCO) was registered on 07 October, 1996 under the Sikkim State Cooperative Societies Act, 1978. The license for the formation of the Bank was issued under Section 22 of the Banking Regulation Act, 1949 by the Reserve Bank of India on 19 August 1997. The bank was inaugurated on 12 December 1998 at Gangtok. The objectives of SISCO are to serve as a ‘State Cooperative Bank’ for the state of Sikkim as well as to function as a development Bank providing finance for all kinds of economic activities – short term, medium term, long term including development of agriculture and allied activities, industries trade and commerce in Sikkim to cooperative societies, self-help groups, joint liability groups, individuals etc. SISCO Bank is perhaps the first bank of the state with RBI license. As a state level credit cooperative federation, its members include Primary level cooperatives, individuals and the State Government. The headquarter of the Bank is located at Metro Point, Tadong, Gangtok. It presently has a network of 14 branches and ATMs spread across the State in sync with the tag line of ‘SISCO Bank – Hamro Bank’. The Bank is focused on rendering the best banking services to rural and financially excluded population, in addition to providing a host of modern technology driven products and services, competitively at par with other private and nationalised Banks. Strengthen the affiliates, achieve sustained growth and attain prime position in the banking industry are considered the main aims of SISCO Bank.

1.8 Significance of the study

For a developing economy like India in general and Sikkim in particular, the study of financial inclusion (FI) has got a greater importance as it can support formal financial sector to enter into the larger segment of the society. Again, access to

organized financial system implies availability of standardized financial products from regulated institutions. The absence of financial inclusion results financial exclusion (FE) which is more harmful as the issue of cost of FE may be reflected into the loss of opportunities for individuals and institutions. Again, from the macro perspectives, the nation may not achieve its growth potential due to the aggregate loss of welfare of the masses. FE may create loss to individuals in the form of high cost for money transfer, expensive credit and the reduction in the formal saving avenues and so they may be led into the nasty trap of dearth and expensive credit from informal agencies like money lenders, which may result in big financial crisis and unmanaged liability.

Cooperative banks play a very vital role in the way of serving the underprivileged and unorganized segments of the population, especially those who are cornered by the commercial banks in the areas of basic financial services. In comparison to commercial banks, the structure and the organisation of the cooperative banks are more convenient for services for the underprivileged people. Given this background, it seems momentous and constructive to study the role of SISCO Bank, in promoting FI in Sikkim and to identify the problems being faced by these institutions in achieving wider FI and the factors which keep the financially excluded away as well.

Most of the studies on FI are based on secondary data, which give only a macro picture. It does not bring to limelight the various aspects of FI, such as the nature of Awareness, Availability, Access, Affordability and Appropriateness of financial products and services at micro level, for a proper assessment and understanding of FI/FE among the people. Such insights can only be gained from a primary survey, incorporating state specificities. This the study is an attempt to fill this gap.

1.9 Scope of the Study

The study is meant for observing and describing the factors explaining the Financial Inclusion/Financial Exclusion status among the people of Sikkim and also the role played by SISCO Bank, operating in Sikkim from both the demand side as well as the supply side. As because it is difficult to identify and cover all the customers of the SISCO Bank in a single study, the study is limited to those areas where SISCO Bank branches are available. The study is very important for the SISCO Bank as it may make them understand the status of FI in Sikkim and also guide the management of the banks to frame suitable policies and programmes to accelerate the pace of FI.

1.10 Objectives of the study

The general objective of the study is to examine and analyse the role of Sikkim State Cooperative Bank Ltd. (SISCO) in achieving the goal of financial inclusion in the State of Sikkim.

The specific objectives of the study are:

- (i) To present an overview of financial inclusion and cooperative banks.
- (ii) To assess the performance of SISCO Bank Ltd. towards financial inclusion in Sikkim.
- (iii) To find the role of demography on financial inclusion carried out by SISCO Bank Ltd.in Sikkim.
- (iv) To analyse the role of SISCO Bank Ltd.in promoting financial inclusion in Sikkim.
- (v) To make the appropriate suggestions based on the findings.

1.11 Hypotheses of the study

Based on the above background, the following hypotheses have been formulated.

- i) H₀₁: There is no correlation between financial availability and financial awareness.
- ii) H₀₂: There is no significant variation in the mean scores of set of variables describing financial service exclusion among the districts under study.
- iii) H₀₃: There is no significant difference in the satisfaction level of the beneficiaries of SISCO Bank on the usage of bank products.
- iii) H₀₄: There is no difference among the preferences of bank managers associated with the reasons for account refusal.

1.12 Research Methodology

“The thesis follows the mixed research design of descriptive and analytical research, wherein the ‘descriptive research’ with the available literature as well as ‘analytical research’ with the feedback collected from the respondents”. (Clare Louis Chambers, 2004). This chapter gives details about the research design adopted and outlines the methodologies used to accomplish the research objectives. The methodology portion covers research design, data collection, instruments used for data collection, sampling design, method of analysis, tools of analysis.

1.12.1 Research Plan

The study has been planned towards the accomplishment of the research objectives in two stages:

a) The first stage involves extensive literature review of already published research papers and thesis, exhaustive personal interviews, household level survey for the development of conceptual framework of research work.

b) The second stage involves the identification of the measurement tools used to measure the variables under study, analysis of data obtained from different sources, achievement of the objectives of the research and finally reporting the outcome of the study.

On the basis of the research objectives and the research gaps identified, this study has been aptly titled as “**Role of Sikkim State Cooperative Bank Ltd. in Financial Inclusion**”

1.12.2 Data Sources

1.12.2.1 For Descriptive Research

In the first phase, the available past studies were reviewed to appreciate the present status of the concept under study. The various sources to this thesis include, Articles - International and National, Working Papers, Theses - International and National, RBI Reports, Speeches of RBI personnel and statistical information from RBI, NABARD (National Bank for Agriculture and Rural Development), NAFSCOB (National Federation of State Co - operative Banks Ltd), Planning Commission of India, State Planning Board - Govt: of Sikkim and SLBC (State Level Bankers Committee). Sources include various libraries in and out of the state of Sikkim. The scope of World Wide Web for collecting information has been exploited well.

1.12.2.2 For Analytical Research

In the second phase, survey data from the respondents has been used since it aims to capture the views of the people who are using FI services as well as the impacts of improved FI on the prospects and quality of life of beneficiaries of financial services. For the purpose of collecting field level survey data, a questionnaire – survey was conducted among the beneficiaries of SISCO Bank Ltd., functioning in Sikkim. To enhance the validity of the research, as well as to add a quantitative element to the research, questionnaire has been distributed among the beneficiaries of the bank.

1.12.3 Research Instrument

The respondents who display financial inclusion/financial exclusion features have been surveyed with the help of questionnaire method. The feedback from the respondents has been obtained from survey questionnaire which contains personal opinion based statements and appropriately framed likert scales. The demographic, cultural and socio-economic aspects have also featured in the questionnaire.

1.12.4 The Population

Since the present study has been intended to be carried out from the data collected from the field level survey, so the population of the study consists of the account holders of SISCO Bank Ltd. operating in four districts of the Sikkim with 14 branches.

1.12.5 Pilot Study

A pilot study has been done for the 100 account holders of SISCO Bank in Sikkim, using preliminary questionnaire based survey feedback. The collected data have been

studied with the variance identification so that changes could be made in the preliminary questionnaire. Reliability analysis is usually done on the responses obtained from the respondents on the basis of a number of statements recorded on 5 point likert - scale. Here, in this study, classical Cronbach's Alpha test for reliability has been applied. This approach has resulted in the deletion, modification and inclusion of items/statements and the final set of questionnaire are derived. The Alpha value for each variable has been obtained against the number of statements under study and shown below:

Table1.1. Cronbach Alpha for the Variables Selected under Study

Sl. No. of Variable	Cronbach's Alpha
1 Financial Access	.820
2 Financial Awareness	.850
3 Financial Necessity	.875
4 Financial Products availability	.840
5 Financial information	.837
6 Attitude of people	.835

1.12.6 Sample Size

Here, it may be said that the sample size is considered as to the proportional of the level of variation and the assumed level of the error of the estimate of the population parameter of the study variable. The following formula has been used in estimating the sample size: $n = (1.96s/d)^2$, assuming 5% level of error in the estimates of mean, where 'n' is the sample size, 's' is the estimate of standard deviation, 'd' is the standard error of population parameter estimation and the value 1.96 is the critical value at 5% level of significance (Uma Sekaran, 2009). In this study, 279 have been found the sample size obtained from responses for all the statements.

1.12.7 Method of Sampling

Samples have been derived with the help of multi stage random sampling method where the state of Sikkim has been divided into four districts in the first phase as east, west, north and south districts. In the second phase, two SISCO Bank branches from each district have been identified as shown below. Lastly, the sample size of 279 account holders (beneficiaries) has been allocated to these branches.

Table 1.2 Allocation of sample size in the district wise selected branches

District	Branches	No of account holders	Sample size
East	Gangtok		96
	Pakyong		32
West	Geyzing		16
	Jorethang		47
North	Mangan		21
South	Namchi		50
	Ravangla		17
Total			279

1.12.8 Tools Used for Analysis

After collection of raw primary data, the next step followed towards the edition of the collected data. Designing the database is an important step in terms of defining the data fields & data type. The database for this survey has been developed in MS-Excel. Suitable data checks and validation techniques have been used while getting input (raw data) into the database. For the statistical analysis purpose, the database is

converted into SPSS (Statistical Package for Social Sciences) format. Proper definition of variables, data type descriptions, value label descriptions are performed on the SPSS databases. Bi-variate and multivariate analysis have been applied in establishing the relationship among the variables under study. The tools used for the analysis of the primary data are cross – tabulation, descriptive statistics etc. The other tools used for data analysis and interpretation have been outlined below.

a) Chi- Square Test of Independence

Chi- square test is applied to test whether there is a significant association between two categorical variables, with classical test for independence.

b) Factor Analysis

Factor Analysis (FA) and Principal Component Analysis (PCA) are techniques used when the researcher is interested in identifying a smaller number of factors underlying a large number of observed variables. Variables that have a high correlation between them and are largely independent of other subsets of variables are combined into factors. Both FA and PCA are data reduction techniques.

c) Correlation

Correlation is a measure of relationship between two variables. The bi -variate correlation gives a mathematical value for the strength of the linear relationship between two variables without giving any consideration to the interference, some other variable might cause to the relationship between the two variables being tested.

d) SEM – AMOS

AMOS is statistical software and it stands for analysis of a moment structures. AMOS is an added SPSS module and is specially used for Structural Equation Modeling, path analysis and confirmatory factor analysis. It is also known as analysis of covariance or causal modeling software.

e) ANOVA

ANOVA (Analysis of Variance) is a kind of statistical tool which is used to compare the means for multiple independent variables. It shows the interaction effects of independent variables on one or more dependent variables

f) CAMEL Model

In a present study an attempt has been made to evaluate the performance of Sikkim State Co-operative Bank Ltd (SISCO) in Sikkim using CAMEL model for a five-year period from 2011 – 2015. CAMEL model is basically an approach widely used to measure the performance of banking unit from all the important parameters like Capital Adequacy, Assets Quality, Management Efficiency, Earning Efficiency and Liquidity. The study is based on secondary data drawn from the annual reports of SISCO Bank Ltd. For the purpose of evaluation, the data are analyzed by calculating ratios related to CAMEL Model. Basic statistical tools like average, standard deviation and coefficient of variation are used in drawing conclusion about the performance of SISCO.

1.13 Limitations of the study

The present research work also has few limitations:

- (i) Lack of cooperation from the side of the bank staffs was one of the major limitations of this study. It has become a very difficult task in the process of collecting feedback from bank managers and other staffs.
- (ii) The study has found it difficult in convincing the bank personnel about the importance as well knowledge of financial inclusion.
- (iii) Coverage of all segments of customers was not possible at the time of survey.
- (iv) The study has been based on accountholders of SISCO Bank Ltd only.

1.14 Chapterization

The whole thesis has been described in six chapters:

Chapter I. Introduction

This chapter deals with the introduction of the thesis which incorporates the background of the study, financial inclusion and inclusive growth, financial exclusion, extent of financial inclusion worldwide, financial inclusion in India, financial inclusion in Sikkim. This chapter also discusses about the overview of the study area, significance of the study, scope of the study, research methodology and chapter scheme.

Chapter 2. Review of Literature

This chapter presents literature review which has already been studied in the past with the objectives to understand the concepts in the similar area. This chapter helps in identifying the research gaps, leading towards the formulation of research objectives.

Chapter 3. Financial Inclusion and Cooperative Banks –Theoretical Overview

This chapter tries to highlight the different aspects of financial inclusion along with the initiatives taken thereon. It also outlines the role played by the cooperative banks towards the achievements of financial inclusion.

Chapter 4. Performance of SISCO Bank Ltd. using CAMEL Model

This chapter analyses the performance of SISCO Bank Ltd. by using CAMEL Model in terms of capital adequacy, asset quality, management efficiency, earning capacity and liquidity status.

Chapter 5. Data Analysis and Interpretation

This chapter analyses the collected data in accordance with the defined research objectives and research methodologies.

Chapter 6. Summary of Findings, conclusions and Recommendation

This chapter provides the summary of the important findings, obtained from the data analysis of the study. It also tries to suggest recommendations and the scope for future research on the area under study.

CHAPTER 2

REVIEW OF LITERATURE

2.1 Introduction

The Literature review for the present research discusses about the different perspectives of Financial Inclusion (FI). Along with various dimensions the present chapter tries to explore the research gaps that are likely to be existed in the available literature. It is also expected that the review of previous studies helps the researcher to carry out the further research in a better way and contribute to the new insights in the field of FI.

Research articles, books, committee reports, working papers, theses and dissertations on various aspects of financial inclusion make the framework of the literary sources of this thesis. International studies have also been accessed from websites and reviewed with a purpose to understand the status of the subject area in the developed and developing countries. The institutions and places, visited to collect information include Head office, SISCO Bank Ltd., NABARD, Sikkim chapter, Sikkim University library, Reserve Bank of India, Sikkim chapter, SLBC, Gangtok, Sikkim.

The available literature has been classified into the following nine areas, viz.

- a. Studies based on Finance, Economy and Inclusive Growth
- b. Studies based on Financial Inclusion
- c. Studies based on Financial Exclusion
- d. Studies based on the Role and Performance of Banks in Financial Inclusion

- e. Studies based on the Determinants of Financial Inclusion
- f. Studies based on Measurement of Financial Inclusion
- g. Studies based on Financial Inclusion and Informal Finance
- h. Studies based on Financial Inclusion through Micro Finance
- i. Studies based on CAMEL Model

2.2 Studies based on Finance, Economy and Inclusive Growth

Inclusive economic growth leads to sustainable development for any economy and India is not an exception to it. Facilitating access of benefits by the rural population of India is the key to sustainable growth of the Indian economy. The importance of utilising physical and human capital for overall development of the country has been understood by the respective governments of the country resulting in the concept inclusive growth has become the guiding principle of public policy on the part of the Government. For the first time in India, the term ‘Inclusive Growth’ has been used in the very title of the Approach paper of XIth Five Year Plan. The XIthPlan (2007-2012) is aimed at achieving a new vision of growth ‘Towards Faster and More Inclusive Growth.’

Sufficient amount of data in the literature has proved a strong link between a well-structured financial system and inclusive growth. From the time of the classical thinkers like Adam Smith, Joseph Schumpeter etc., it has been found that a robust financial system can play a greater role in the development of the economy.

Levine Ross (1997) in his work titled “Financial Development and Economic Growth: Views and Agendas” identified that well structured banking networks and dynamic stock markets have a role in fostering the economy of a country at a faster

rate. The study has observed that industries excel faster in the countries with well-structured banking sector and security markets than in the countries with poorly structured and under-developed financial systems.

Moreno, L. A. (2007) found that active association of the general population with the financial process can contribute in the achievement of their financial security and thus help them in establishing a sense of ownership.

Beck et al. (2008) in his article “Finance, Firm Size and Growth” outlined that “Financial Exclusion” works as a barrier towards the achievement of economic development of the country and thus pointing at the urgency of building inclusiveness in the financial systems. The study also found that not only banking sector but also insurance companies can play a bigger role in achieving inclusiveness for the disadvantaged groups of the population.

Luce Edward (2008) outlined that the growth trend of job opportunities for the unskilled and semi-skilled labourers in India are extremely poor in spite of the existence of huge labour force and the reason is due to the deficiency in the labour intensive growth pattern. The study also shows that the poor and underprivileged sections of the society are not in a position to reap the benefits of the economic growth in the same manner as that of rapidly growing economics like China and Vietnam. Here, the study outlines the unusual development path is a serious problem of India.

Rangarajan, C. (2009) said in his work “India: Perspectives on Equitable Development” a country must move with the support of two important legs like ‘economic growth & social development’. He also remarked that ‘FI is no longer an option but a compulsion’ and hence FI needs to be considered as an integral part of

Inclusive Growth which aims at bringing the weaker and underprivileged sections of the society under its purview.

Chakraborty, K.C. (2009) remarked that financial inclusion depends on the level of inclusive growth and hence, it does not denote enabling people to get credit from locally available money lenders but get them included in the mainstream financial system on a fair, transparent and cost effective manner.

Sameer Kochar (2009) in his book ‘Speeding Financial Inclusion’ outlined that FI offers incremental and complementary solutions to tackle poverty in promoting inclusive development and also in addressing the Millennium Development Goals (MDGs). He also opined that only financial growth can leave many people in persistent poverty if they are not actively associated in taking part in the process.

Asha Jalan (2009) in her work on “Microfinance: Does It Affect Rural Poverty Reduction? - The case of two villages in Southern India” remarks that the aim of Inclusive Growth is to incorporate the country’s underprivileged and disadvantaged groups of the society in the growth process and thus integrates the informal sector with the formal sectors. The works also added that microfinance initiative ‘Self Help Group - Bank Linkage Program (SBLP)’ can play an important role in achieving Inclusive Growth’ and hence initiatives of micro-finance need to be given more importance in facilitating the outcomes for both FI and poverty reduction.

Mandira Sarma (2010) highlights the advantages of the existence of the inclusive financial system which can make possible efforts in the effective distribution of fruitful resources and thus can reduce the level of cost of capital. The study also highlights that accessibility of right kind of financial products and services can

significantly improve the management of finance. She also highlights that an inclusiveness in the financial system supports in lessening the growth of informal sectors which are often oppressive in nature. An inclusive and well-structured financial system improves the level of efficiency as well the welfare of the vast section of people of the society by way of creating the possibilities for secure and safe saving practices.

Nageswara Rao (2010) found that the economic system should aim at ensuring the growth with distributive justice in line with the democratic principles with the maximum benefits for the majority of the population. The study also outlines that the development pattern cannot be seen as the final outcome until it turns into the mechanism of income generation and enablement of the whole section of population. Therefore, the process of growth should be inclusive in nature and should not be confined to a few pockets of area and people which makes it exclusive.

Saroj Upadhyay (2010) remarks that for the economic growth and human resource development, accessibility of financial products and services proves to be an important tool. In place of welfare measures, the target should be to act as development agents to include the excluded towards the achievement of Financial Inclusion. Understanding the needs, productivity and vulnerability of the poor section of the society, the process of FI should start. The poor and underprivileged section of the society should have the power in accessing the wide range of financial services like savings, payments, remittances and insurance for the participation in the ongoing economic growth.

Anuradha, P.S. and Ganesan, G. (2010) identify that microfinance can be used as one of the strategies in achieving sustainable development as well as in fostering

inclusive growth in the Indian economy. The study also suggests that the crucial goals of inclusiveness should achieve in the form of sustainable and equitable growth, social inclusion, empowerment and security of the major section of the society.

Chandan Kumar and Srijith Misra (2011) highlight the existence of two-way association between the development of financial system and the growth of the real sector. The study also suggests that real growth can be achieved through the advanced financial system whereas the focus of the growing economy should be towards the advancement of financial sector. Here, the banking institutions can play a major role in facilitating the development of robust financial system.

Kaul, R.C. (2011) in his study “Financial Inclusion – A business opportunity for banks” outlines that from the past few years the Indian economy has shown a very good pace on different dimensions and hence it moves towards the start of new phase of higher growth. The study also highlights that the growth process could not match with the growth in manufacturing sector in terms of employment and so creates a kind of doubts about the nature of inclusiveness of the growth process.

2.3 Studies based on the concept of Financial Inclusion (FI)

Understanding FI in a proper way is a must for the development of conceptual framework and also for the identification of different parameters affecting financial inclusion. The past studies on this area outline the different views on the definitions and concepts of financial inclusion throughout the globe with the consideration of the status of social and economic development.

Regan, S., & Paxton, W. (2003) in the study “Beyond bank accounts: Full financial inclusion” said that mere accessibility of financial products does not reflect the actual

position of financial inclusion. Rather the skills and the level of confidence in the process of taking judicious financial decision needs to be considered the basis of financial inclusion.

Leyson and Thrift (1995) said that financial exclusion is the result of preventing some sections of the society from accessing financial products and services and also suggest that low level of income and education may result financial exclusion in the economy.

Sinclair (2001) in the study “Financial exclusion: An introductory survey” opined that the involvement of cost and the problem of accessibility may result the inability of people in availing the benefits of financial services.

Leeladhar (2005) in the study “Contemporary and future issues in Indian banking” reveals that financial inclusion and financial exclusion are prevailing in the society at different stages. A section of the population are getting benefits of broad range of financial products and services who can be considered as ‘Super included’ whereas another section of the population are denied access to even the basic financial products and services can be considered as ‘financially excluded’. A section of population with restricted access in financial products and services in the form of basic banking services with deposits and withdrawal facilities is grouped as ‘Under Included’.

Basu Priya (2006) in his study “Improving access to finance for India’s rural poor” locates the multiple obstructions being faced by the rural households while attempting borrowing facility from the banks. The study also highlights that banks demand security during borrowing which the poor people are unable to make available of that

collateral support. At the same time, it is found that bank transactions tend to be time consuming and expensive which ultimately leads towards the existence of informal sources of credit.

Shetty (2006) in his study suggests that the achievement of financial inclusion is possible with the collective efforts of three pillars, viz: access to financial services, affordability of financial services and actual utilisation of financial services. The study also opined that financial inclusion can be achieved with the positive results of these three pillars and hence, the ABC of financial inclusion is Advice, Banking and Credit.

Bluebook (2006) in his study said that the achievement of financial inclusion should be tried by way of ensuring a wide range of right kind of financial products and services to every individual and also enabling them in accessing those products and services.

Usha Thorat (2006) in the study “Financial inclusion and millennium development goals” shows that connecting the customers by way of facilitating the opening up of savings account can help them in accessing the variety of saving products, loan products which can ultimately help them for financial transactions as well for remittance purposes also.

The study also reveals that the same bank account can also be used by the State Governments to provide social security services like health insurance, calamity insurance and other government payments under various schemes for the disadvantaged section of the society. Hence, banking account can be used by the beneficiaries for multiple purposes.

Bermanke (2006) in the speech on “Financial literacy: Testimony before the committee on Banking, Housing and Urban Affairs of the United States Senate” highlights the various dimensions of financial inclusion for its proper understanding of its meaning. He also suggests that improved financial services can be given to the customers with the proper understanding of their requirements.

Devendraprasad Pandey (2007) in his study “Era of Social Entrepreneurship: In pursuit of Excellence” reveals that the concept of financial inclusion has come to the picture as a result of financial sector reforms of 1990s. He also remarks that before the implementation of the reform process, rural credit structure was neglected which led to the outcome of financial exclusion of the vast majority of rural artisans, farming population and micro-enterprises.

Anderloni et al. (2007) in the study “Access to bank accounts and payment services” views that merely having bank account is not the sufficient condition towards the improvement of the actual financial inclusion. The study also opines that if the account is not accessible due to overdrawn condition or the account is being used only for the purpose of receipt of money which may result the situation of ‘exclusion within inclusion’.

World Bank (2008) reports that in the absence of inclusive formal financial system, poor individuals and small entrepreneurs have to rely on informal sources to invest in better opportunities because of its timely availability and easy accessibility but at a much greater interest burden. FI can help in removing this impediment. Achieving FI in a country like India, with large and diversified population with significant segments in rural and unorganized sectors requires a high level of penetration by the formal financial system.

Vijay Kelkar (2008) proclaims that Financial Inclusion (FI) needs to be observed as a business policy for development. The indebtedness of the farmers and their risk management are better handled with the help of financial inclusion. He also suggests that the improvement of FI is possible with the greater access to educational loans to all the sections of society which can help in establishing the status for India as a nation with equal opportunities. This is perceived as a pre-requisite condition of inclusive growth and the improvement in the level of financial inclusion will foster entrepreneurship and involvement at the underprivileged level.

Suryanarayana, M.H. (2008) in his study “What is Exclusive about Inclusive Growth” observes with sufficient evidence that in spite of the substantial growth process between 1993-94 and 2004- 05, inclusiveness could not be achieved. From the national level figure about FI, the inclusion coefficient is found higher in the rural sector than the urban. With the study of the association between median consumption and inclusion coefficient across the states, he remarks that there is no reason to believe that the growth process has been inclusive.

Mandira Sarma (2008) in her working paper “Index of Financial Inclusion” reveals that the widely held view that NPAs are a result of providing credit to the low income groups, sometimes, in compliance with the directed lending programs such as ‘priority sector lending’ is not true. If lending to the poor and consequent default on their part is in fact the cause for ‘NPA’, then higher levels of ‘NPA’ should be associated with higher levels of Financial Inclusion. The results of the study show the opposite, indicating a higher level of ‘NPA’ associated with lower level of FI. It clearly shows that, the efforts to include more people into the financial system are not the significant cause for the ‘NPA’. Further, highly capitalised banking system, with a

high 'CAR,' seems to be less inclusive. This is due to the fact that, a banking system having high 'CAR' tend to be more cautious in lending, negatively affecting FI.

Thyagarajan and Venkatesan (2008) in a study "Cost – Benefit and Usage Behaviour Analysis of No Frills Account: A Study Report on Cuddalore District" identifies that few districts having at least more than 85 percent of the no - frills accounts are dormant, primarily due to the reasons of the distance from bank branches, low financial literacy and poor marketing by banks.

Mas Ignacio and Kabir Kumar (2008) outlines in the study "Banking on mobiles: why, how for whom?" that the banks without branches has come out with the creative approach in accelerating FI. A branchless banking channel using mobile phones could be far more preferable to the people than the available options like to travel a long distance and staying at queue for availing the banking services.

Drabu, H.A. (2009) remarks in his study that policymakers in India have been identifying the issue of financial inclusion in terms of growth with redistribution or redistribution with growth. He also finds that the study of FI has been addressed in line with priority sector lending or microfinance approach in the same manner since the mid 1970s.

Bhave, C.B. (2009) finds in the study "Is technology inclusive" that FI is not only identifying financial products and services for the people, rather FI should be considered about giving people a choice and power to decide the kind of financial products and services they actually need.

Minakshi Ramji (2009) in the working paper "Financial inclusion in Gulbarga: Finding usage in access" outlines that the banks of the developing countries are

getting pressure in serving low income groups. The study also suggests that more than 1 in 10 countries already require financial institutions to facilitate the basic bank accounts. In India, the facilitation of basic bank accounts as a measure of improving financial inclusion has shown mixed results as banks typically view these basic bank accounts as unprofitable. As shown in the study, the public and private sector banks have been able to open 15.8 million accounts with the policy initiative of the RBI as a measure of encouraging 'no-frills' accounts in the year 2005.

Mehrotra et al., (2009) identify two types of financial exclusion in the context of financial inclusion. The study shows that 'voluntary exclusion' is a kind of stage where people claim that they do not want the financial services, even if they are not disallowed by the financial institutions for the same. Again 'involuntary exclusion' is another stage of exclusion where all those who would like to avail the financial services but are unable to do so because of some barriers. Hence, the challenge of financial inclusion is the 'involuntarily excluded' as they are the ones who really need those financial services, but not in a position to avail.

Thingalaya et al., (2010) in the study "Financial Inclusion and beyond: Issues and Challenges" describe Financial Inclusion as the accessibility of easy, fair and transparent financial products and services encompassing all section of the society. The study suggests that the understanding of the concept of FI is very important in Indian context as it has been started with the liberalisation policy of the Government of India in the year 1991.

Usha Thorat (2010) in the study "Financial regulation and financial inclusion: Working together or at cross-purposes finds that the belief of the people in India

regarding the concept of Financial Inclusion lies in the accessibility of bank accounts backed by deposit, insurance, affordable credit and the payment system.

Pranab Mukherjee (2010), the then Finance Minister of the GOI insists in his speech at the Union Budget that priority needs to be given to financial inclusion and financial literacy in the new financial sector initiatives of India through innovative policy measures from the side of Government and the Central bank. He also suggests the players of the financial sector should implement the policy initiatives on FI in a efficient and creative manner.

Subha Rao (2010) makes a note in his writings on “Financial crisis – some old questions and may be some new answers” in the RBI Bulletin that the basic characters of an open and well-organized society should be the unrestricted access to public goods and services. He also notes that banking services are in the nature of public goods and hence Financial Inclusion should be viewed as availability and accessibility of banking services to the entire population without the existence of discrimination.

Rajalakshmi et al. (2010) outlines that though having bank accounts is a pre – requisite condition for financial inclusion, but not the sufficient condition. The study also suggests that FI should contain some other parameters in the form of credit accessibility, affordable insurance and remittance facilities, credit counseling and financial literacy etc. In this study, they observe that the size of institutional debt outstanding for the households should be the measure of the extent of financial services, rather than only the number of bank accounts.

Chakraborty, K.C. (2010) observes that Financial Inclusion though understood as more concern to rural poverty, but the urban poverty also needs to be taken into

consideration. He identifies that a section of people in the urban area like rickshaw pullers, construction workers, migrant labours etc are beyond the scope of FI and so the banking sector should properly address their concerns regarding FI.

Suniti Nagpurkar (2010) in her study tries to understand the extent of banking exposures among the urban poor, both migrants and non-migrants from the city of Mumbai. The study outlines that this group of people are finding problems in dealing with the bank personnel and also recognises the deficiency on the part of banks in making an all-out effort to reach out to the urban poor.

Nageswara Rao (2010) in his study “Financial Inclusion and Indian banking system – the way ahead” remarks that the banking to the poor is not always considered as poor banking and also it should not always be considered as social banking. He suggests that a great opportunity is there on the part of banking business to capture the business from the people at the bottom and so an urgent need is required to consider the bottom – up approach in driving FI movement in the future.

Arindan Banerjee and Pranav Saraswat (2012) in the study “Financial Inclusion in India: An Overview” explain the idea of financial inclusion in terms of making available of the financial products and services at affordable cost to the underprivileged and poor earners of the society. They also explore that with the help of technology and adequate initiatives, the very objective of FI can be achieved.

Balbir Singh (2012) in his study “Financial Inclusion – Role of Banking Industry” discusses that India needs to do a lot in achieving FI in order to gain an international recognition. It is to be mentioned here that the banking sector has shown significant growth in terms of volume and process during the last few decades.

Kuppan (2012) in his study on “Financial Inclusion” identifies the main cause of financial exclusion to be the absence of continuous source of earnings. In majority of the cases, the people with low income status are not considered eligible for any loan. These people do not get familiarized with the financial products and services which may deem profitable for them. He suggests that FI can be considered as one of the great policies to eradicate poverty in India.

World Bank Spring Meeting (2013) expresses the necessity of togetherness in making inclusive financial sectors for the advancement of the life of people. In the year 2013, Executive Director of Alliance for Financial Inclusion (AFI) Alfred Hannig comments “Financial inclusion is to be considered as no longer a fringe subject; rather it is now recognised as an important part of the mainstream belief on economic development based on country leaderships”

2.4 Studies based on Financial Exclusion

In order to promote financial inclusion, the issue of financial exclusion of the consumers who wish to use the financial products and services but are denied needs to be properly redressed. The concept of financial exclusion can be interpreted as inability to participate in the mainstream financial or banking spectrum. Financial exclusion is the outcome of social exclusion over the period of time. Financial exclusion is wide ranged problem and encompasses a majority of the people from the underprivileged section of the society. Financial exclusion is experienced by heterogeneous group of people in a society. As such the reasons behind social exclusion also many a times apply to financial exclusion as well.

Leyshon, A. and Thrift, N. (1995) in their study “Geographies of Financial Exclusion: Financial Abandonment in Britain and the United States” remark that financial exclusion is the process through which a specified section of people from a society are denied access to the financial products and services. In most of the cases, people from the rural areas which are far off the urban financial institutions are financially excluded.

Kempson, E. and Whyley, C. (1998) in their study titled “Measuring the Extent of Financial Exclusion” identify that the countries having well-structured banking and financial functionaries do have the existence of financial exclusion from the underprivileged sections such as low income groups, ethnic minorities etc.

Namoodhiri, N.V. and Shiyani, R. L. (2001) in their study “Potential Role of Self-Help Groups in Rural Financing Deepening” outline that the rural populace is not being properly served by the formal banking system. They suggest that the financial sectors lacked in a structured mechanism in identifying the credit needs of the rural population, rather they regard their demands for credit to be unprofitable.

Kofi Annan (2003) in his address to the General Assembly commented that the section of people with low incomes is not in a position in accessing the conventional financial products and services like bank accounts, insurance services etc. He also highlighted that the big hindrances which make the people excluded from such services need to be addressed in an amicable way.

The report of the **RBI (2003)** explores the existence of the specific regional disparity in the access to formal financial services. It further identifies that there is an uneven

distribution of access to financial services if they are studied in terms of eastern, central and north - eastern India.

Clare Louise Chambers (2004) explains that financial exclusion may also lead to social exclusion of the people. Further, social exclusion may also be linked with other subsidiary problems like unemployment, low income, poor housing facilities, ill health and family failures etc.

Kempson, E. et al. (2004) in the report on “Policy level response to financial exclusion in developed economies: lessons for developing countries” describe that scholars have started taking interest in the issues of financial exclusion recently. One of the issues raised in the academic circles is to find out whether financial development leads to all inclusive financial system or not. They further proclaim that even the advanced countries such as the US and the UK have not been able to develop an all-out effort in achieving the complete inclusiveness in their financial systems.

Basu Priya and Pradeep Srivastava (2005) in their study “Exploring Possibilities: microfinance and rural credit access for the poor in India” mention a blend of factors which obstruct the people of India in accessing the borrowing facility from the formal financial platform. They have also outlined that the banks are careful enough in knowing about the status of the borrowers in terms of the repayment capability, variations in the earnings and availability of collateral support. The study also highlights that the borrowers avail loans purely for the purpose of consumption, not for the purpose of investment or further income generation and the reasons put forth as the lacking of entrepreneurial and technical skills.

Clark et al. (2005) identify that though the government appears at a successful stage as supporter of basic banking services, but the problems with inactive bank accounts and limited availability of ATM facility are still showing a bigger issue. The study outlines that all the mainstream banking facilities are not still available for a considerable size of the population which portrays the case of ‘exclusion within inclusion’ and the reasons behind this condition are cited in terms of unemployment, social exclusion, lack of social welfare measures, low level of incomes, ethnicity problem, minority problem and other demographic conditions.

Andrew, L. et al. (2006) highlight the concept of ‘voluntary exclusion’ which explains that the people become excluded from the mainstream financial services due to denial or poor experiences from the banking or financial institutions.

RBI (2006) outlines in the report that with the introduction of liberalisation and globalisation, India has observed exceptional growth in the field of financial services in the last 15 years. The report also highlights the existence of a huge section of the population still beyond the scope of financial services in spite of this positive development.

Chandrasekhar (2007) studies the existence of several levels of FI and FE where he identifies the availability of financial products and services for a section of people at one side whereas there is no accessibility of the basic banking products and services for a segment of the society at the another end. The study also finds the existence of a section of the population with limited access of the same.

Carbo et al. (2007) in their study “Financial Innovations in banking: Impact on regional growth” reveal that the existence of a situation that deprives or denies the

people from the formal financial services is considered as financial exclusion. They outline the conditions of financial exclusion in terms of access – exclusion, condition - exclusion, price – exclusion and marketing exclusion etc. They also highlight the reasons behind the outcome of financial exclusion as low level of incomes, high cost of loan products, lack of insurance facility etc.

Jefferis, K. (2007) in his study “Enhancing access to banking and financial services in Botswana” states that Financial Exclusion or restricted access to financial products and services has multi-faceted effects which arise due to the non-existence of efficient financial service facility. He points out that the problem of financial exclusion limits the accessibility of the formal financial services to the people, particularly to the poor and disadvantaged groups which adversely affects them in terms of financial loss.

Mas Ignacio and Kabir Kumar (2008) in their study “Banking on mobiles: why, how and for whom” observes the possibility of mobile phones in making the easy accessibility of financial services to the poor people. At the same time, he identifies that though mobile users have been doing well in payment settlement through mobile banking and other payment services in most of the countries, but banking sector have had minimum achievement in using mobile technology as a part of its plan to improve the level of financial inclusion.

Sameer Kochar (2009) in his study mentions that certain conditions like no frill account for financial transactions, availability of suitable saving products, appropriate loan products and micro – insurance facility need to be fulfilled in addressing the holistic approach of financial exclusion.

Vani, K. Borooah (2010) in the study “Social exclusion and jobs reservation in India” reveals that inability of the people in participating in the social life at a fullest stage is referred as social exclusion which reflects the exclusion of them from the secure and permanent employment, earning opportunity, credit, land, housing, education, and other welfare measures. He also looks at the foundation on which people are excluded socially in the form of age criteria, caste system, gender status, ethnicity ground, migrant status, religion status and sexual orientation.

Subha, Rao (2010) comments that the true picture of the level of financial exclusion is not reflected through statistical data base; rather the actual situation portrays the different scenario. He explores that the ground reality is different in terms of the number of active accounts and dormant accounts. He also identifies that a considerable number of people across the countries has been cornered as marginalized group who are usually denied the opportunity in exploring their earning potentiality and entrepreneurial capacity.

Makarend Chikodikar (2012) in his study clarifies that the accessibility of advanced technology of banking services is confined only to a certain sections of the society and another section of the under-privileged people is being deprived in using the same. He outlines that the problem of financial exclusion is not only India specific; rather global in nature. The study also specifies that the emergence of the issue of financial inclusion is due to the problem of financial exclusion and also suggests the involvement of all the stakeholders like NGOs, industry association, MFIs and the society at large in eradicating the problem of financial exclusion.

2.5 Role and Performance of Banks in Financial Inclusion

Srinivasan (2007) in his study “Policy issues and role of banking system” observes that business growth of the banking sector is not supported with the availability of present status of banking network and the strength of employees. The study was conducted to express the relationship between the deposit account and loan account of the commercial bank and also explores that there are 10 states where more than 50% adult population does not have deposit account.

Venkataramany (2009) in his study finds the role of Self – Help Groups, mainly comprising women groups which are expected to help in reducing the poverty level and helplessness, establishing the capacity level with sustainable approach and also in building up resource level of the weaker sections of the society. The study also explores the excessive efforts of the Government of India for the success of the commercial banks linkage with self-help groups (SHGs) towards the achievement of financial inclusion.

Rai and Saha (2010) in their study “Financial inclusion in Karnataka: a study of operationalisation of no frills accounts” points out the strategy of dual steps in achieving financial inclusion. As per their views, identifying the financial products and services is the first phase and making accessible of all those for the beneficiaries is the second phase in the way of achieving financial inclusion. The study identifies that along with the opening of the no - frill account, a creative approach is needed for furthering the support services in the form of financial literacy, financial planning, insurance facility etc.

Rachana (2011) in the study “Financial inclusion and performance of rural co-operative banks in Gujarat” explain that employment status and education level of people are very much helpful towards the achievement of financial inclusion, whereas gender position shows the negative status in terms of having bank account.

Raman (2012) in his empirical study with the secondary data tries to explain the relationship between the growth of the Indian banking system and financial inclusion and also the role of the Reserve Bank India thereon. The study shows that the adult population with bank account is 41% and 39% and 60% is the position of having bank account of rural and urban households respectively. The study concludes that the banking sector can play a very effective role in financial inclusion.

Anjum and Tiwari (2012) in the study in examining the role of private sector banks in the financial inclusion explore that there is very modest relationship between the ratio of gross state domestic products and bank branches. The study also outlines that the number of bank branches and economic variables are very much related in the way of influencing the level of financial inclusion.

Mishra (2012) in his study tries to analyse the relationship between financial capabilities and saving habits of the people and the role of commercial banks in financial inclusion. The study explores that all these factors have positive impact towards the achievement of financial inclusion if associated with the awareness of people about the financial products and services. The study also shows that the limitation of the planned economy is the main cause behind the poor structure of developed banking system which has a role in achieving financial inclusion.

Gupte et al (2012) in their study with the household level data attempt in exploring the distribution pattern of banks and financial inclusion index in India and Kenya, using the dimensions like outreach, usage, ease of transaction and cost of transaction. The study shows that outreach of bank branches and ATM penetration can play a major role towards the achievement of financial inclusion.

Archana (2013) in the study “Financial Inclusion – Role of Institutions” attempts to analyse the role of institution like MFIs, RRBs, and SHGs towards the improvement of financial inclusion. The study explores the barriers in improving financial inclusion in spite of the initiatives taken by these institutions. The study suggests that both the private and public sector financial institutions should work together in avoiding the barriers in the way of achieving financial inclusion.

Parameshwara and Raghuma (2013) in their study with the secondary data try to analyse the lack of awareness of people about the concept of financial inclusion in spite of the initiatives taken by GOI and RBI. The study suggests that the financial institutions can play a major role to include the financially excluded people into the main stream financial inclusion spectrum with the financial literacy programme.

Tamilarasu (2014) in the study “Role of Banking Sectors on financial inclusion development in India” observes the role of banking sector on financial inclusion. The study discovers the inability of the households with low income groups in opening the bank accounts. The study also identifies the decreasing trend of the number of banks and the population per bank branch in spite of the positive trend in the aggregate deposit and credit position.

Hameedu (2014) in the study “Opportunities in the development of Pakistan’s private sector” attempts to analyse the different perspectives of measurement issue of Financial Inclusion. The study explores that there are a wide range of variations across the regions in terms of usage and operation of bank account in spite of having around 50% bank account among adult population worldwide. The study also identifies the decreasing trend of the number of banks and the population per bank branch in spite of the positive trend in the aggregate deposit and credit position.

2.6 Studies based on the Determinant of Financial Inclusion

“About half of the world adult population is excluded from formal financial services” (**Beck et al., 2007**). According to **Thingalaya et al (2010)**, “appropriateness of the financial products/services and how their availability is marketed are crucial in financial inclusion”. **Sinha and Subramanian (2007)** arrive at the similar kind of observation that the consumers/clients want not to settle for cheap versions of mainstream financial products and services rather expect a kind of products and services with attractive offers. The past studies show that the underdeveloped economy fails to develop the financial products and services as per the ability and requirements of the people. Many literatures highlight that informal sectors edge over formal sectors in terms of the features of financial products and services being offerings and these are outlined as suitability, timeliness, convenience, flexibility and adequacy from informal sectors as well as rigidity, unsuitable and inconvenient in offerings from formal sectors.

Wambua & Datche (2013) in their quantitative and qualitative study on “Innovative Factors That Affect Financial Inclusion in Banking Industry – A Case Study of Equity Bank Mombasa Country, Kenya” examine the factors affecting financial inclusion

with the focus of the perceived risk factors, trust and confidence on innovated delivery channels, user friendliness of innovated delivery channel and anti-money laundering requirement on the innovated delivery channels. The study comes to the conclusion that the innovated channels of distribution are generally underutilized and the banks that roll out new channels of distribution such as Agency banking; E-Banking and M-Banking are still experiencing influx long queues inside their banking halls especially at enquiry and customer service counters despite their innovativeness.

Divya (2013) in the study “A study on Impact of Financial Inclusion with reference to daily earners” observes that married wage earners are coming under the purview of financial inclusion as compared to unmarried. The study also outlines that more and more people, working in the public sectors, are utilising financial inclusion schemes against the people working in the private sectors and also finds that male participation is higher as compared to women in financial inclusion.

Paramasivan and Ganeshkumar (2013) in their study “Overview of financial inclusion in India” conclude that the branch density has a significant impact on financial inclusion. The study also finds that awareness level is not a complete step towards financial inclusion without the creation of enough investment opportunities.

2.7 Studies based on Measuring Financial Inclusion

The measurement of FI involves evaluating the extent of accessibility, availability and usage of financial services like saving, credit, insurance, remittance facilities etc. It is necessary to emphasize on measurement of FI by policy makers and researchers. The criterion of measuring FI has to be multi-dimensional as it is a complex phenomenon.

The following scholars have attempted to throw some light on measuring some aspects of FI.

Anjali Kumar (2005) opines that even though there has been interest among the experts on measuring FI but there are dearths of globally accepted standards on measurement. Countries like Brazil, South Africa, India and Kenya have shown positive trends in the measurement practices of FI.

Beck et al. (2007) attempts to measure the financial sector outreach and its determinants by using cross - country data. Here, the measurement indicators are individually applied in assessing the coverage of financial inclusion. Here, the parameters applied in the study are the number of bank accounts per 1000 people, the number of bank branch penetration per million people, the number of ATM establishments per million people, the amount of bank credit level and the amount of bank deposit level. However, all these parameters separately may indicate the incomplete picture on the extensiveness of the scenario of financial system.

Hanohan Patrick (2007) in the study “Recapitalization of Failed Banks: Some Lessons from the Irish Experience” explores the portion of the adult population using the formal financial intermediaries and based on the number of banking and MFI accounts for more than 160 countries and then finally correlated with inequality (Gini Coefficient) and poverty.

Mandira Sarma (2008) uses three dimensions viz. financial access, financial availability and usage of financial services in the process of measuring the index of financial inclusion (FII). This Index of Financial Inclusion takes into account the level of banking penetration, the accessibility of banking products and services and the

usage of banking products and services with a number ranging between 0 and 1. Here, the value of IFI indicates the level of financial inclusion where '0' denotes the position of complete FE and '1' denotes the position of complete FI. The study takes into consideration the above mentioned three dimensions while measuring the index of IFI of 55 countries including India. The outcome of the study shows that India stands at 50th position with the value of IFI at 0.170. Here, it is also highlighted that though the IFI result is comparatively low in India due to the low density of bank branch penetration, the level of credit and deposit position in terms of usage is moderately high. The study also explores that though the sectoral indicators (number of bank accounts per 1000 persons, number of bank branch penetration per million people, number of ATM installation per million people) are used in assessing the extent of financial inclusion or financial exclusion, it might show the ambiguous result on the position of financial inclusion if such indicators are applied on a separate manner.

Mehrotra *et al.* (2009) built up an index for measuring FI using aggregate indicators like number of rural offices, number of rural deposit accounts, volume of rural deposit and credit from banking data for sixteen major states of India.

Vijay Mahajan and Suman Laskar (2009) in their study "Measuring Financial Access – Some Lessons for India" have attempted to design a model on financial access. Their findings include lack of comprehensive analysis though it has been done in respect to measuring the financial inclusion status of the total number of citizens in respect to credit and repayment position.

The study suggests that financial access measurement needs to be undertaken once in two years through national level large scale sample survey. The study takes into

account three vital factors viz. financial literacy, financial transaction and financial inclusion. Here, financial literacy refers the extent of knowledge on the availability and pattern of usage of diverse kinds of financial products and services, being offered by different financial institutions. Financial transaction refers to the extent of the usage of financial products and services which are reflected in the form of the quantity of usages and frequency of usages. Financial inclusion can be identified as the accessibility of all those financial products and services to every section of the society.

Most of the studies discussed above, used the financial depth measures (how much finance) rather than actual outreach or access measures (how many users). These studies cover availability and accessibility elements to a large extent and usage to a certain extent. They mainly use aggregate banking data, which provides information only for service provided by banks or other service providers. This set of information can be termed as supply side information, which is partial in nature. It has its own shortcomings; it does not distinguish between business and individual accounts, or between individual having multi - accounts, or on the adequacy and timeliness of loan amount, or information about informal service.

Chandan Kumar and Srijith Misra (2010) attempted to analyse both supply and demand side information and providing a comprehensive picture of FI in India. FI from supply side includes banking outreach indicators such as number of deposit and credit accounts, number of bank branches, average deposit and credit amount per account and credit utilised) and demand side includes indicators of household level access such as the proportion of households having saving, credit and insurance facilities, financial services.

Nageswara Rao (2010) in the study “Financial inclusion and Indian banking system – the way ahead” argues that a number of measures initiated by the Central Government and RBI, with regard to FI, are still to be implemented by various banks. He tries to find out the understanding of the ground level operating functionaries about FI, and suggests a suitable structure to implement FI, after conducting a study, with limited samples of 26 officials from different banks across the country. The study finds that, majority of the bankers are clear in the concept of FI, but, the banks should conduct awareness camps about FI and the staff should be made more aware of FI.

Satya, R. and Rupayan Pal (2010) in the study “Measuring Financial Inclusion: An Axiomatic Approach” try to measure the extent of financial inclusion with the establishment of an index for FI considering six factors affecting FI, viz. demographic level penetration of bank branches per ten lacks people; geographic level penetration of bank branches per one thousand square Km; the number of bank accounts per one thousand people; the number of loan accounts per one thousand people; the ratio of deposit and income; and the ratio of credit and income. The study has been done for twenty-four states of India, considering the timeframe of 2001 -2007 and the results indicate the improvement trend in the level of financial inclusion over the study periods.

Chattopadhyay (2011) in the study “Financial inclusion in India: A case study of West Bengal” has developed the financial inclusion index for the major states in India and for all the districts in West Bengal.

Karmakar, et al (2011) tries to study the level of financial inclusion among the rural mass of the major 20 states of India. The study takes into consideration few parameters affecting FI, viz; the number of bank branches; the number of bank

accounts per branch; the volume of deposit per branch; the volume of credit per branch.

Ramapal and Rupayanpal (2012) in their study “Income related inequality in financial inclusion and role of banks: Evidence on financial exclusion in India” found that increase of the proportion of households using formal financial services in a state need not necessarily reduce the inequality in FI across income groups or foster FI among the poor households in that state.

2.8 Studies based on Financial Inclusion and Informal Finance

The role played by informal finance in meeting the credit requirements of the small borrowers can't be neglected. The majority of the opinion is that informal sector role in meeting short term credit requirements is important for lower income groups. The liaison between informal sector and credit requirement works in tandem when financier and borrower know each other by face and cultural affinity creates the feeling of confidence in each other. However, some prejudices associated with informal finance are as follows (i) informal lenders exploit the clientele, (ii) informal credit is used in an unproductive way, and (iii) informal finance is not regulated and it may undermine monetary policy.

There is no denying fact that both the formal and informal financiers continue to do business in the modern times but the role of informal finance is getting reduced because of growing role of formal institutions. Once the poor have been provided access to adequate credit under the microfinance schemes, the monopoly of money lenders would be weakened. Ideally, the strategy to reduce the dependence on money lenders is to develop Micro Finance Institutions (MFIs) and SHGs and reviving the

rural co - operative credit structure. In the long - run, the strategy of FI advocated by the RBI and implemented by the banks will be helpful in bringing down the role of moneylenders.

Bouman and Hospes (1994) in the study “Financial Landscapes Reconsidered” argued against the informal lenders for their excessive exploitation in the form of high rate of interest against formal lending institutions. Hence, informal institutions cannot make efficient reallocation of resources throughout the economy and contribute to economic growth as in the case of formal finance.

Joshi, N.C. (1998) in the study “Indian Banks Abroad, The Challenges Ahead” comments that banking sector reforms have created severe problems in the rural credit status. The study also shows that no serious attempts have been made by rural credit agencies in mobilising rural deposits and hence, failed to cater to the real needs of the rural people, especially the middle and poor section of the society. So even now, the ordinary people are outside the purview of the formal financial institutions and they are in the clutches of moneylenders.

Jeromi, P.D. (2007) in the study “Regulation of Informal Financial Institutions: A Study on Money Lenders in Kerala” remarks that the informal sector, especially money lenders assumes a vital position as integral part of financial sector in the state of Kerala in spite of the well-built existence of the formal financial institutions, viz; commercial banks (both public and private sector banks) and cooperative banks. The author also recognises that the total number of bank branches from the formal financial sector is less than the total number of registered money lenders in the state of Kerala.

Financial Express (2008) reports that in India, over 50 per cent of the labourers surveyed, indicated saving cash at home while simultaneously borrowing at high rates of interest from money lenders.

Isern Jennifer and Louis de Koker (2009) in their study “Strengthening financial inclusion and integrity” revealed that the presence of money lenders, informal money transfer operations and unregistered community finance organizations are the characteristics feature of lesser developed economies. Low-income people often prefer to use informal financial services because of convenient locations, familiarity with the institutions and their services and often fewer restrictions (such as ID requirements).

Rajalakshmi Kamat et al. (2010) observe that even from the first All India Rural Credit Survey in 1954, it has been documented that the credit needs of the financially excluded households are met by the informal, non-institutional sources rather than formal institutions.

2.9 Studies based on Financial Inclusion through Micro Finance

‘The term microfinance was formally employed in the academic literature in the 1980s’ (**Marguerite, S. Robinson 2001**). ‘Microfinance in India has emerged as a powerful tool for FI’ (**NABARD, 2006**). ‘India has been experimenting with microfinance strategy in the form of SHGs as a part of formal credit delivery system since 1960s, giving lot of freedom to NGOs to set up SHGs on various models’ (**Das et al. 2008**).

Jaya, S. Anand (2002) in the study “Self-help groups in empowering women: Vase study of selected SHGs and NHGs of Trivandrum” observes that SHGs can bring

about drastic changes in the lives of the poor. Delivering credit alone may not produce the desired impact. A wider range of other supporting measures are critical to make the impact strong and sustainable.

Abdullah, M.A. (2003) reports that empowering women by adequately facilitating them with better access to credit, advocating them to form a networking, disseminating the knowledge of various schemes available, enhances the potential and personality of women outside the household and check the social issues of population growth, infanticide, dowry, family planning, marriage age, widow remarriage, and freedom to utilise opportunities.

Manivel, A. (2005) states that women are no longer confined to three K's, namely, Kitchen, Kid and Knitting, rather, they have come to assume the role of entrepreneurs in various non-traditional areas.

Singh, B. K. (2006) in the study "Women Empowerment through Self Help Groups" explores that a section of women, having association with SHGs is in a better position in terms of economic independent with the support of savings and credit opportunities and hence, they become able in controlling their earnings. The study also concludes that this group of women is in a position to get knowledge in accessing outreach markets of their products. The study outlines that the participation in household decision and also the role played by the women in contributing towards their household earnings and welfare activities of the family is really appreciable

Devendra Prasad Pandey (2007) in his study "Cause related marketing" finds that Indian model of microfinance offers greater promise and potential to address poverty

as it is focused on building social capital through providing access to financial services through linking with the mainstream.

Duraisami, A. (2008) explores the idea of Self-Help-Group as a means of aiming “Gram Swaraj”. Here, the concept has been rightly taken from the Indian Constitution to match the concept of SHG as the platform “of the people, by the people and for the people. The study recognises the great principle “all for all” is the basis of cooperative movement. The study explains that the benefits expected from the cooperative types of organisations have been beyond the scope due to many negative factors, viz; bigger size of cooperatives; diversified group members; greater political interventions; government influence into the autonomy and hence, the outbreak of Self-Help-Group type of set up has become a sustainable rural development platform.

Lathika, K.K. (2008) in the study “A Study on Women Empowerment in Kerala with Special reference to Kudumbasree Project” discovers that the facilitation is not reaching in the pockets of the target group due to the deficiency of the right kind of machineries and the distribution channels. Here, the study finds that the collective savings of the members of SHG, kept under the common ownership as informal bank can ultimately benefits of the members at the time of exigencies, like consumption needs, occasional need etc. The study explores that the Self-Help-Group as informal bank have been able to come out as the protective wall for the poor farmers, labourers and artisans from the risk of money lenders.

Dhar, S.N. (2009) in his study stresses that the microfinance movement in India has reached at the unparalleled position within a very short span of time though it started its journey in the early nineties. The study outlines that ‘borrower knows the best’ is

the basic principle behind the operation of microfinance programs and also highlights the transfer of the momentum from individual to group approach as SHGs.

Venkateshmurthy and Dinesh (2010) in the study “Women Empowerment through SHG – An Analysis” views that the movement of Self-Help-Group have been able to reach at its soaring height in India as a means of extending the credit and saving facilities in the hands of rural women. The study outlines that the platform of SHGs have extended multiple benefits to the women by way of encouraging them for active participation in the village activities. The study also explores that the Self-Help-Group can cultivate the entrepreneurial skill among the members of the group which ultimately helps them in achieving their financial and social goals and also leads to their economic and social empowerment. The study suggests that Self-Help-Group can provide a platform through which the members can exchange their views and also coordinate with the external agencies for their mutual benefits.

Subrahmanyam, N. (2010) in the study “Microfinance - A Promoting Instrument for SHGs” tries to analyse the role of microfinance as a means of promoting the platform of Self-Help-Group. The study has been done for the periods 2003 – 2007 with the consideration of three dimensions, viz; the number of SHG linkage with banks; bank loan disbursal and refinance. The outcome of the study shows that the South Indian states, Andhra Pradesh, Karnataka, Kerala, Tamil Nadu and Puducherry have shown the outstanding performance and come out as advanced Self-Help-Group states.

Raghuwanshi, D.B. (2010) reports that with regard to various components of microfinance related services (demand for savings service) is higher than demand for credit services. Quoting World Bank reports, he states that the Indian microfinance

activity currently reaches only 4 per cent of the poor which shows that despite the rapid growth in the past few years, the supply of credit is below the demand.

Rasure, K.A. (2011) in the study “Indian’s Population in Transition” defines that the expansion of the microfinance led to the state of global industry during the last 3 decades. He also finds that many advocators of the microfinance, started to talk about its vital role towards the eradication of poverty level globally, but still remains questionable

2.10 Studies based on CAMEL Model

The review of literature available on the subject helps to understand the existing knowledge in the area of study. It not only provides the requisite background for further study but also makes the researcher aware of the issue. Hence, it helps to identify the gap that exists in the area of research. This is an attempt to provide an overview of various aspects and issues of this study through the review of existing literatures. A review is a pre-requisite, not only for sharpening the methodology, but also for conducting the study as well as for drawing meaningful inferences from the results obtained from present study. The financial performance of different categories of banks like public sector banks, private sector banks, regional rural banks and cooperative banks, has been analysed by academicians, scholars and administrators using CAMEL model in the last decades. A summary of the studies is given below:

Kwan and Eisenbeis (1997) observed that Asset Quality is commonly used as a risk indicator for financial institutions, which also determines the reliability of capital ratios. Their study indicated that financial capitalization affects the operation of financial institution. More the capital, higher is the efficiency.

Prasuna (2003) analyzed the performance of 65 Indian banks for the year 2003 – 2004, using CAMEL Model. The author concluded that better service quality, innovative products and better bargains were beneficial because of the prevailing tough competition.

Sarker (2005) has scrutinized the CAMEL model for the study of regulation and supervision of Islamic banks by the central banking Bangladesh. The study enabled the regulators and supervisors to get a Shariah benchmark to supervise and inspect Islamic banks and financial institutions from an Islamic perspective.

Bodla and Verma (2006) have recommended that types of rating would help the Reserve Bank of India to identify the banks whose performance needs special supervisory attention. The main attempt of CAMEL system is to find out problems which are faced by the banks themselves and catch up the comparative analysis of the performance of various banks.

Sangmi and Nazir (2010) have analysed the performance of biggest nationalised bank Punjab National Bank (PNB) and biggest private sector bank (J&K Bank) using the CAMEL model for the period from 2001-2005. The study exhibited that the position of both the banks under study was sound and satisfactory in case of capital adequacy, asset quality, management capability and liquidity.

Siva and Natarajan (2011) empirically tested the applicability of CAMEL norms and its consequential impact on the performance of SBI Groups. The study concluded that annual CAMEL scanning helps the commercial bank to diagnose its financial health and alert the bank to take preventive steps for its sustainability.

Chaudhory and Singh (2012) analyzed the impact of the financial reforms on the soundness of Indian Banking sector through its impact on the asset quality. The study identified the key players as risk management, NPA levels, effective cost management and financial inclusion.

Prasad and Ravinder (2012) tried to evaluate the performance of chosen twenty nationalized banks through CAMEL model where the results shown that Andhra bank was at the top most position followed by Bank of Baroda, Punjab and Sindh banks and also Central bank of India was observed at the bottom most position.

Mishra, Harsha, Anand and Dhruva (2012) tried to analyse the performance of 12 public and private sector banks over a period of eleven years (2000 – 2001) using CAMEL approach. They concluded that private sector banks topped the list as they performed better in terms of economic soundness in comparison to public sector banks.

Vijayakumar (2012) made an attempt to measure the overall health and financial status of State Bank of India (SBI) and its associate banks. He concluded that SBI and its associate banks have succeeded in maintaining capital adequacy and liquidity at higher level. Also these banks have been able in improving asset quality, management efficiency and earning quality.

Reddy (2012) attempted in his study to evaluate the relative performance of public sector banks in India using CAMEL approach where it has been found that public sector banks have significantly improved their performance with the positive impact of the reforms in rationalizing directed credit and liberalizing interest rates and investments.

Chaudhry and Singh (2012) have analyzed the impact of the financial reforms on the soundness of Indian Banking through its impact on the asset quality. The study identified the key players as risk management, NPA levels, effective cost management and financial inclusion.

2.11 Research Gap

Review of earlier studies on financial inclusion has helped the researcher to identify the research gap. Financial inclusion has been widely researched. Yet many studies have been undertaken previously on the role of commercial banks, co-operative banks, SHG, Micro Credit, Kisan Credit Card, Agricultural Jewel Loan and Joint Liability Group towards financial inclusion, studies pertaining to financial inclusion through co-operative banks are found inadequate. The previous studies covered mainly the inclusion of people in the financial services through commercial and scheduled banks. More over studies on financial inclusion are concentrated in general. Therefore, in-depth and comprehensive study on the position and scope for financial inclusion in this respect attempts to evaluate the determinants of financial inclusion with the study of the role of SISCO Bank Ltd. towards financial inclusion.

Well-functioning financial systems serve a vital purpose, offering savings, payment, credit, and risk management products to people with a range of needs. Inclusive financial systems allowing broad access to appropriate financial services are especially likely to benefit poor people and other disadvantaged groups. Majority of Sikkim's people especially live in rural areas and financial inclusion is the need of the people in Sikkim. One of the special ways to lift people from the poverty is to through inclusive growth, so this can be done through the financial institution like bank. Much study has been done in national and state level but very few studies have been done in

household level. And till now no such study has been done in Sikkim in this regard, so this study will try to fulfil this gap.

CHAPTER 3

FINANCIAL INCLUSION AND COOPERATIVE BANKS:

THEORETICAL OVERVIEW

3.1 INTRODUCTION

In the arena of five-year plan of Indian economy, NITI AAYOG replaced Planning Commission in the year 2017. “Faster, more inclusive and sustainable growth” were the focused objectives of the 12th five-year plan. Financial inclusion as an instrument is expected to play a vital role towards the achievement of these objectives. According to Dr C. Rangarajan (2008, Chairman of the Committee on Financial Inclusion) financial inclusion is the process which ensures the accessibility of financial products and services to the vulnerable groups such as weaker sections and low income groups at the right time and at an affordable cost. The Census report 2011 highlighted that ‘58.7% of the total population is financially included and rest population is excluded’. Rural and semi-urban masses are required to be given adequate amount of platform where from they would be able in accessing financial products and services with reasonable manner. This is considered as key requisites towards the improvement of employment opportunity, economic growth and poverty reduction. To enhance the level of financial inclusion, an opportunity is required to be given to this section of population in the form of opening bank account to ensure their saving, investment and credit facility. “Ensuring access to financial services and timely and adequate credit for vulnerable groups at an affordable cost is recognized as an urgent need. It concerns not only with delivering financial services to the unbanked population, but also emphasized on innovative delivery systems and channels to expand banking

reach into unbanked interior parts” (Ramakrishnan, 2007). In this backdrop, RBI started focusing on financial inclusion since 2005 and undertook a number of initiatives for bringing the larger population within the ambit of structured and organized financial system (Mohan, 2006).

Thus, the instrument of financial inclusion can be properly activated by the banking sector where both the banking sector and financial inclusion are considered as interrelated. Unlike the commercial banks which are urban in their orientation, cooperative banks have very much rural experience with vast network in rural areas. So, this study tries to find out the role of cooperative banks in financial inclusion with reference to SISCO Bank and also to identify the determinants in achieving the financial inclusion. K.C. Shekhar and Lekshmy Shekhar outlined “The Cooperative banking system in India is characterised by a relatively comprehensive network extending to the grass root level. What distinguishes the co-operative banking sector from commercial banking sector is the focus of the former on the local population and micro-banking among middle and low income strata of the society.”

3.2 FINANCIAL INCLUSION – DIMENSIONS

Financial inclusion (FI) is a multidimensional concept. The different dimensions are inter-related and reinforce each other. Within each dimension of FI different degrees of inclusion are identified. Greater level of FI can only be achieved if a wide range of financial products and services exist to meet the needs and circumstances of the masses.

The different dimensions of FI are outlined below:

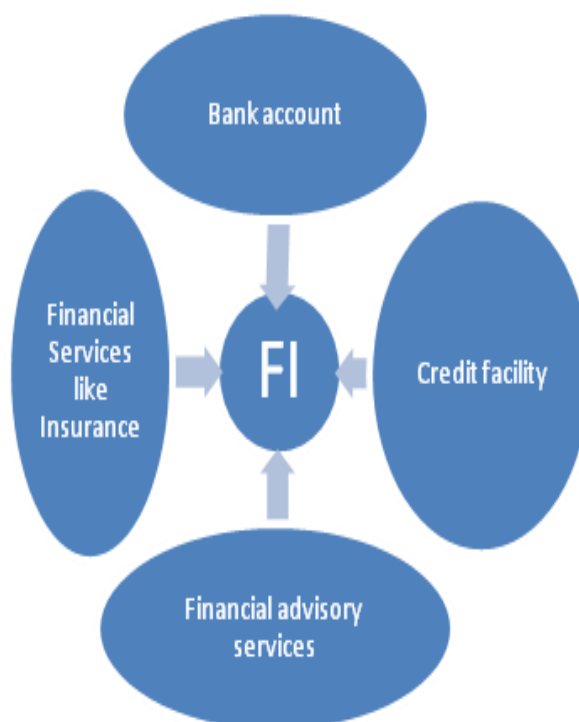
(1) **Banking inclusion** – having bank account allowing access to and being able to make effective use of it in terms of savings and remittance.

(3) **Credit inclusion** – having credit account allowing access to and being able to make effective use of credit facility.

(4) **Financial Service Inclusion** (like insurance) – having availability of financial services allowing access to them, like insurance products.

(5) **Financial Advisory services** – having facilities of financial advice allowing access to timely and appropriate information about financial products and services and implementation thereon.

Figure 3.1 The Dimension of Financial Inclusion (FI)



3.3 OBJECTIVES OF FINANCIAL INCLUSION

The major objectives of FI are the following:

- 1) Making available the various financial products and services such as savings bank account, credit facility, insurance facility, payments and remittance services and financial advisory services.

- 2) Giving the benefit of vast formal financial markets and protecting a section of financially excluded population from the exploitation of informal financial markets so that they can be brought into the platform of mainstream financial markets.

3.4 SIGNIFICANCE OF FINANCIAL INCLUSION

The Government of India has been focusing on financial inclusion of all the sections of the society with the motive of achieving the following major benefits:

- 1) To provide a stage for inculcating the habit of saving as a critical tool, especially for the lower income and disadvantaged groups.

- 2) To provide a platform for adequate and transparent credit facility from the formal banking system, especially for those who are dependent on informal credit channels, like family, friends and moneylenders.

- 3) To provide a platform for blocking the leaks in public subsidies and welfare programmes of the Government by way of direct transfer of those benefits including social security transfer and Mahatma Gandhi National Rural Employment Guarantee Programme (MGNREGA) wages to the actual beneficiaries' bank account.

4) Finally, to provide a platform for each group of the society in accessing the banking facilities in the form of cash receipts, cash payments, investments and balance enquiry etc.

Figure 3.2 Benefits of Financial inclusion



Source: Arihant Bhandawat, Financial Inclusion - Role of Indian Banks in Reaching Out to the unbanked, www.allindiabankingsolutions.com

3.5 FINANCIAL INCLUSION MODELS

Models on financial inclusion reveal different approaches, followed by the countries around the world towards the achievement of financial inclusion which shows that there is no 'one size fits all' outcome in solving the problem of financial inclusion.

But the models used so far in the Indian context are discussed below:

1) Lead Bank System – Here, the lead bank system was introduced by RBI in 1969 to provide lead roles to individual banks (public and private) for each district in a state on the basis of the recommendations of both the Gadgil Study Group and Banker's Committee (Nariman Committee). Here, it has been said that the lead bank identified is expected to act as a consortium leader to coordinate the efforts particularly in the

matters of branch expansion and credit planning. Under this, it was targeted that all the villages above 2000 population would be provided access to financial services by March 2012.

2) Correspondent Banking – In 2006, with the motive of getting low-cost technology solution, the RBI had permitted banks to use intermediaries as Business Facilitators(BFs) or Business Correspondents (BCs) for providing financial and banking services. The BCs are allowed to conduct banking business as agents of the banks at the places other than the banking premises who would serve as the “Doorstep Bankers” and also as the provider of the last mile connectivity. For the purpose, banks were permitted to utilize the services of non-governmental organisations, like NGOs or SHGs, micro-finance institutions and other civil society organisations. As per the present norms, various categories of individuals, kirana shops etc. and in addition corporate and for-profit companies are allowed to act as Business Correspondents’ of banks.

3) Mobile Banking – The mobile penetration is very high in the country and so to make use of this opportunity the green signal from RBI was given in October 2008 and 32 banks were authorized to provide the facility of online banking. But, still the object of achieving the financial inclusion with the help of technology looks far beyond the target. To improve the situation, The Financial Inclusion Technology Fund was established with an overall corpus of INR 5000 million to create technology infrastructure with comprehensive credit information. And subsequently, mobile banking guidelines were also issued by RBI as mobile connectivity was thought of as a cheap but reliable model to reach out to the people.

4) Microfinance Model – There are a variety of micro-credit models operating in India, making it the world's best laboratory for micro-finance. The model includes Microfinance system in India including Self-Help Group – Bank Linkage Programme.

3.6 FINANCIAL INCLUSION IN INDIA – MAJOR INITIATIVES

For the first time in April 2005, the mile stone of financial inclusion was initiated in the presentation of Annual Policy Statement by Y.V. Reddy, the then RBI Governor, which gained a greater momentum later on. Here, banks were advised to review their existing practices to arrange them in line with the objectives of achieving financial inclusion to the greater extend. In the year 2006, commercial banks were allowed in making use of the services of NGOs/SHGs, microfinance institutions and other civil society organisations as agents for them for the purpose of providing financial and banking services towards the achievement of financial inclusion. The Reserve Bank of India vision for 2020 is to open nearly 600 million new customers' accounts and service them with the support of information and communication technology. However, illiteracy, low income savings and lack of bank branches in rural areas continued to be a roadblock to financial inclusion in many states. Pradhan Mantri Jan Dhan Yojna – the National Mission of Financial Inclusion was declared in the year 2014 by the Government of India with an aim to integrate the poorest of the poor with bank account and so as to ensure access to financial services, namely, saving and deposit accounts, remittance, credit, insurance, pension in an affordable manner.

In India, RBI has taken several steps to boost up the financial inclusion process to a greater degree. Some of the initiatives taken by RBI are as follows:

1) No-Frill Accounts - It is a kind of basic saving account with all the features of a normal saving account. The special features of this account are as follows:

- The account holder is not required to maintain any minimum balance requirement.
- Requirement of simplified KYC norms.
- ATM facility is provided at free of cost.
- There is no account maintenance cost.

2) Overdraft in Saving Bank Accounts—Though the overdraft facility is given to current accounts only, but under the financial inclusion initiatives, banks have been advised to give credit facility in the form of overdraft on saving bank account to its customers so that no frill account holders can enjoy the benefits of overdraft facility.

3) KYC Norms - Know Your Customers (KYC) system enables banks to recognize their customers and financial dealings which can ultimately help them to serve in a better way in managing their risks in an efficient way. KYC norms were revised in order to make it easy for people to avail financial services on February 18, 2008 which are given below:

- Banks have been advised to keep away from undue hardships to people at the time dealing with them.
- Banks should review the risk categorization of customers periodically which would be of not less than once in six months.

- Further, in order to ensure that persons belonging to low income group both in urban and rural areas do not face difficulty in opening the bank accounts due to the procedural hassles. KYC procedure for opening account has been simplified for those persons who intend to keep balances not exceeding rupees fifty thousand (50,000/-) in all their accounts taken together and the total credit in all the accounts taken together is not expected to exceed rupees one lakh (1, 00,000/-) in a year.

4) Self Help Groups (SHGs)

The SHG-Bank Linkage Programme was launched by NABARD in 1992, with the policy support of the RBI. The SHG-Bank Linkage program can be regarded as the most powerful initiative since independence for providing financial services to the poor in a sustainable manner. There are three different models that have emerged under the linkage programme:

- Model I: This involves lending by banks directly to SHGs without intervention/facilitation by any NGO.
- Model II: This envisages lending by banks directly to SHGs with facilitation by NGOs and other agencies.
- Model III: This involves lending, with an NGO acting as a facilitator and financing agency.

5) KCC / GCC Scheme

A. Kisan Credit Card (KCC) Scheme

It is a credit card to provide affordable credit for farmers in India. It was started by Government of India, Reserve Bank of India and National Bank for Agricultural and Rural Development in 1998-99 to help farmers' access timely and adequate credit. It allows farmers to have cash credit facilities without going through time consuming bank credit screening processes repeatedly. Repayment can be rescheduled if there is a bad crops season and extensions are offered for upto four years. The card is valid for five years' subject to annual renewal. Withdrawals are made using slips/cards and a pass book.

B. General Credit Card (GCC) Scheme

With a view of providing credit card like facilities in the rural areas, with limited Point-Of-Sale (POS) and limited ATM facilities, the Reserve Bank advised all scheduled commercial banks, including Regional Rural Banks (RRBs), in December 2005 to introduce a General Credit Card (GCC) Scheme for issuing GCC to their constituents in rural and semi-urban areas, based on the assessment of income and cash flow of the household similar to that of prevailing under a normal credit card.

The Reserve Bank also advised banks to classify fifty per cent of the credit outstanding under loans for general purposes under General Credit Cards (GCC), as indirect finance to agriculture under priority sector. In May 2008, the Reserve Bank further advised banks in May 2008 to classify 100 per cent of the credit outstanding

under GCCs as indirect finance to agriculture sector under the priority sector with immediate effect.

6) Micro-Credit Scheme

Microcredit is a common form of microfinance which involves an extremely small loan given to people who do not have collateral support or steady employment with the motive of making them self-employed or grow a small business. Microcredit is also known as “micro lending” or “microloan”. The origin of the Grameen Bank in Bangladesh during the late 80’s, developed by Nobel Prize winner and economist Muhammad Yunus actually drew attention of the microcredit scheme that can play the role of banking the unbankable that are really poor to be served by the conventional banking system.

The concepts that poor section of the society remains poorer as their skills are unutilized and underutilized actually led the outcome of microcredit scheme which can enable them to build up wealth with the start of their own business. As the main aim of financial inclusion is to make financial services accessible the underprivileged section of the society and so where the role of microcredit comes in. Here, it can aptly be said that Micro Finance Institutions (MFIs) plays a pivotal role in achieving financial inclusion in different ways and micro credit is one of them which is provided to the members of Self Help Groups (SHGs) for enabling them to raise their income level and improve living standards. So, the prospects of MFIs as encouraging platform have been identified in meeting the demands of the underprivileged section of the society by way of offering them right kind of financial products and services towards the achievement of financial inclusion

7) Financial Literacy Program

Identifying the lack of awareness level among the masses, the RBI has taken initiatives towards giving knowledge about financial literacy and related matters. A project named “Project Financial Literacy” has been undertaken by the RBI towards the same. The main objective of this project is to provide information to the masses, specially targeting students, women, poor, defence personnel and senior citizens about the central banks and the basics of banking practices. The information is expected to pass through pamphlets, brochures, documentaries as well as websites.

Following is the detail of the measures taken up by the RBI towards the dissemination of financial literacy campaign:

- The Reserve Bank of India launched a multilingual website on the 18th June, 2007 with all the related information on banking matters.
- Children friendly comic books relating to banking concepts have already been put on the website. Similarly, books which shall be suitable for others such as rural and urban poor, women, defence personnel etc. are also to be launched.
- With the active involvement of the state governments and SLBC, Financial Literacy programmes have been launched in all the states. As a part of this, a credit counselling centre has been set up as a pilot project which shall be extended to other districts also.
- In the College of Agricultural Banking, a cell named ‘Financial Inclusion and Financial Literacy Cell’ which will be a resource in the field.
- New guidelines were issued in June 2012 according to which all the Financial Literacy Centres (FLCs) and rural branches of all the scheduled commercial banks need to organise financial literacy camps on Financial Literacy and

Easy Financial Access. In accordance with the guidelines, a total of 718 FLCs were set up by the end of March 2013. Similarly, 2.2 million people were trained with the help of seminars, lectures etc. during April 2012 and March 2013.

8) Engaging business correspondents (BCs)

The Reserve Bank of India, in 2006, gave permission to the banks to involve business facilitators (BFs) and BCs to act as the mediators for providing banking services. This system allows banks to give door to door services thus helping people to solve their problems. The eligibility conditions of the individuals or entities to become BCs are reviewed constantly. The for-profit companies have also been allowed to engage as BC since September 2010. The Business Correspondents of various banking segments, with the help of the village local bodies like panchayats have set up Common Service Centres (CSC). It helps the rural people in finding out solution to their banking and financial needs through e-governance as it is facilitated with internet connected computers.

9) Use of technology

Realising the potential of technology in addressing the outreach and credit delivery services in rural and remote areas, the banks are advised to use the information and communication technology for various banking needs. It not only soothes the burden of work but can also be used by even an illiterate person with the help of their biometrics which enhances the security of banking transactions.

10) Simplified branch authorization

In order to solve the issue of uneven spreading of bank branches, the RBI permitted the domestic scheduled commercial banks to open tier III and tier VI branches with less than 50,000 populations. According to this rule, domestic scheduled commercial banks can now freely open branches in rural, semi-urban and urban places in the north eastern states without prior permission of the RBI.

Current Measures by RBI

Following are some of the measures taken by RBI recently to promote financial inclusion:

➤ Licensing of New Banks:

The current set of rules of licensing banks aim at providing boost to the financial inclusion strategies. Innovative ideas which will eventually boost up financial inclusion will certainly be taken into account for new licensing of banks. In fact, financial inclusion will remain as an important condition in procuring bank licenses.

➤ Discussion Paper on Banking Structure in India

The RBI launched a discussion paper in August 2013 on banking structure for the public to get information and comment. The main issue behind this initiative is related to differentiate banking license. The issues pertaining to small bank licenses and financial inclusion are discussed thereon. The RBI would take call after receiving comments and suggestions from the public.

3.7 FINANCIAL INCLUSION AT WORLD LEVEL

The analysis made of Global Financial Inclusion (Global Findex) Database derives a set of factors which indicate the financial behaviour in 148 economies in the world. A World Bank study reveals that 50% of the adults worldwide own an account; yet the penetration rate differs considering regions, income groups and individual features. Apart from this, 22% of the adults reveal that they have made savings in organised institutions during one year and 9% reveal that they have taken loan from financial institution during one year. Half of the adults remain without any account in banks but they believe that the hindrances can be got rid of by amicable public policies. The mostly reported problems of such adults are high cost, distance, lack of documentation; but, again these problems differ individually and according to the geographical locations.

Financial exclusion is predominantly seen in the developing countries where in only 41% adults have formal accounts. Out of these, 37% of women have accounts in comparison to 46% of men. The gender difference deepens more with the difference in income in the developing countries. In a comparison made across the countries, it would be revealed that bank account penetration is a per cent of the adult population. In the high income group of countries, 89% of adults do have formal accounts with several financial entities.

3.8 FINANCIAL INCLUSION AND CO-OPERATIVES

Cooperative banks/sectors are indispensable part of Indian rural economy. These sectors do have direct or indirect influence on agricultural and rural development. The present worldly scenario is marked with so many factors like globalisation, structural

adjustment programmes, transition from a centrally planned to a market oriented economy, processes of democratisation and decentralisation, agricultural industrialisation and rural out-migration and the cooperatives are having many challenges but, they have to be conducive in this changing pretext. They need to restructure themselves by re-evaluation, re-invention, and adaptation to the new paradigm shift and prove themselves to be of immense potential.

Little changes in the official composition will help financial inclusion to succeed. In order to become successful, the bankers need to travel on the field and design financial services as per observation of clients, households, markets and workplaces. In this context, the Primary Agricultural Cooperative Credit Societies are more suitable as these can perform the challenging tasks easily. The top most essence in making out vast economic energy that is waiting to be unleashed in the rural farmers is cooperation. Experiences and studies have proved that cooperative institutions are very capable of catering to the need of financial inclusion which eventually would take a section or society to the mainstream economy.

In the Indian context, it was believed that cooperative institutions can play a vital role in protecting the vulnerable section of population, especially the farmers who are being exploited from certain social evils like agricultural backwardness, poverty and rural indebtedness. Here, the features of Cooperative Banks have been identified below:

- Rural orientation
- Focus on the financial needs for agricultural and allied activities
- Low cost banking
- Service motive, rather than profit orientation

All the above mentioned features are very much conducive in accelerating the path of financial inclusion as these are suitable to bring forward the under privileged section of the society like women, farmers, and other weaker sections into the platform of mainstream economy. Hence, it is very much relevant in playing the constructive role towards the achievement of financial inclusion. The words of Henry Wolff states that “Co-operative banking is an agency which is in a position to deal with the small man on his own terms accepting the security he has and without drawing the protection of the rich”. So, it can be rightly said that the Role of co-operative banks are very important in the real mile financial inclusion.

3.9 SUMMARY

In winding up, it can be said that India has miles to go to emerge as a global economy. To talk about the Indian context, it can be said that merely opening of accounts is not the target of financial institutions. The banks and financial institutions must strive hard to gain the trust and goodwill of the unbanked populace through different financial ventures. The concept of financial inclusion has not gained the desired momentum. The government, agencies and legal policy makers must work in an all-encompassing way to achieve the much coveted goal of financial inclusion.

CHAPTER 4

PERFORMANCE OF SISCO BANK LTD.

USING CAMEL MODEL

4.1. INTRODUCTION

The introduction of liberalization, privatization and globalization had facilitated the economic development of the Indian economy. Financial sector particularly the banking sector is one of the important elements for the Indian economy. A flexible and exciting banking sector is important for sound and quick monetary augmentation. Because of this the expansion of the economy depends on the financial development of the banking sector. This paper attempts to evaluate the economic presentation of Sikkim State Cooperative Bank Ltd. (SISCO), one of the major cooperative banks in Sikkim.

Profile of SISCO Bank Ltd.

SISCO was registered on 07 October, 1996 under the Sikkim State Cooperative Societies Act, 1978. The license for the formation of the Bank was issued under Section 22 of the Banking Regulation Act, 1949 by Reserve Bank of India on 19 August 1997. The Bank was inaugurated on 12 December 1998 at Gangtok and altogether 14 branches have been opened since. The objectives of SISCO are to serve as a 'State Cooperative Bank' for the state of Sikkim as well as to function as a development Bank providing finance for all kinds of economic activities of agriculture and allied activities, industries trade and commerce in Sikkim to cooperative societies, self-help groups, joint liability groups, individuals etc. SISCO

Bank is perhaps the first bank of the state with RBI license. As a state level credit cooperative federation, its members include Primary level cooperatives, individuals and the State Government. Presently (2015-16) it has 357 Primary Cooperatives as its members and 4977 as individual members. In the current study, different ratios related to CAMEL model are computed to measure the financial performance of SISCO Bank Ltd.

About CAMEL Parameters

CAMEL is a global term that helps in measuring the concert and reliability of banks based on Capital Adequacy, Asset Quality, Management Efficiency, Earning Capacity and Liquidity Conditions. All these parameters are evaluated separately to ensure the goodness of the bank.

- a) Significant capital adequacy for a bank.
- b) Asset quality
- c) Management capability
- d) The quality of earnings.
- e) Liquidity is an important criterion that presents a bank's capability to meet its fiscal obligation.

4.2. REVIEW OF LITERATURE

A review of literature on the topic helps in understanding on - hand knowledge in the field of lessons. This not only provides the requisite background for further study, but also makes the researcher aware of the issue. A review is a pre-requisite, not only to speed up the methodology, but also to draw meaningful conclusions from the study as

well as the results obtained from the current study. Few of the literature review are cited as below:

Kwan and Eisenbis (1997) found, the quality of asset is generally used as indicator of threat for fiscal institutions. This also determines capital ratios reliability. This study says financial capitalization impacts the operations of financial institutions. Higher efficiency leads to higher capital.

Prasuna (2003) study the recital of sixty-five banks of India from the year 2003 to 2004 by using CAMEL model. Author founds the conclusion that better service quality, innovative products and better deals were beneficial due to the prevailing tough competition.

Siva and Natarajan (2011) experienced the application of CAMEL criteria and its impact on recital of SBI. The study found, CAMEL model helps the commercial banks in analyzing the economic health and prompt the bank to take precautionary ladder for stability.

Chaudhary and Singh (2012) study the collision of monetary reform on reliability of the banking sector of India and its affect on quality of asset. The study acknowledged the important group of actors as a risk management, effective cost management, NPA level management and financial inclusion.

Prasad and Ravinder (2012) tried to appraise the recital of twenty nationalized banks, selected through the CAMEL model, where the results showed that Andhra Bank was on top, followed by Bank of Baroda, Punjab and Sindh Bank and Central. Bank of India was also seen in the lowest position.

Mishra, Harsha, Anand and Dhruv (2012) study the performance of twelve private and public sector banks for a period of 2000 to 2011 using CAMEL approach. The study concluded that private sector banks have better performance in terms of economic viability than public sector banks.

Vijayakumar (2012) attempted to measure the overall health and financial condition of SBI and its associate banks. He concluded that SBI and its associate banks have been successful in maintaining of adequacy of capital and liquidity at a high level. In addition, these banks are able to improve asset quality, management efficiency and earning quality.

Reddy (2012) in his study evaluated the relative performance of public sector banks in India using the CAMEL approach, where it has been found that public sector banks rationalized direct lending and moderate interest and also has been able to improve its performance with positive effects of reforms in rate and investment.

STUDY SCOPE

The study scope is limited to only state level cooperative bank of Sikkim, i.e. Sikkim State Cooperative Bank Ltd. For the study of financial performance of the bank, we have taken 5 years' financial data from 2011 – 2015.

4.3. OBJECTIVES OF THE STUDY

The study based on the following objectives which are as follows:

- a) To study the Capital Adequacy of SISCO Bank Ltd.
- b) To analyse the Asset Quality of SISCO Bank Ltd.

- c) To explore the Management Efficiency of SISCO Bank Ltd.
- d) To found the Earning Capacity of SISCO Bank Ltd.
- e) To study the Liquidity Status of SISCO Bank Ltd.

4.4 RESEARCH METHODS

Research methods are described to follow the methods of research, the tools used, the data to be collected and the patterns of conclusions drawn. For the study, CAMEL model has been used to determine the financial performance of the SISCO Bank Ltd.

4.5 DATA ANALYSIS AND INTERPRETATION

By CAMEL approach, present study tries to measure the parameter of the model i.e. capital adequacy, asset quality, management efficiency, earning capacity and liquidity of SISCO Bank Limited for a period of 5 years from 2011 - 2015. The Study takes into account the secondary information of annual data related to financial statement published from 2011 to 2015 for a period of 5 years of SISCO Bank Limited. The data analysis used in the study is both descriptive and analytical in form. Various variables related to the CAMEL model are taken for the completion of the study. Analysis and interpretation have been done with the help of statistical means, namely arithmetic mean and standard deviation.

4.5.1 Capital Adequacy Analysis (CAA)

CAA is an internal potency of a bank, which will help to stand in good standing in times of crisis. CA can have an impact on the overall performance of the bank, such as opening new branches, fresh lending in high risk but profitable sectors, manpower

recruitment etc. Presently RBI orders the minimum capital adequacy ratio (CAR) to be 9%. Tier-1 Capital consists of Equity Capital and Free Reserve, while Tier-2 Capital consists of subordinated debt with tenure of 5 to 7 years. The higher the CAR, the stronger the bank, however, the much higher CAR indicates that the bank is conservative and has not used its full capital capacity.

The CAR of the banks under study is given as below:

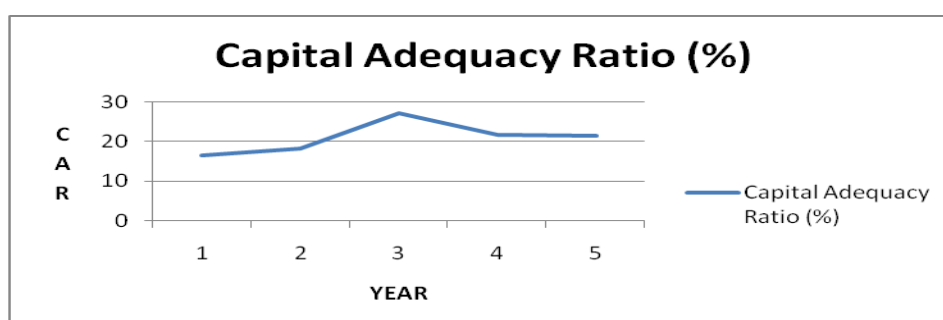
$$\text{CAR} = \frac{\text{Total capital of Tier I \& II capital of the bank}}{\text{Total risk weighted assets}}$$

Table 4.1 Capital Adequacy Ratio of SISCO Bank Ltd

Ratio	2011	2012	2013	2014	2015	Mean	S.D
Capital Adequacy Ratio (%)	16.42	18.14	27.30	21.73	21.60	21.038	3.7

Source: Annual Reports of SISCO Bank Ltd.

Fig. 4.1 Capital Adequacy Ratio



Source: Created

The above table 4.1 shows the CAR in percentage form. The Table 1 reveals CAR of SISCO Bank Ltd. during the study period has been well above the norm (9%). The average of the five years (21.038%) is good because standard deviation being only 3.7

and all these explain the strength of SISCO Bank in terms of sound capital base and its adequacy.

Debt Equity Ratio (DER)

DER indicates how a bank's big business is financed by debt and how much through equity; it reflects the leverage of a bank.

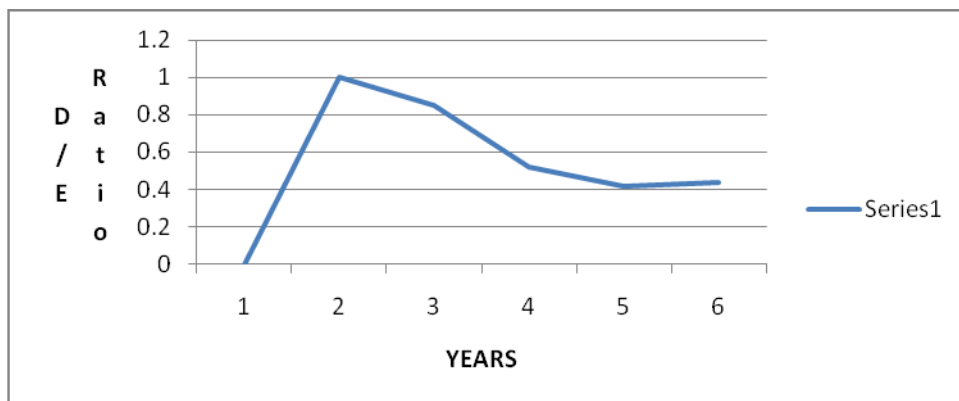
Debt Equity Ratio = External Debt (long term + short term) / Owner's equity

Table 4 2. Debt Equity Ratio of SISCO Bank Ltd.

Rati	2011	2012	2013	2014	2015	Mean	S.D
Debt Equity Ratio	1.00	0.85	0.52	0.42	0.44	0.65	0.055

Source: Computed as per Annual Reports of SISCO Bank Ltd.

Fig. 4.2: D / E Ratio



Source: Created

DER is a long-standing solvency ratio that reflects the soundness of a company's long-term financial policies. From Table 4.2, it is observed that the D / E ratio in the year 2011 was one (1) which suggests that creditors and stockholders contributed equally to the assets of the bank. The average D / E ratio (0.65) indicates that the

share of property provided by stockholders is greater than the share of property provided by creditors. Creditors generally prefer a lower debt-to-equity ratio because a lower ratio (less than 1) is a sign of greater security for their money. But shareholders prefer to benefit from the funds provided by creditors; therefore, they want a higher debt to equity ratio.

Property Advance:

An advance to total assets ratio shows which amount is given as an advance. Advances are directly responsible for profits. An aggressive bank will try to earn more by giving more advances. Thus a higher proportion of advances for assets is preferred than a lower one. Therefore, the advance to assets ratio is directed towards the profitability of a bank, by its aggressiveness in lending. It is calculated as follows:

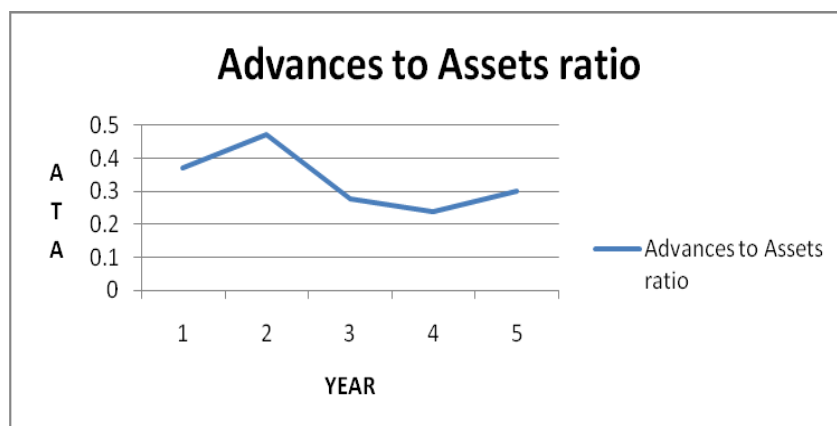
$$\text{Advances to total assets ratio} = \text{Advances} / \text{Total assets}$$

Table 4.3 Advances to Assets ratio of SISCO Bank Ltd.

Rati	2011	2012	2013	2014	2015	Mean	S.D
Advances to Assets	0.37	0.47	0.28	0.24	0.30	0.33	0.0327

Source: Computed as per Annual Reports of SISCO Bank Ltd.

Fig 4.3: Adv. to Asset Ratio



Source: Created

Table 4.3 results are indicating that Advances to Total Asset ratio was the highest in the year 2012 in comparison to other periods under study and also kept on decreasing from 2013 onwards. So, the aggressiveness in lending of the bank has come down over the periods of time.

4.5.2 Asset Quality Analysis (AQA)

Asset quality measures the financial strength and risks of a bank's assets. This indicates that the type of debtor of a bank establishes the toughness of a financial organization as opposed to the loss of value in asset quality. The falling value of assets, being the major foundation of banking dilemma, is directly transferred to other sectors, as losses are eventually written off against capital, which jeopardizes an organization's earning potential. Some important asset quality ratios are adopted for the data analysis of SISCO Bank Limited.

NPA: Gross Non-Performing Assets:

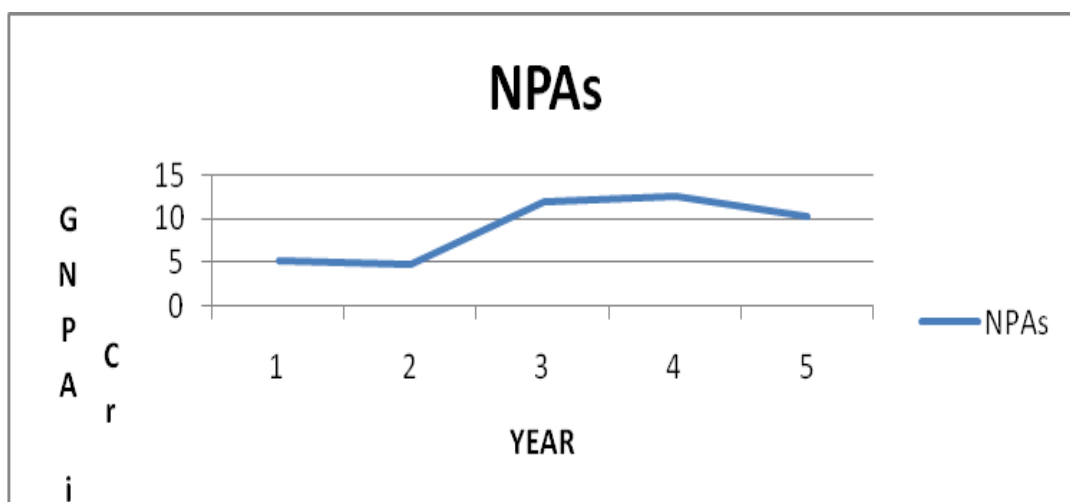
Advances are classified into performance and non-performing advances (NPAs) as per RBI guidelines. NPAs are expanded into sub-standard, doubtful and loss assets based on the principle predetermined by RBI. An asset, which consists of a leased asset, becomes nonperforming to generate income for the bank.

Table 4.4 Gross Non-Performing Assets of SISCO Bank Ltd

Year	2011	2012	2013	2014	2015	Mean
NPAs	5,13,11,000	4,64,56,117	11,81,21,900	12,53,72,207	10,10,27,644	8,84,57,773

Source: Annual Reports of SISCO Bank Ltd.

Fig. 4.4 Gross NPA



Source: Created

Table 4.4 shows that there were the lowest gross NPAs in the year 2012 and started increasing till 2015 which is representing that the bank was adding up a fresh stock of bad loans. It is also indicating that the bank was not exercising sufficient concern when offering loans or was too permissive in terms of following up with borrowers on timely repayments. Again, in the year 2015, the bank has been able to reduce its NPAs status with the serious and concerted recovery efforts.

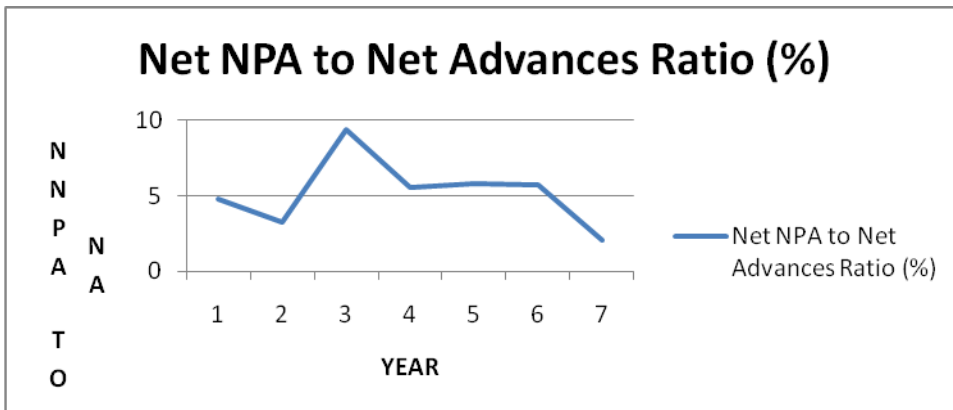
Net NPA to Net Advances Ratio:

Table 4.5 Net NPA Ratio of SISCO Bank Ltd.

Ratio	2011	2012	2013	2014	2015	Mean	SD
Net NPA to Net Advances Ratio (%)	4.81	3.20	9.39	5.55	5.8	5.75	2.03

Source: Annual Reports of SISCO Bank Ltd.

Fig. 4.5: Net NPA to Net Advances Ratio



Source: Created

The data presented in the table 4.5 shows that net NPA to Net Advance ratio of SISCO Bank was the highest (9.39%) in the year 2013 as compared to other periods under study, indicating fluctuating trend. Incidentally it has been noted that SISCO Bank made floating provisions for the first time in the year 2013. During 2014 and 2015 net NPAs to net Advances have come down from the figure of 2013. This has been possible with the arduous hard work and improved recovery drive. Thus the bank has been victorious to manage the net NPAs to net Advances at an average of 5.75%. So, to be secure and safe, the bank has been maintaining adequate provisions for NPAs.

4.5.3 Management Efficiency Analysis (MEA)

MEA confirms the augmentation, expansion and survival of the bank. It is considered as the most prominent factor of the CAMEL model. The ratio in this part includes bank management efficiency and subjective assessment. The ratios used to evaluate management efficiency are described as:

Employees per business (epb)

Revenue per employee is measured how efficiently a bank is using its employees. Generally, a bank wants the highest occupation per employee, as it reflects higher productivity. In general, increasing revenue per employee is a positive sign that the bank is finding ways to squeeze more sales / revenue from each of its employees. This reflects the quality of the workforce which can increase profits.

Business= Advances+ deposits

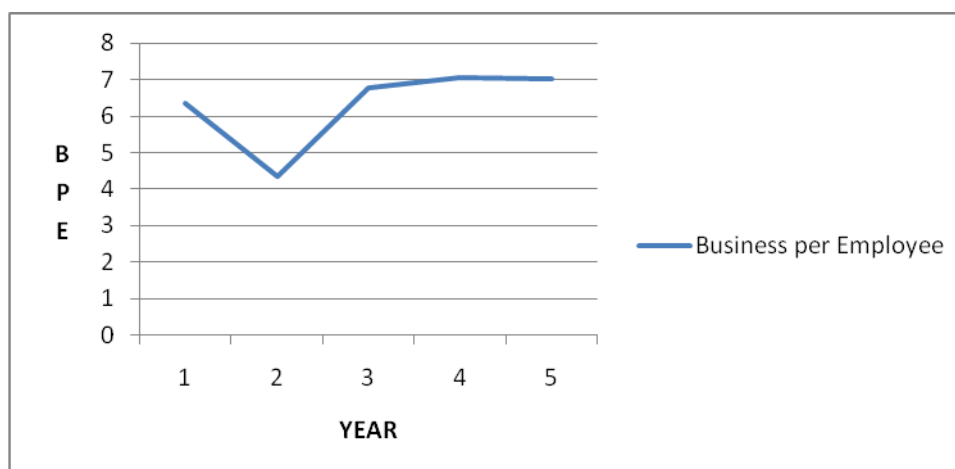
Ratio= Business/ number of Employee

Table 4.6 Businessper Employeeof SISCO Bank Ltd.

Year	2011	2012	2013	2014	2015	Mean	SD
Business per Employee (Rs in Cr)	6.35	4.36	6.79	7.06	7.02	6.32	1.01

Source: Annual Reports of SISCO Bank Ltd.

Fig. 4.6: Business per Employee



Source: Created

Fig. 6: Business per Employee

Business per employee ratio indicates the efficiency of bank in terms of doing business with lesser number of employees. Table 4.6 results show that total business per employee concentrated towards the average figure (6.32) except for the period of 2012, which year per employee business was extremely low as compared to average figure.

Credit – Deposit Ratio:

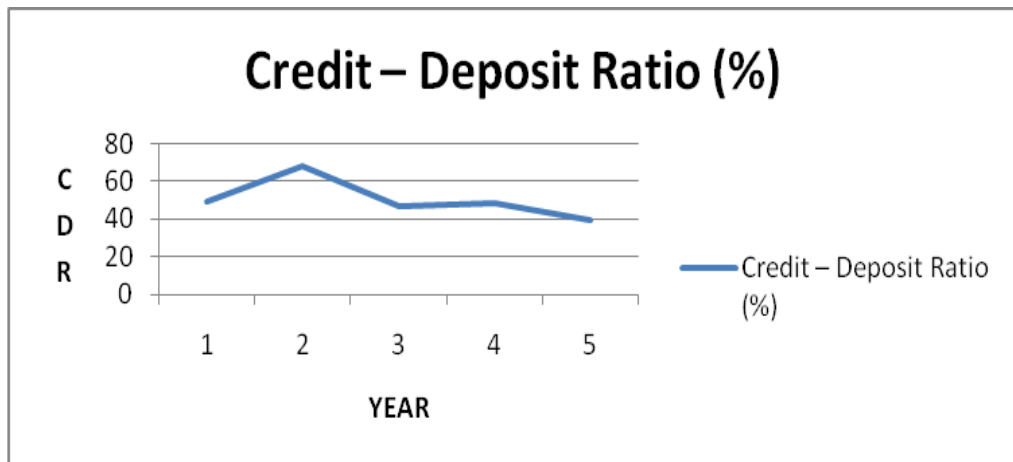
The credit deposit ratio measures the bank management's capability to convert deposits into advances of high- income. The deposits include demand, savings deposits and term deposits etc. and advances include receivables. The ratio reflects the bank's investment through approving loans against accepting deposits. It is used to calculate a lending institution's ability to cover withdrawals made by its customers. The higher the ratio, the higher the debt-asset created from the deposit. The result of the ratio reflects the bank's ability to make optimal use of available assets.

Table 4.7 Credit – Deposit Ratio of SISCO Bank Ltd.

Ratio	2011	2012	2013	2014	2015	Mean
Credit – Deposit Ratio (%)	49.16	68.12	47	48.56	39.45	50.46

Source: Annual Reports of SISCO Bank Ltd.

Fig. 4.7: Credit – Deposit Ratio



Source: Created

Table 4.7 shows that though Credit Deposit ratio of SISCO Bank is the highest in the year 2013, but it is below the norm which is 80% to 90%. The average for the five years from 2011 to 2015 was 50.46 which indicate that management was not able in converting high yielding advances.

4.5.4 Earning Quality Analysis

The earning of quality determines the profitability, stability and ability of the bank to continuously grow future earnings. Income and profitability, major sources of growth in the capital base, interest rate policies and adequacy of provision are examined. The following activity evaluates the quality of income in terms of core activity and income generated by lending operations.

Financial margin

The financial margin of the bank is deducted from the company's net sales / revenue, resulting in the company's either the first level of profit or from gross profit. Gross

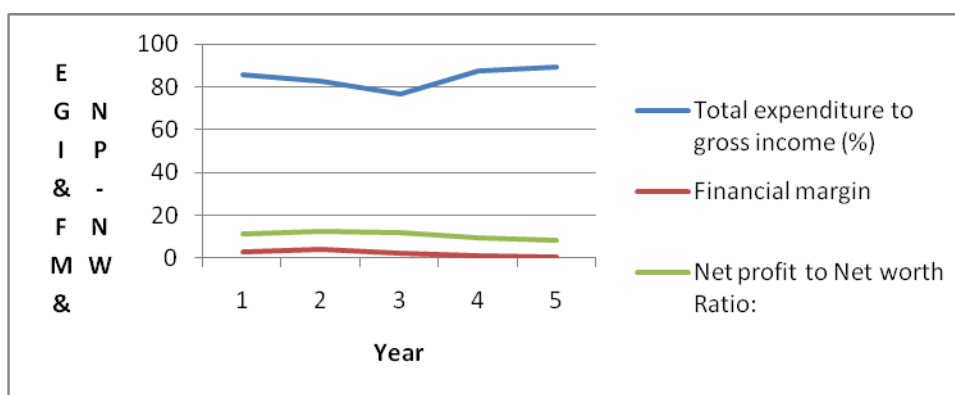
profit margin is used to analyze how efficiently a company is using immovable assets to produce profits.

Table 4.8 Earning Quality Ratios of SISCO Bank Ltd.

Ratios	2011	2012	2013	2014	2015	Mean
Total expenditure to gross income (%)	85.69	82.89	76.53	87.70	89.57	84.48
Financial margin	2.59	3.96	2.14	0.90	0.60	2.038
Net profit to Net worth Ratio:	10.93	12.15	11.40	9.12	8.21	1036

Source: Annual Reports of SISCO Bank Ltd.

Fig. 4.8: Earning Quality Ratios



Source: Created

Table 4.8 reveals that ratio to total expenditure to gross income is showing decreasing trend from 2011 to till 2013 and start rising from 2013. But financial margin and net profit on net worth trend are showing opposite picture.

4.5.5 Liquidity Analysis (LA)

LA represents a bank's ability to meet its obligations. Liquidity of the bank is the most prominent factor especially in banking sector since banks are considered as a liquidity producer in the market. Therefore, if the liquidity management of a bank is not appropriate, it can adversely affect the performance of banks. The ratios suggesting liquidity in the CAMEL model are as follows:

Current Ratio (CA / CL)

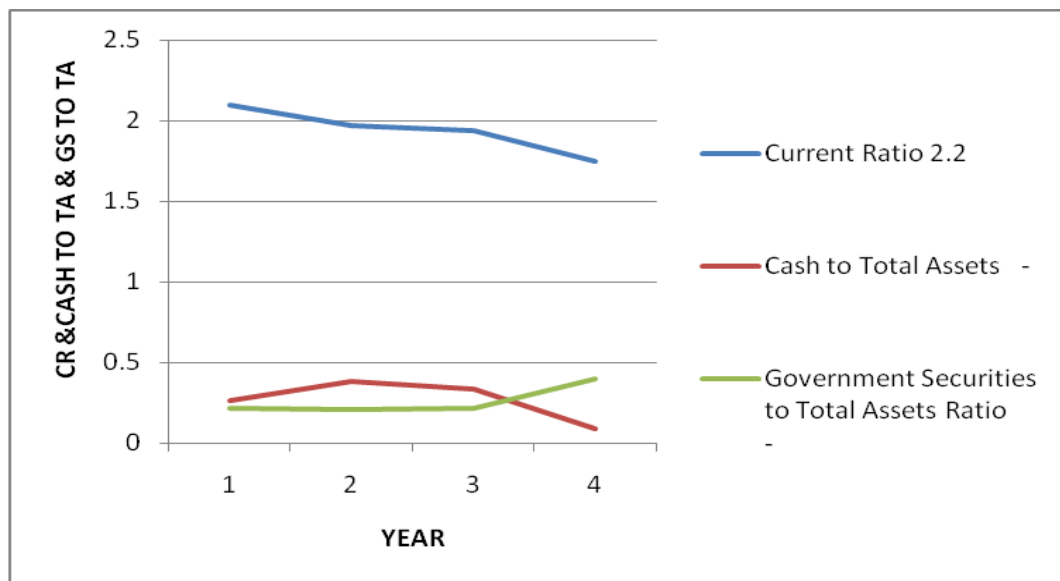
Current ratios are used to measure short-term liquidity or solvency. If current assets are sufficient to reduce its current liabilities, it helps to use the current ratio. Current Ratio = Current Assets / Current Liabilities. Where current assets include closing stocks, banks and cash, debtors, bills receivable etc., and current liabilities include creditors, bills payable, outstanding expenses and bank overdrafts etc.

Table 4.9 Liquidity Ratios of SISCO Bank Ltd.

Ratios	2011	2012	2013	2014	2015	Mean
Current Ratio	2.2	2.1	1.97	1.94	1.75	1.99
Cash to Total Assets	-	0.26	0.38	0.33	0.09	
Government Securities to Total Assets Ratio	-	0.22	0.21	0.22	0.40	

Source: Computed as per Annual Reports of SISCO Bank Ltd.

Fig. 4.9: Liquidity Ratios



Source: Computed

Table 4.9 shows that the bank is consistently maintaining current ratio which reflects the strong short term solvency position. But at the same time trend of the ratio is showing a declining. Again, cash to total asset ratio is showing a declining trend from 2014 which is not a good signal on the part of the bank as the liquidity position of the bank is worsening. But government securities with respect to total assets ratio are reflecting a positive sign as it can improve the confidence of depositors and customers of the bank.

4.6 CONCLUSION

The study reveals that, in the five analytical methods used by CAMEL model is significant to evaluate the financial performance of the SISCO Bank Ltd. of Sikkim. The model result shows that there is a good financial performance of SISCO bank and account holders of the bank are happy upon the service provided by the bank.

CHAPTER 5

DATA ANALYSIS AND INTERPRETATION

In this chapter we will discuss the data collection and the outcome of data analysis. For this data collected through questionnaire in survey is tabulated. Both descriptive and inferential statistical analysis is carried out to analyze the data and to test the hypotheses. The Data Analysis chapter provides us a snapshot of the subject and sector of the study, which will allow us to clearly and quickly recognize areas of strength and immediate areas for improvement. Without the data analysis results, the lengthy, time-consuming process of identifying these opportunities may have left us at a disadvantage.

After collection of raw data, the next step is to edit or scrutinize the collected data. Designing the database is an important step in terms of defining the data fields & data type. The database for this survey has been developed in MS-Excel. Suitable data checks and validation techniques have been used while getting input (raw data) into the database. For the statistical analysis purpose, the database is converted into SPSS (Statistical Package for Social Sciences) format. Proper definition of variables, data type descriptions, value label descriptions are performed on the SPSS databases.

Here, in the data analysis, some Hypotheses have been formulated which are the proposition, condition or principle, presumed without belief in order to draw out the logical consequences. This method is applied to test the facts which are known or may be defined? Hypothesis testing is equivalent to the geometrical concept of hypothesis negation, i.e. to prove that A (the hypothesis) is true; it has to be first

assumed that it is not true. If it is found that the assumption is logically impossible, then the original hypothesis is taken as automatically proven.

5.1 DATA ANALYSIS AND DATA INTERPRETATION

PART A: Profile of the respondents (N= 279)

The procedures used for the analysis of the research data of this study are described in the following manner. The following table 5.1 and chart 5.1 show that the respondents residing in Sikkim. Majority of the respondents are having resident of Sikkim 83.90% and 16.10% are non-resident of Sikkim.

Table 5.1: Are you resident of Sikkim (N=279)

Particulars	Frequency	Percent	Cumulative Percent
Yes	234	83.9	83.9
No	42	16.1	100.0
Total	279	100.0	

Source: developed from the survey data

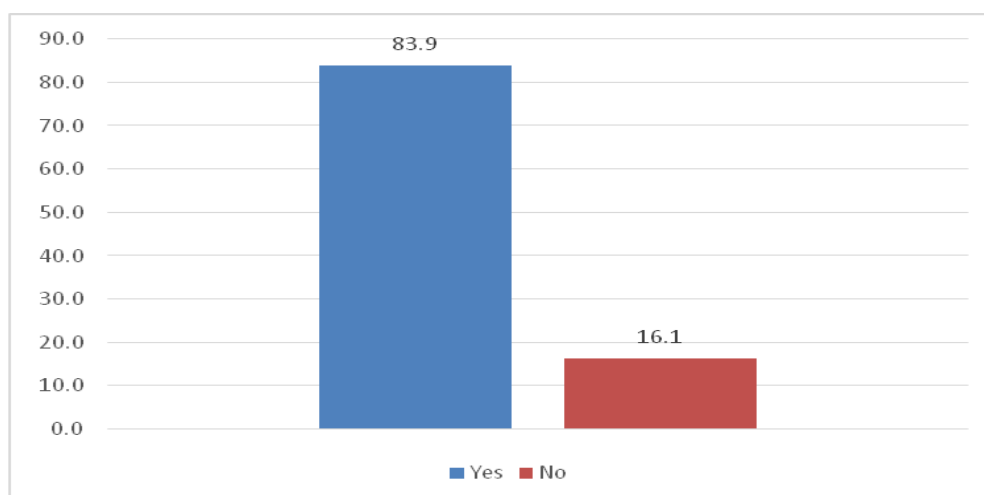


Fig.5.1: Resident of Sikkim (N=279)

In table 5.2, the employment status of the respondents, majority of the respondents are employed 78.10% (218 nos) and few numbers of respondents are unemployed 21.90% (61 nos).

Table 5.2: Employment status of respondent (N=279)

Particulars	Frequency	Percent	Cumulative Percent
Employed	218	78.1	78.1
Unemployed	61	21.9	100.0
Total	279	100.0	

Source: developed from the survey data

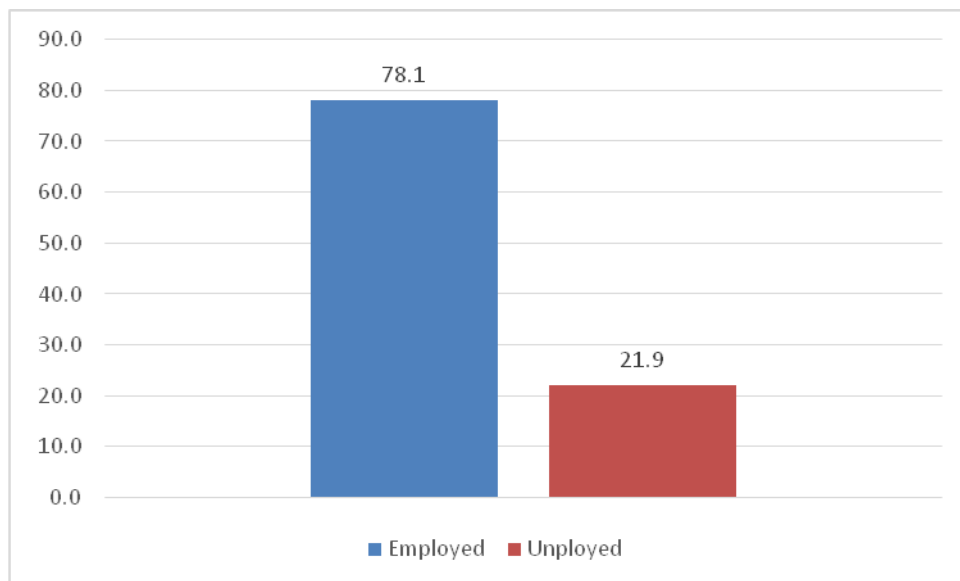


Fig.5.2: Employment status of respondent

Following table 5.3 and chart 5.3 show the sector employed. Out of three sectors, majority of the respondents are self-employed 52.30% (146 nos) and then coming government 25.10% (70 nos). Few of the respondents are in private sector 22.60% (63 nos).

Table 5.3: Sector employed (N=279)

Particulars	Frequency	Percent	Cumulative Percent
Government	70	25.1	25.1
Private	63	22.6	47.7
Self-employed	146	52.3	100.0
Total	279	100.0	

Source: developed from the survey data

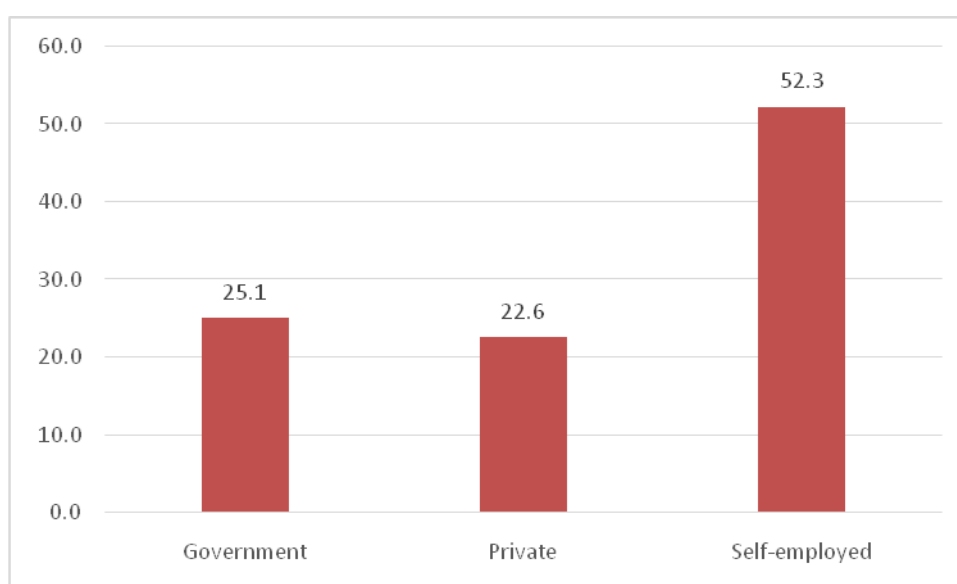


Fig.5.3: Sector employed

Following table 5.4 and chart 5.4 show the income of the respondent in Sikkim. Majority of the respondents are having income above 15001 rupees 45.90% (128 nos) then coming between the range of 5001 to 10000 27.90% (78 nos). Few respondents are having income between 5001 to 10000 i.e. 27.90% (78 nos).

Table 5.4: Income of respondent (N=279)

Particulars	Frequency	Percent	Cumulative Percent
Upto Rs 5000	22	7.9	7.9
Rs 5001 to Rs 10,000	78	27.9	35.8
Rs 10,001 to Rs 15,000	51	18.3	54.1
15,001 and above	128	45.9	100.0
Total	279	100.0	

Source: developed from the survey data

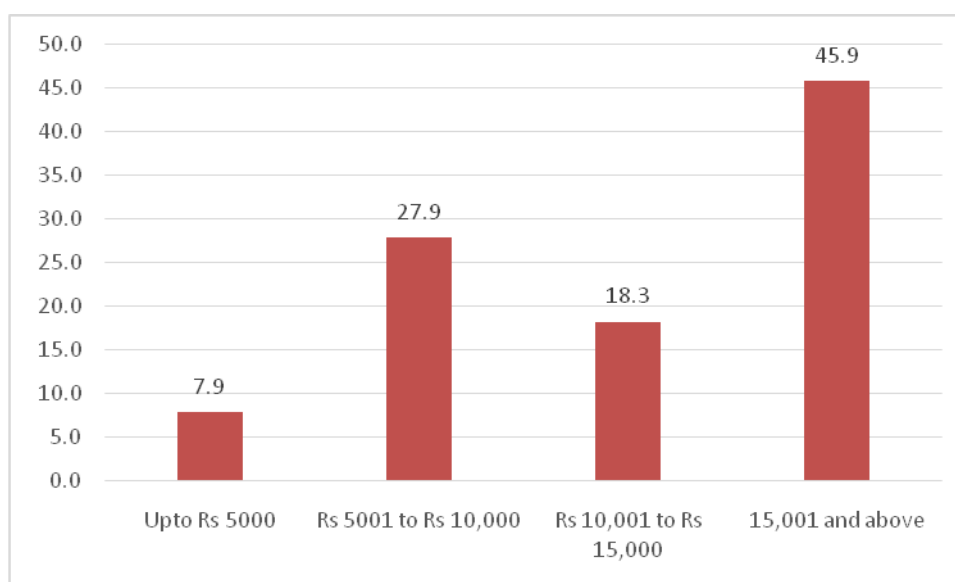


Fig.5.4: Income of respondent (N=279)

Demographic Profile of the Respondents (N = 279)

The primary data is obtained through a well-framed questionnaire circulated among different accountholders of SISCO Bank Ltd., located in four districts of Sikkim. The questionnaire comprises of personal details to be filled by the

respondents. The frequency and percentage analysis is applied to identify different categories of accountholders and their backgrounds.

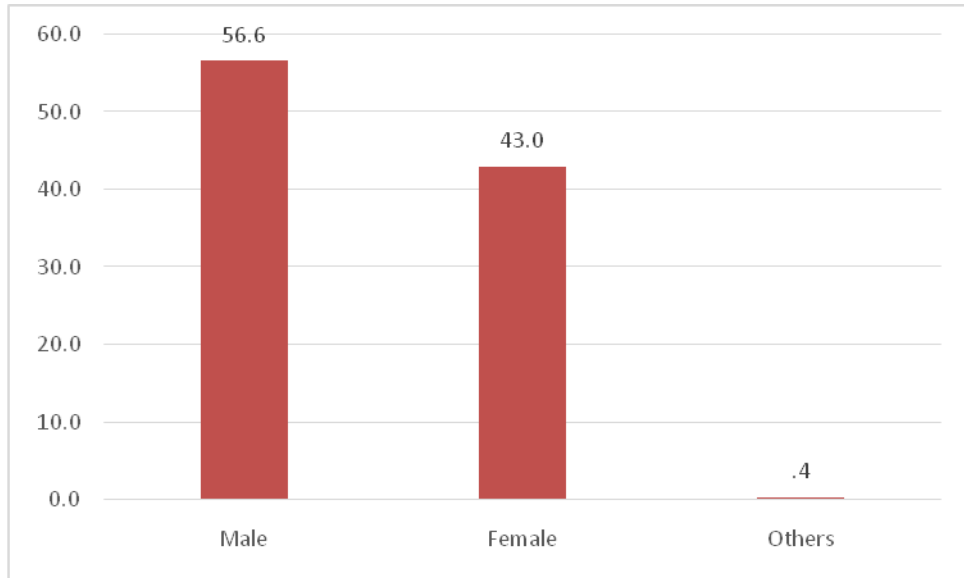
The table 5.5 below presents the demographic profile of the respondents on the basis of gender, marital status, age, educational qualification, religion and caste.

Table 5.5: Demographic Profile of the respondents (N=279)

Particulars	Frequency	Percent	Cumulative Percent
Gender of respondent			
Male	158	56.6	56.6
Female	120	43.0	99.6
Others	1	0.4	100.0
Total	279	100.0	
Age of respondent			
18-27	130	46.6	46.6
28-37	74	26.5	73.1
38-47	35	12.5	85.7
48-57	26	9.3	95.0
58 and above	14	5.0	100.0
Total	279	100.0	
Religion of respondent			
Hindu	128	45.9	45.9
Muslim	15	5.4	51.3
Christian	71	25.4	76.7

Buddhist	61	21.9	98.6
others	4	1.4	100.0
Total	279	100.0	
Caste of respondent			
General	37	13.3	13.3
SC	54	19.4	32.6
ST	83	29.7	62.3
OBC	105	37.7	100.0
Total	279	100.0	
Education of respondent			
Illiterate	31	11.1	11.1
Up to class X	74	26.5	37.6
Undergraduate	48	17.2	54.8
Graduate	65	23.3	78.1
Postgraduate and more	61	21.9	100.0
Total	279	100.0	

Source: developed from the survey data



Source: developed from the collected data

Fig.5.5: Gender of the respondents (N=279)

In gender, majority of the respondents are male 56.60 percent (158 nos) and 43.0 percent are female (120 nos).

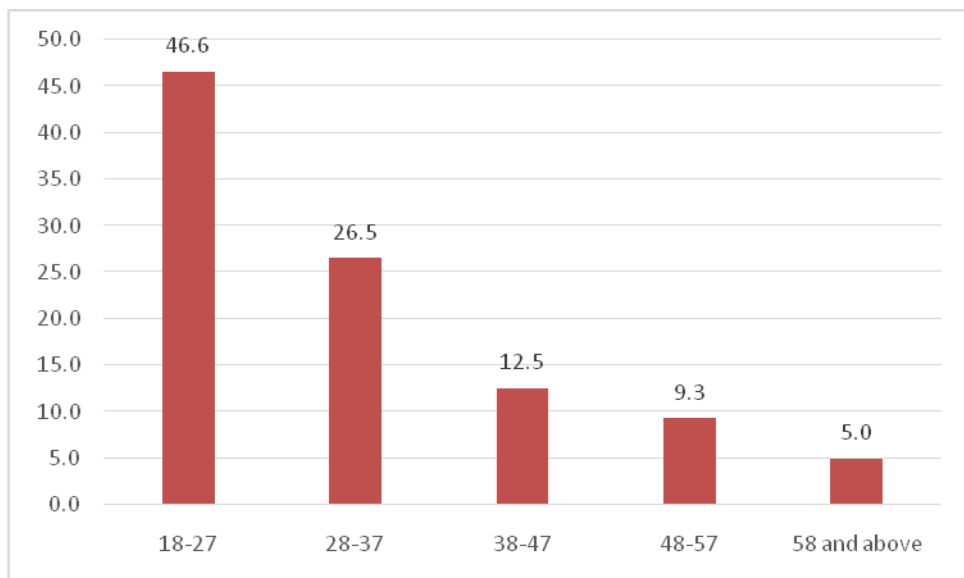


Fig. 5.6: Age of the respondents (N=279)

The above chart 5.6 shows the percentage figure of different age group of the respondent. Majority of the respondents (46.60%) are in the age group (18 to 27 years) then coming in the age group of 28 to 37 years (26.50%). Few respondents are in the age group of 48 to 57 years (9.305) and 58 years and above (5.0%).

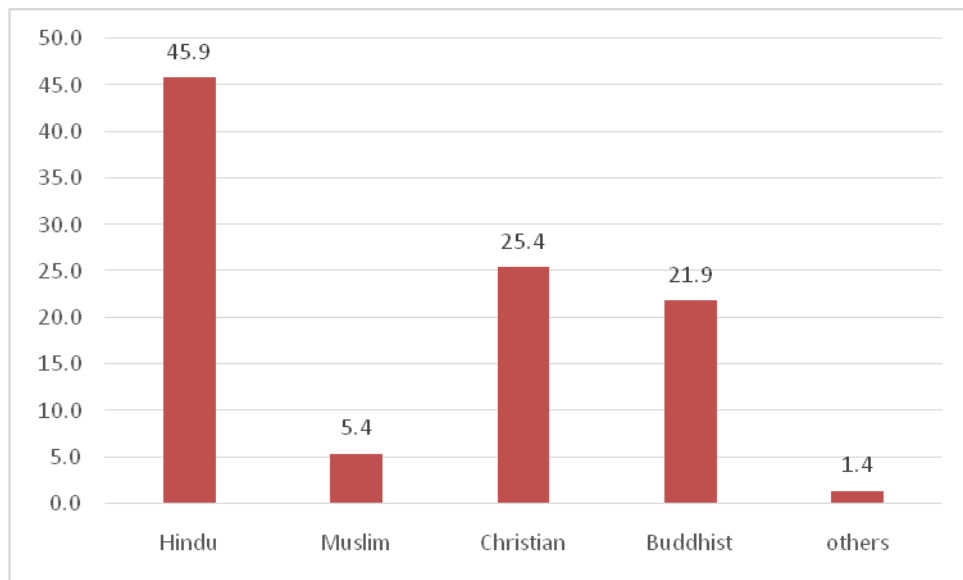


Fig.5.7: Religion of the respondents (N=279)

The above chart 5.7 shows the religion of the respondent of the Sikkim. Majority of the respondent are belonging to Hindu (45.90%) then coming Christian (25.40%). Few of the respondents belong to Buddhist (21.90%) and Muslim (5.40%).

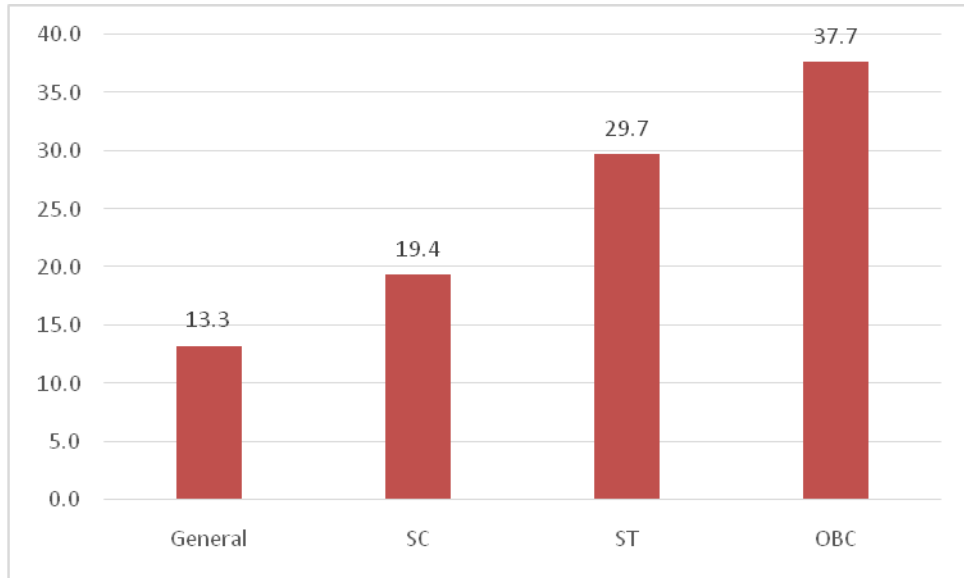


Fig.5.8: Caste of the respondents (N=279)

Source: developed from the collected data

In case of caste of the respondent, majority of the respondents belong to OBC (37.70%) and ST (29.70%). Few of the respondents are in SC (19.40%) and General category (13.30%).

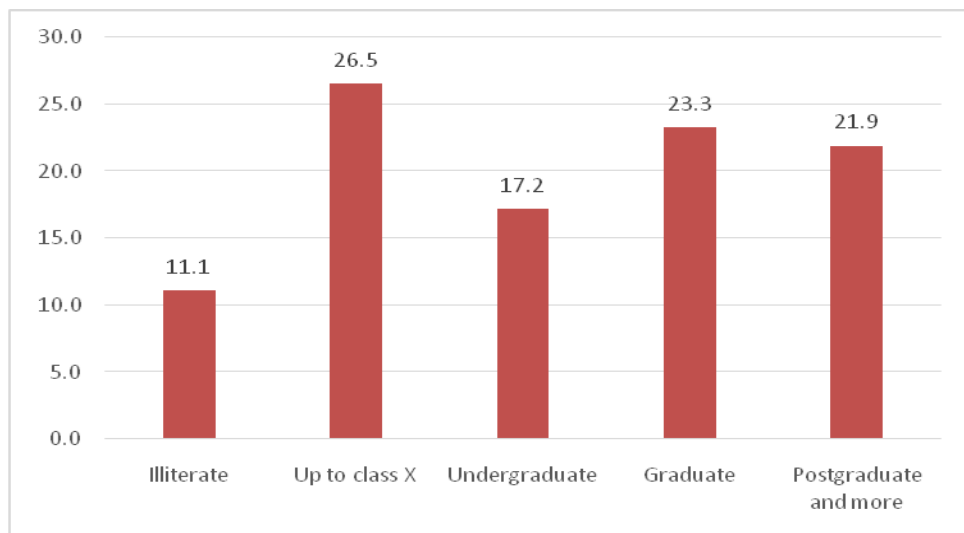


Fig.5.9: Education of the respondents (N=279)

Source: developed from the collected data

Similarly, in educational qualification, majority of the respondents having qualification up to class X (26.50%) and graduates (23.30%), then under graduate (17.20%) and few of the respondents are illiterate (11.10%).

5.2 PART B: Savings of the respondents (N=279)

The following table 5.6 and chart 5.6 show that the respondent having different bank account. 93.50 percent (261 nos) are having multiple bank accounts. Few respondents are not having multiple bank accounts. (6.50%).

Table 5.6: Respondent having multiple bank account

Particulars	Frequency	Percent	Cumulative Percent
Yes	261	93.5	93.5
No	18	6.5	100.0
Total	279	100.0	

Source: developed from the survey data

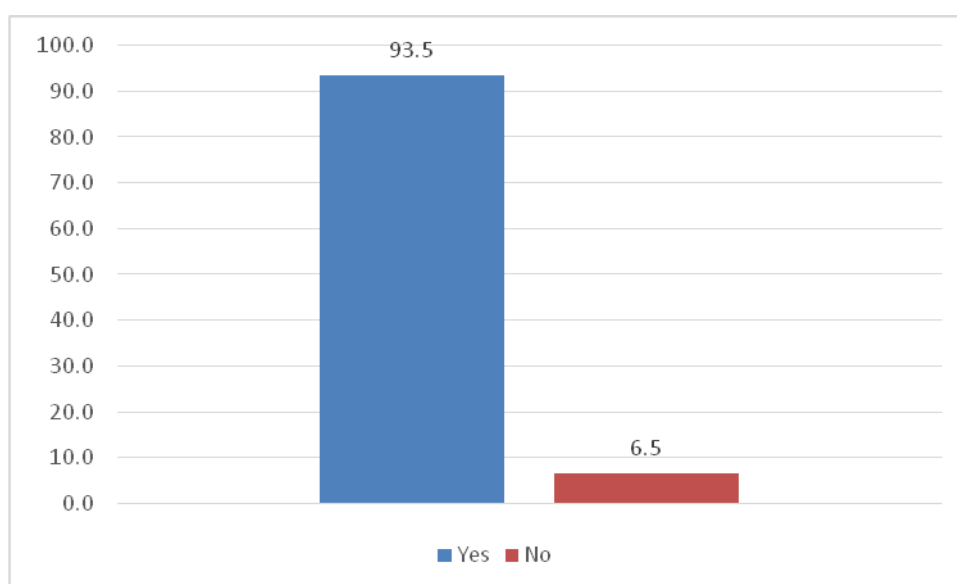


Fig.5.10: Respondent having multiple bank account

The following table 5.7 shows the cross tabulation between respondents having bank account and the type of a/c. Result of the table reveals that 207 number of respondents having saving bank account (79.60%), then coming current account (17.30%) and fixed deposit account (3.10%).

Table 5.7: Cross tabulation between respondent having bank account and If yes which type of a/c Cross tabulation

Particulars			If yes which type of a/c			Total
			Saving bank A/C	Current A/C	Fixed deposit A/C	
Respondent having bank account	Yes	Count	208	45	8	261
		%	79.6%	17.3%	3.1%	100.0%
Total		Count	207	45	8	261
		%	79.6%	17.3%	3.1%	100.0%

Source: developed from the survey data

The following table 5.8 shows the cross tabulation between respondent having multiple bank accounts and reasons for no account. Majority of the respondents do not have bank account because of not important (55.6%), and then no bank nearby (22.20%) followed by lengthy process of opening of account (16.7%).

Table 5.8: Cross tabulation between Respondent having bank account and reasons for no account

Particulars			Reasons for no account					Total
			No money	Tried but refused	Lengthy process	No bank nearby	Not important	
Respondent having bank account	Yes	Count	1	5	33	101	68	208
		%	0.5%	2.4%	15.9%	48.6%	32.7%	100.0%
	No	Count	0	1	3	4	10	18
		%	0.0%	5.6%	16.7%	22.2%	55.6%	100.0%
Total		Count	1	6	36	105	78	226
		%	0.4%	2.7%	15.9%	46.5%	34.5%	100.0%

Source: developed from the survey data

The following table 5.9 and chart 5.11 show the reasons for refusing account. Majority of the response is coming as “unknown” 49.10% and then coming being unemployed (38.70%).

Table 5.9: Reasons for refusing account

Sl.	Particulars	Frequency	Percent	Cumulative Percent
1	Being unemployed	108	38.7	38.7
2	Min balance requirements	19	6.8	45.5
3	Previous debt	15	5.4	50.9
4	Unknown	137	49.1	100.0
	Total	279	100.0	

Source: developed from the survey data

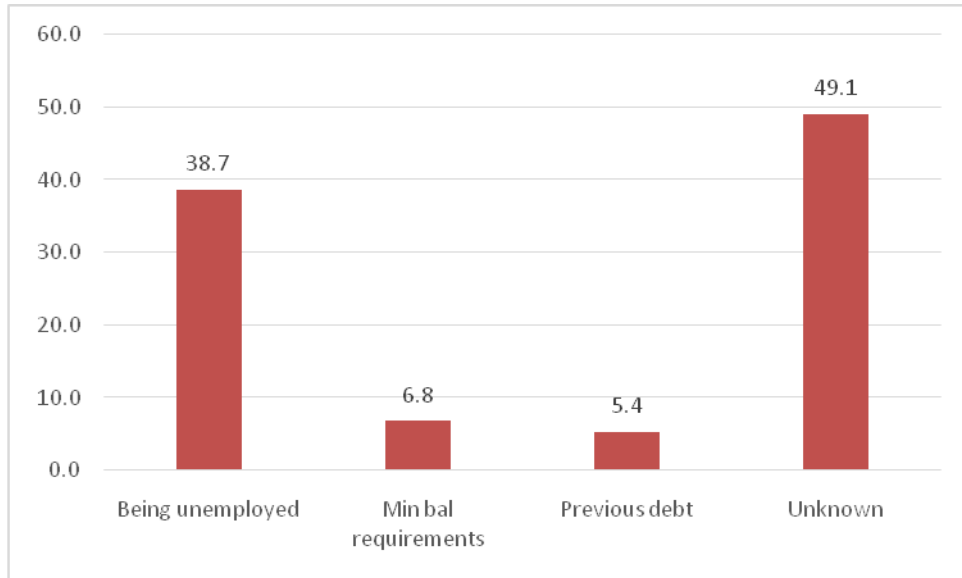


Fig.5.11: Reasons for refusing account

The following table 5.10 and chart 5.12 show no interest in opening SISCO account. The table reveals majority of the respondents are saying as “Not Important” 73.10 percent and then coming because of many charges i.e. 7.90%.

Table 5.10: No interest in opening SISCO account

Sl.	Particulars	Frequency	Percent	Cumulative Percent
1	Many charges	22	7.9	7.9
2	Tried but refused	20	7.2	15.1
3	Lengthy process	19	6.8	21.9
4	Not important	204	73.1	95.0
5	Any other reason	14	5.0	100.0
Total		279	100	

Source: developed from the survey data

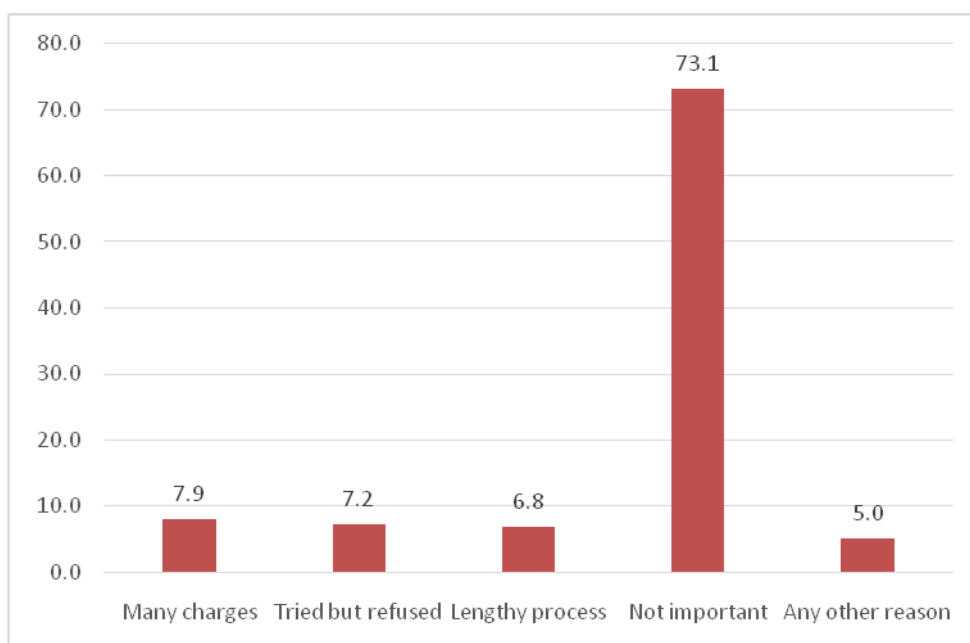


Fig.5.12: No interest in opening SISCO account

The following table 5.11 and 5.13 chart show the different reasons that the respondents are opening account in SISCO bank. Table reveals, majority of the respondents are saying ‘for saving purpose’ 68.80% and then coming ‘to receive NREGP’ 19.40%. Few of the respondents are giving reason as ‘to receive government payments’. 9.70%.

Table 5.11: Reasons to open account (N=279)

Sl.	Particulars	Frequency	Percent	Cumulative Percent
1	To receive NREGP payments	54	19.4	19.4
2	To receive Govt payments	27	9.7	29.1
3	To receive remittances	1	0.4	29.5
4	For saving purpose	192	68.8	98.3
5	Loan purpose	1	0.4	98.7
6	Others	4	1.3	100.0
Total		279	100.0	

Source: developed from the survey data

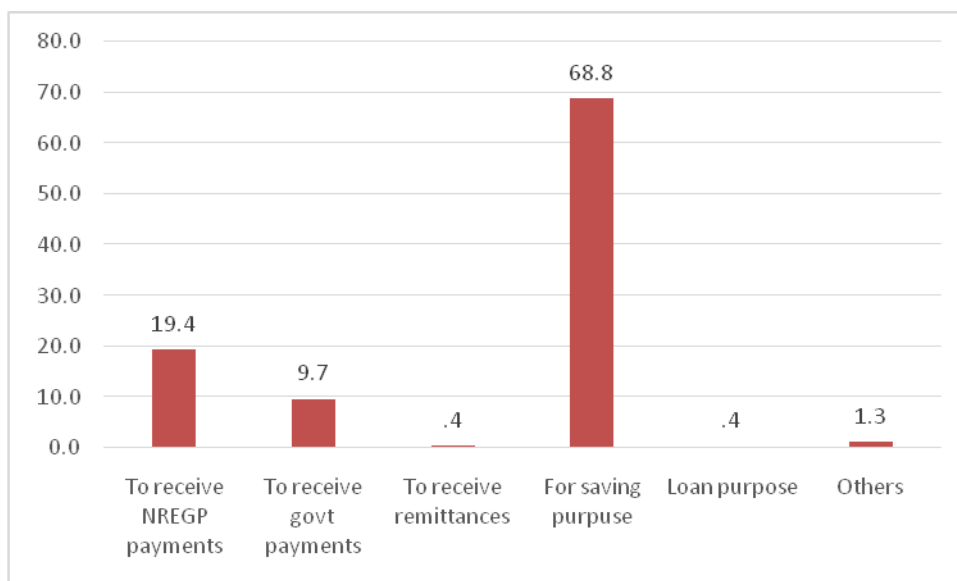


Fig.5.13: Reasons to open account

In the following table 5.12, the respondents getting help from “bank officials’ 60.60% (169 nos) to open account. Then coming by ‘relatives’ 15.80% and by ‘friends’ 14.70%.

Table 5.12: Help in Open account (N=279)

Sl.	Particulars	Frequency	Percent	Cumulative Percent
1	Village panchayat	4	1.4	1.4
2	Bank officials	169	60.6	62.0
3	Neighbors	21	7.5	69.5
4	Friends	41	14.7	84.2
5	Relatives	44	15.8	100.0
	Total	279	100.0	

Source: developed from the survey data

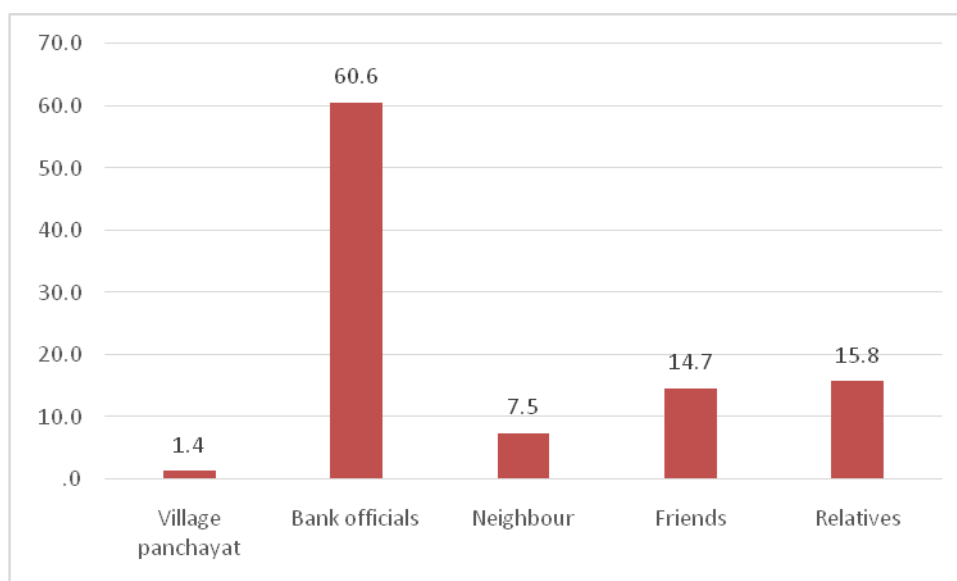


Fig.5.14: Help in Opening account

5.3 PART C: BORROWINGS (N=379)

Following table 5.13 and chart 5.15 show the loan taken and borrowed. Majority of the response is coming as “No” 46.20% and ‘yes from bank’ 42.30%. Few of the respondents are saying as ‘yes from friends’ 6.10% and ‘yes from relatives’ 3.90%.

Table 5.13: Borrowed or loan taken (N=279)

Sl.	Particulars	Frequency	Percent	Cumulative Percent
1	No	129	46.2	46.2
2	Yes from bank	118	42.3	88.5
3	Yes from relatives	11	3.9	92.5
4	Yes from friends	17	6.1	98.6
5	Yes from money lenders	4	1.4	100.0
Total		279	100.0	

Source: developed from the survey data

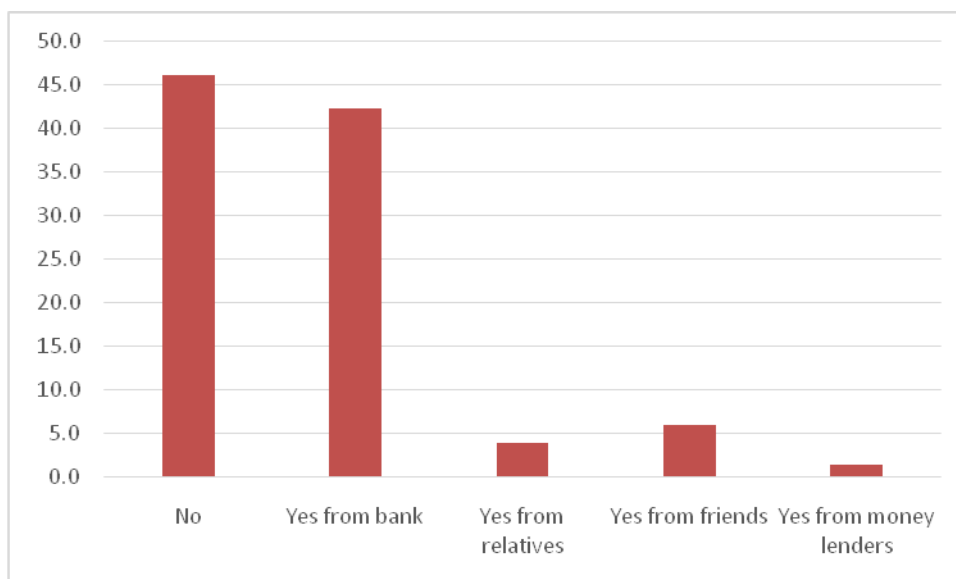


Fig.5.15: Borrowed or loan taken

Table 5.14: Reasons to borrow from banks (N=279)

Sl.	Particulars	Frequency	Percent	Cumulative Percent
1	Low interest rate	56	20.1	46.7
2	Arranged by banks	57	20.4	94.2
3	Easy to take loan	2	0.7	95.8
4	Being trustworthy lender	5	1.8	100.0
Total		120	43.0	
<i>Missing</i>		<i>159</i>	<i>57.0</i>	
Total		279	100.0	

Source: developed from the survey data

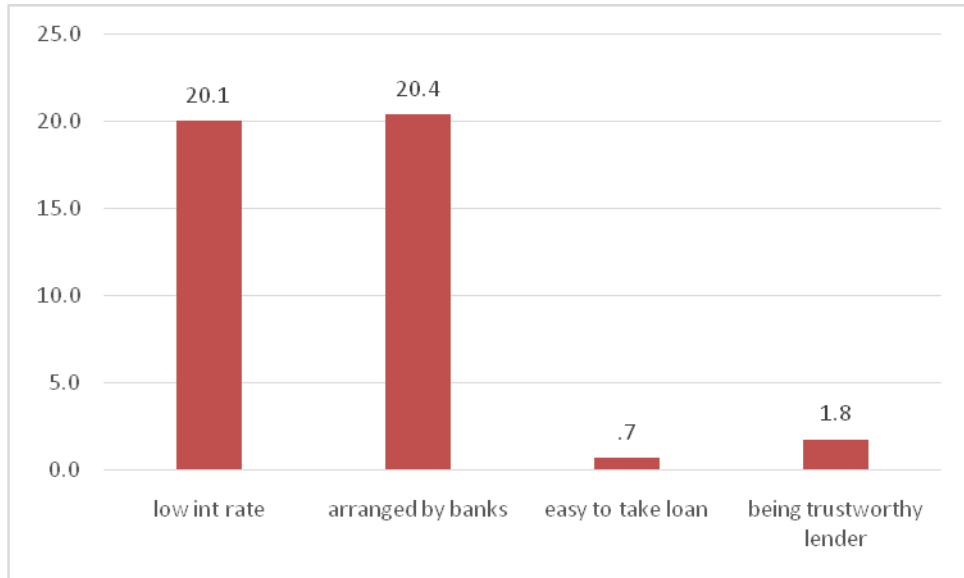


Fig.5.16: Reasons to borrow from banks

In the reasons to borrow from banks, majority of the response is coming as ‘arranged by banks’ 20.40% and low interest rate 20.10%. Further, few number of respondents are borrowing from banks because of being trustworthy lender (1.80%) and easy to take loan (0.70%).

The below table 5.15 shows association between frequencies of borrower or loan taken from bank with respect to reason for borrows from other source. The result reveals, majority of the response is coming ‘yes from bank with no-security’ as 56.10%, and then coming because of locally available (25.20%).

**Table 5.15: Cross tabulation Borrowed or loan taken w.r.t reason for borrow
from other source**

Particulars			Reason for borrow from other source					Total	
			Able to borrow small sum	No security	Locally available	Easy repayment	Convenient to repayment		
Borrowed or loan taken	No	Count	0	68	47	9	4	128	
		%	0.0%	53.1%	36.7%	7.0%	3.1%	100.0%	
	Yes from bank	Count	4	60	27	13	3	107	
		%	3.7%	56.1%	25.2%	12.1%	2.8%	100.0%	
	Yes from relatives	Count	0	5	3	3	0	11	
		%	0.0%	45.5%	27.3%	27.3%	0.0%	100.0%	
	Yes from friends	Count	0	13	1	1	2	17	
		%	0.0%	76.5%	5.9%	5.9%	11.8%	100.0%	
	Yes from money lenders	Count	0	3	0	0	1	4	
		%	0.0%	75.0%	0.0%	0.0%	25.0%	100.0%	
	Total		Count	4	149	78	26	10	267
			%	1.5%	55.8%	29.2%	9.7%	3.7%	100.0%

Source: developed from the survey data

Table 5.16: Chi-Square Tests (Borrowed or loan taken w.r.t reason for borrow from other source)

Particulars	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	29.587	16	0.020
Likelihood Ratio	29.332	16	0.022
Linear-by-Linear Association	0.001	1	0.969
N of Valid Cases	267		

Source: developed from the survey data

The Pearson Chi-square significance value of the above two associations is coming 29.587 with 16 degrees of freedom. Therefore, it is found that there is a significant association between **Borrowed or loan taken w.r.t reason for borrows from other source**. Since, significant value of chi-square test is coming 0.020, null hypothesis is rejected and alternative hypothesis is accepted i.e. *there exists a significant association between borrowed or loan taken w.r.t reason for borrow from other source (H₁)*.

Table 5.17: Reason for borrowing from other source

Sl. No.	Particulars	Frequency	Percent	Cumulative Percent
1	Able to borrow small sum	4	1.4	1.5
2	No security	149	53.4	57.3
3	Locally available	78	28.0	86.5
4	Easy repayment	26	9.3	96.3
5	Convenient to repayment	10	3.6	100.0
	Total	267	95.7	
	<i>Missing</i>	<i>12</i>	<i>4.3</i>	
	Total	279	100.0	

Source: developed from the survey data

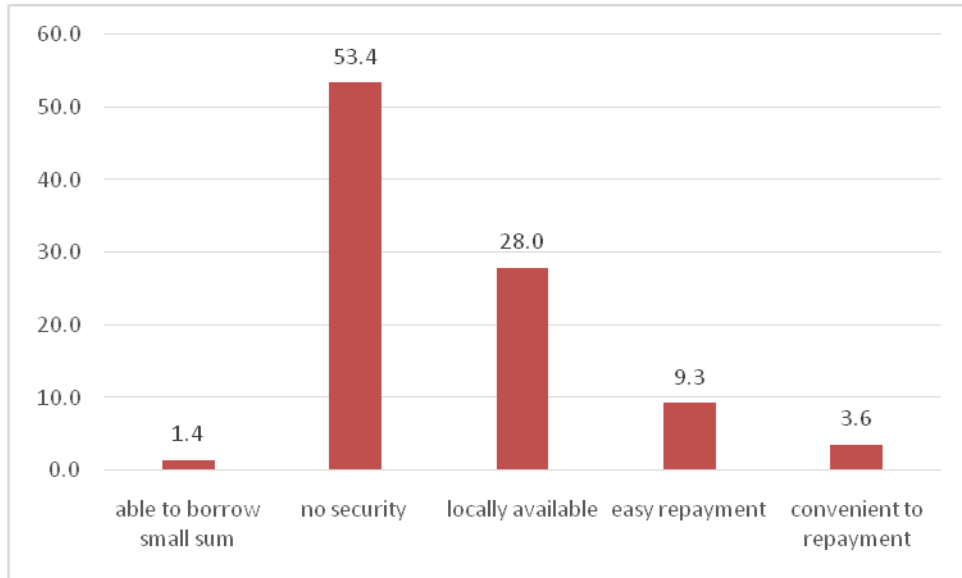


Fig.5.17: Reason for borrowing from other source

The above table 5.17 and chart 5.17 show the frequency and percentage figures of reason for borrowing from other source. Result shows majority of the preference is coming to ‘no security’ 53.40% and then coming to ‘locally available’ 28.0%.

Table 5.18: Using other financial Product (N=279)

Sl.	Particulars	Frequency	Percent	Cumulative Percent
1	No	31	11.1	11.4
2	Yes insurance	39	14.0	25.8
3	Yes Credit card	1	0.4	26.2
4	Yes Debit card	200	71.7	100.0
Total		271	97.1	
<i>Missing</i>		8	2.9	
Total		279	100.0	

Source: developed from the survey data

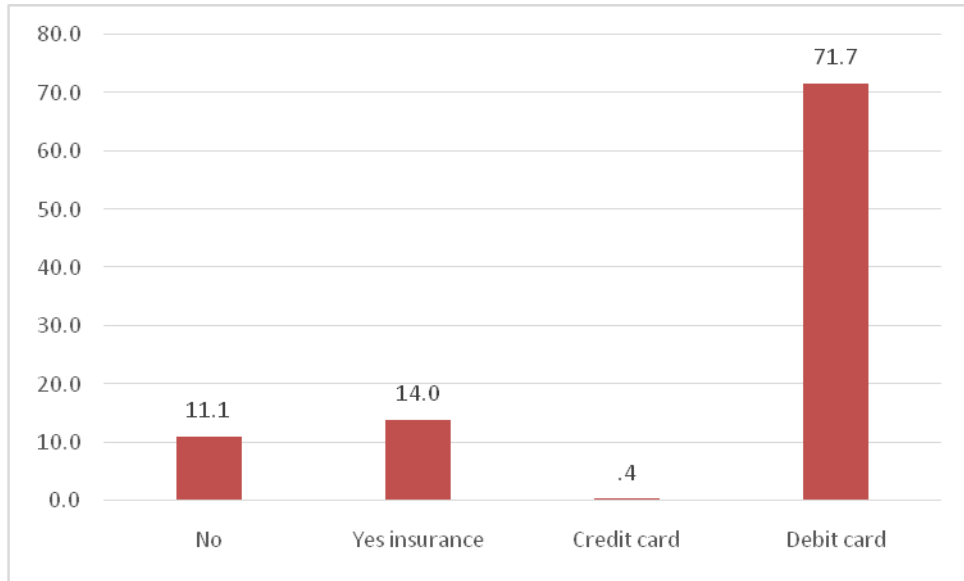


Fig.5.18: Using other financial Product

In using of other financial product, majority of the response is coming to ‘debit card’ 71.70%, followed by ‘yes insurance’ 14.0% and less preference is coming to ‘no’ 11.10%.

Table 5.19: Taking advice on financial matter (N=279)

Sl.	Particulars	Frequency	Percent	Cumulative Percent
1	No	82	29.4	29.4
2	Yes from family	59	21.1	50.5
3	Yes from friend	20	7.2	57.7
4	Yes from fin advisor	90	32.3	90.0
5	Social from worker	28	10.0	100.0
Total		279	100.0	

Source: developed from the survey data

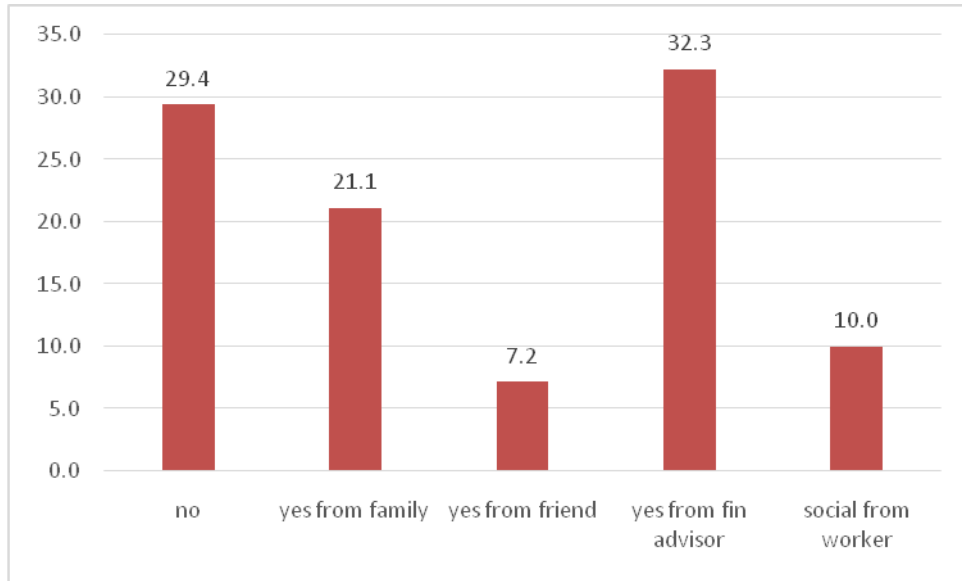


Fig.5.19: Taking advice on financial matter (N=279)

The above table 5.19 and chart 5.19 show the frequency and percentage figures of taking advice on financial matter. Majority of the response is coming to ‘yes’ from financial advisor’ 32.30% and then coming to ‘no’ 29.40%.

Table 5.20: Advice was helpful (N=279)

Sl.	Particulars	Frequency	Percent	Cumulative Percent
1	Very helpful	2	1.0	1.0
2	Helpful	186	94.9	95.9
3	Not helpful	8	4.1	100.0
Total		196	70.3	
Missing		83	29.7	
Total		279	100.0	

Source: developed from the survey data

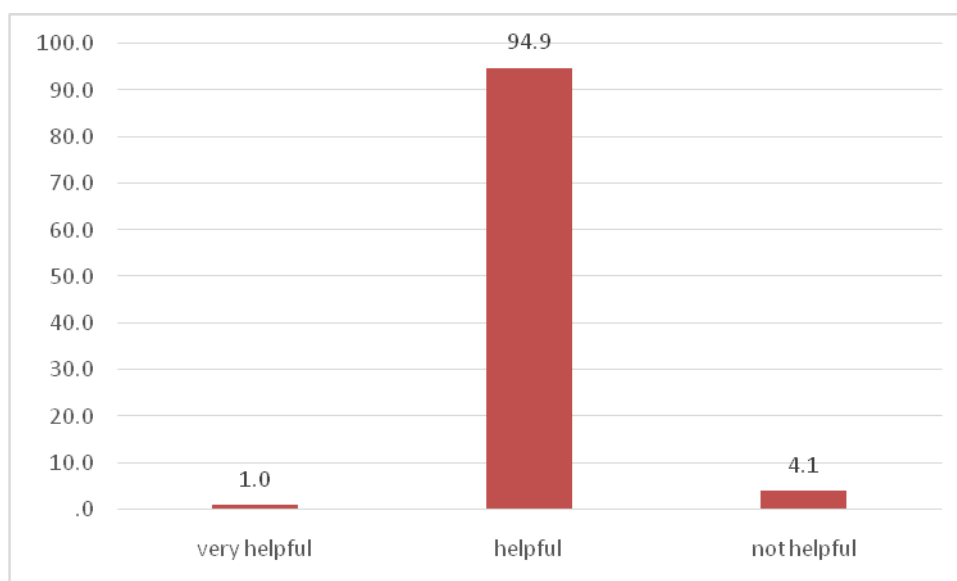


Fig.5.20: Advice was helpful

Following table 5.21 shows the cross tabulation between availability of financial advice centre w.r.t how much satisfied with centre. In ‘yes’ response, majority of satisfaction is coming to ‘satisfied’ 83.20% and ‘Unsatisfied’ 8.40%.

Table 5.21: Cross tabulation between availability of fin advice centre w.r.t how much satisfied with centre (N=109)

Particulars			How much satisfied with centre				Total
			Very satisfied	Satisfied	Just ok	Unsatisfied	
Availability of fin advice centre	Yes	Count	1	89	8	9	107
		%	0.9%	83.2%	7.5%	8.4%	100.0%
	No	Count	0	2	0	0	2
		%	0.0%	100.0%	0.0%	0.0%	100.0%
Total		Count	1	91	8	9	109
		%	0.9%	83.5%	7.3%	8.3%	100.0%

Source: developed from the survey data

The above table 5.21 shows the frequency and percentage figures of cross tabulation between availability of financial advice centre w.r.t how much satisfied with centre. In availability of financial advice majority of response is coming to yes (107 nos). In yes, majority of the respondents are 'satisfied' 83.20%, few number of respondents are unsatisfied i.e. 8.40%.

5.4 PART D: OTHER FINANCIAL SERVICES (N=279)

5.4.1 Financial Access (FA)

5.4.1.1 Reliability Analysis (Financial Access)

Reliability of the variables was ensured through item analysis. Item sum correlations were calculated and only items with more than 0.5 correlations with the sum was included for summation (Hair et al 1998). The item sum correlations and the Cronbach Alpha were calculated for each variable to check for internal consistency of the scale. The Cronbach Alpha in all cases are higher than 0.7. An Alpha value of 0.6 and above is considered usable in exploratory studies (Hair et al 1998). The range of the item sum correlations and reliability coefficients are given in the table.

Table 5.22: Descriptive and Reliability Analysis (Variables influencing Financial Access)

Sl. No.	Items	Mean	Std. Deviation	Cronbach's Alpha (Item wise)	Cronbach's Alpha	N of Items
1	I do not open a/c with bank since it is time taking process	2.35	1.10	0.610	0.659	8
2	I do not open a/c with bank since bank employees are not cooperative	2.53	0.96	0.633		
3	I do not open a/c with bank Because I am unable to keep minimum balance in the account as prescribed by the banks	2.56	1.05	0.629		
4	I do not open a/c with bank Because filling up form for opening an account is complex process	2.50	1.06	0.623		
5	I do not open a/c with bank I do not have savings habit	2.62	1.15	0.655		
6	I find difficulties in taking loans from banks due to delay in sanctioning and getting loans	3.17	1.19	0.620		
7	I do not open a/c with bank since bank charges heavy interest on loans	3.10	1.15	0.630		
8	I find difficulties in taking loans from banks since there is restriction in the use of loan amount	2.99	1.09	0.621		

Source: developed from the survey data

The above table 5.22 represents the reliability statistics of the scales (Financial Access) used for the financial inclusion of Sikkim. The combined Cronbach's alpha value of all the items is coming more than 0.6 which reveals that the items used in the questionnaire are internally homogenous and consistent. Therefore, the factors and variables in the questionnaire are significantly contributing the study.

5.4.1.2 Factor Analysis (Factors influencing financial access)

Analysis of internal homogeneity of the items by factor Analysis (Factors influencing Financial access):

The factor analysis was applied to eight variables related to the views of respondents towards variables influencing the financial access. The KMO value of factor analysis is 0.705 which indicates that factor analysis is reliable to be done for these 8 variables which is also cross validated by significant value of Bartlett's Test of Sphericity i.e. 0.000.

Table 5.23: KMO and Bartlett's Test (Financial Access)

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		0.785
Bartlett's Test of Sphericity	Approx. Chi-Square	352.155
	df	28
	Sig.	0.000

Source: developed from the survey data

Kaiser (1974) recommends accepting values greater than 0.5 as acceptable (values below this should lead to either collect more data or rethink which variable to include). Furthermore, values between 0.5 and 0.7 are mediocre, values between 0.7 and 0.8 are good, values between 0.8 and 0.9 are great and values above 0.9 are superb. For these data the value is 0.785, which falls into range being good. So, we should be confident that factor analysis is appropriate for these data.

Table 5.24: Total Variance Explained (Factors influencing Financial Access)

Component	Initial Eigen values			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	2.388	29.845	29.845	2.388	29.845	29.845	1.674	20.922	20.922
2	1.205	15.064	44.909	1.205	15.064	44.909	1.623	20.293	41.214
3	1.015	12.682	57.591	1.015	12.682	57.591	1.310	16.377	57.591
4	0.918	11.473	69.064						
5	0.691	8.634	77.698						
6	0.673	8.415	86.113						
7	0.582	7.273	93.386						
8	0.529	6.614	100.000						

Extraction Method: Principal Component Analysis.

Source: developed from the survey data

The factor analysis was done for all the 8 variables. All these variables are reduced to three different factors which explained around 57.591% of the total variance. The first factor with their loading pattern indicates that a general factor is running throughout all the items explaining about 20.922% per cent of the variance. The second factor explains about 20.293 %and third factor 16.377% of the total variance. The entire three factors explain about 57.591% of the total Variance.

The scree plot displays the number of the factor corresponding to its eigenvalue. The scree plot orders the eigenvalues from the largest to smallest. It is used to select the number of factors to use based on the size of the eigenvalues. The ideal pattern of the scree plot starts with a steep curve, followed by a bend and then a straight line. The factors in the steep curve are used before the first point that starts the line trend.

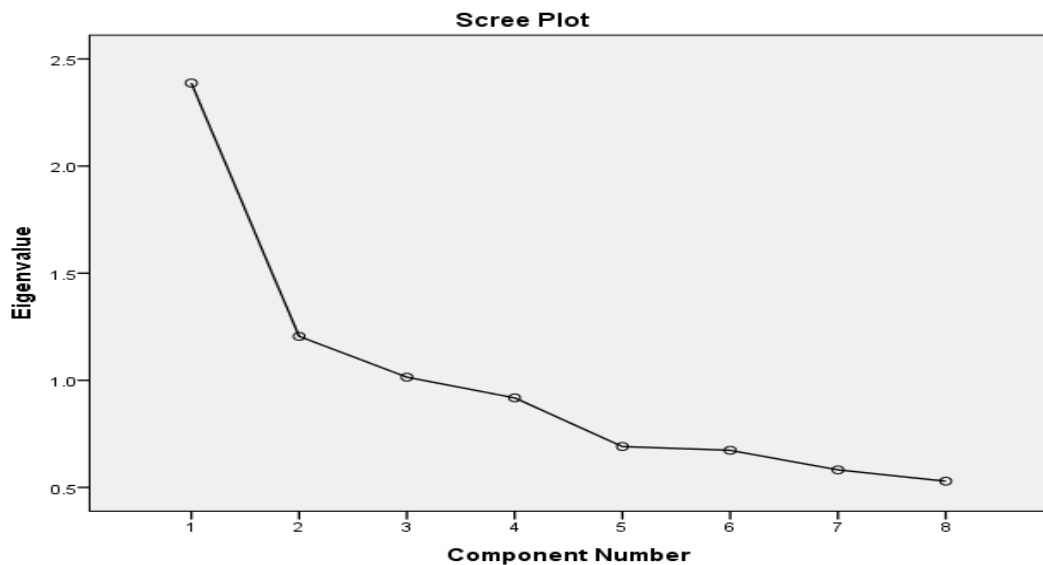


Fig.5.21: Scree Plot

This scree plot shows that the first three factors account for most of the total variability in data, given by the eigenvalues. The eigenvalues for the first three factors are all greater than 1. The remaining factors account for a very small proportion of the variability and are likely unimportant.

Table 5.25: Rotated Component Matrix (Factors influencing financial access)

Sl.	Particulars	Component		
		1	2	3
1	I do not open a/c with bank since it is time taking process	0.669		
2	I do not open a/c with bank since bank employees are not cooperative	0.809		
3	I do not open a/c with bank because I am unable to keep minimum balance in the account as prescribed by the banks	0.676		
4	I do not open a/c with bank Because filling up form for opening an account is complex process			0.611
5	I do not open a/c with bank I do not have savings habit			0.833
6	I find difficulties in taking loans from banks due to delay in sanctioning and getting loans		0.804	
7	I do not open a/c with bank since bank charges heavy interest on loans		0.778	
8	I find difficulties in taking loans from banks since there is restriction in the use of loan amount		0.565	

Extraction Method: Principal Component Analysis.

Rotation Method: Varimax with Kaiser Normalization.

Source: developed from the survey data

All the 8 variables are reduced to 3 factors. We have extracted the factors through Varimax method and through principal component analysis where the Eigen value should be greater than 1. Variable 1, 2 and 3 constitute factor 1 with new name as 'delay in process and not cooperative' Similarly, variable 6, 7 and 8 defined as factor

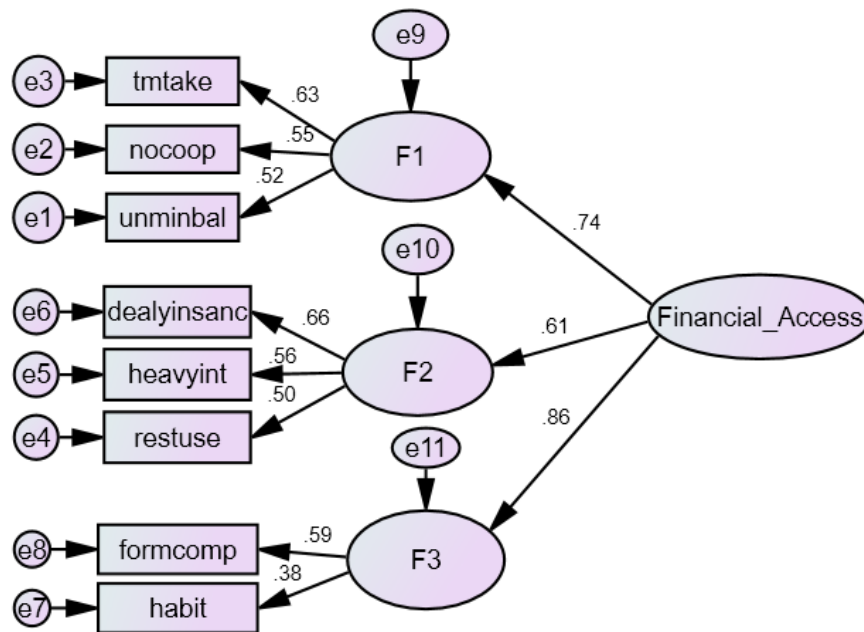
2 with new name as ‘loan approval process’ Variable 4 and 5 constitute factor 3 named as ‘Saving habit’.

Table 5.26: New Factors named (Financial Access)

Factors	Variables	New Name
Factor 1 (FA1)	1, 2 and 3	Delay in Process and not-cooperative
Factor 2 (FA2)	6, 7 and 8	Loan approval Process
Factor 3 (FA3)	4 and 5	Saving habit

Source: developed from the survey data

5.4.1.3 Structural Equation Model (SEM of Financial Access)



Factor 1 (FA1): Delay in Process and not-cooperative; **Factor 2 (FA2):** Loan approval Process; **Factor 3 (FA3):** Saving habit

Fig. 5.22: Structural Equation Model (SEM of Financial Access)

Source: developed from the survey data

Table 5.27: SEM results of Financial Access

Particulars	CFI	RMSEA	GFI	NFI
Chi-square = 41.175	0.901	0.082	0.910	0.905
Degrees of freedom = 17		RFI		
Probability level = 0.001		0.909		

Source: developed from the survey data

CFI: Comparative fit index, **RMSEA:** Root Mean Square Error of Approximation, **NFI:** Normed fit index, **GFI:** Goodness – of-fit, **RFI:** Relative fit index

For construct adequacy and discriminate validity of the test of factors influencing financial access of Sikkim State Co-operative Bank Ltd for financial inclusion of Sikkim, a confirmatory factor analysis through AMOS was used to test whether the observed measures were associated with their respective constructs. The fit of the model was examined and verified, that each indicator loaded significantly with its intended construct. In the model, Chi-square = 41.175, df = 17, $p < 0.001$, CFI=0.901, GFI=0.910, NFI=0.905, RFI = 0.909, RMSEA=0.082, provided a good fit to the data (Browne and Cudek, 1993; Hu and Bentler, 1999). Each item loaded significantly with its intended construct, as the significant value of $p < .01$. All the p value of regression weights was acceptable at a significant level of 0.05.

Table 5.28: Regression Weights (factors influencing Financial Access)

Particulars	Estimate	S.E.	C.R.	P	Label
F1 <--- Financial Access	1.071	0.339	3.157	0.002	
F2 <--- Financial Access	0.897	0.280	3.202	0.001	
F3 <--- Financial Access	1.000				
A1 <--- F1	1.000				
A2 <--- F1	0.976	0.162	6.042	***	
A3 <--- F1	1.263	0.205	6.154	***	
A4 <--- F2	1.000				
A5 <--- F2	1.171	0.196	5.988	***	
A6 <--- F2	1.415	0.236	6.007	***	
A7 <--- F3	1.000				
A8 <--- F3	1.430	0.364	3.924	***	

Source: developed from the survey data

All the factors i.e. **Factor 1 (FA1)**: Delay in Process and not-cooperative; **Factor 2 (FA2)**: Loan approval Process; **Factor 3 (FA3)**: Saving habit are significantly contributing the dependent factor i.e. financial access. Out of the three factors, factor 1 (1.071) and factor 3(1.00) contributes maximum to financial access.

Table 5.29: Regression weights of Independent Variables

Particulars	Estimate	S.E.	C.R.	P	Label
I do not open a/c with bank since it is time taking process (A1)	2.565	0.054	47.083	***	
I do not open a/c with bank since bank employees are not cooperative (A2)	2.527	0.050	50.560	***	
I do not open a/c with bank Because I am unable to keep minimum balance in the account as prescribed by the banks (A3)	2.355	0.057	41.278	***	
I do not open a/c with bank Because filling up form for opening an account is complex process (A4)	2.997	0.057	52.785	***	
I do not open a/c with bank I do not have savings habit (A5)	3.105	0.060	51.953	***	
I find difficulties in taking loans from banks due to delay in sanctioning and getting loans (A6)	3.167	0.062	51.213	***	
I do not open a/c with bank since bank charges heavy interest on loans (A7)	2.624	0.060	43.884	***	
I find difficulties in taking loans from banks since there is restriction in the use of loan amount (A8)	2.500	0.055	45.264	***	

Source: developed from the survey data

All the eight independent variables are being found statistically significant since significant value of t-test is coming less than 0.05. Out of these three variables, the

variable - *I find difficulties in taking loans from banks due to delay in sanctioning and getting loans (3.167)* is contributing maximum towards financial access measures of Sikkim State Co-operative Bank Ltd. in financial inclusion since regression coefficient is the highest.

5.4.2 Financial Awareness (FinA)

5.4.2.1 Reliability Analysis (Financial Awareness)

Table 5.30: Reliability Analysis (Financial Awareness)

Sl.	Items	Mean	Std. Deviation	Cronbach's Alpha (Item Wise)	Cronbach's Alpha	N of Items
1	I am not aware about the banking products (deposit a/c, interest on deposits etc.)	2.78	1.17	0.552	0.572	3
2	I am not aware about loans made available by banks	2.88	1.16	0.558		
3	I am not aware about different financial services provided by banks (ATM/Credit card/money transfer/internet banking etc.)	2.44	1.19	0.588		

Source: developed from the survey data

The above table 5.30 represents the reliability statistics of the scale (Financial Awareness) for the measurement of financial inclusion in the state of Sikkim by the help of Sikkim State Cooperative Bank Ltd. The combined Cronbach's alpha value of all the items is coming more than 0.5 which reveals that the items used in the questionnaire are internally homogenous and consistent. Therefore, the factors and variables in the questionnaire are significantly contributing the study.

5.4.2.2 Multiple Regression Analysis (Financial Awareness)

Multiple regression equation:

$$Y = C + \beta x_1 + \beta x_2 + \beta x_3 + \beta x_4 + \beta x_5 + \dots + \beta x_n$$

Y = prediction relationship of types of variables towards **(Financial Awareness)**

C = Constant value

β = Unstandardized Coefficient

$x_1, x_2, x_3 \dots$ = Dimension of independent variable (FA1, FA2, FA3)

The Regression models are used in the research for measurement of financial awareness of the respondents of Sikkim is to predict a variable from one or more than one variables. The Regression Analysis is used in the study to predict the extent of dependence of financial awareness with various factors of its explanatory variable. This has been tested by using the first result of the regression analysis i.e. ANOVA (F-test). Further, R square value of the regression analysis has been made to show the extent to which the explanatory variables explain the dependent factor.

The second result of the regression analysis i.e. t-test along with significant value (p-value) indicates the most significant explanatory variable that influences the explained/ dependent factor.

The regression co-efficient of the independent variables has been estimated and the results are shown in Table below.

Table 5.31: Model Summary (Financial Awareness)

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0.957	0.915	0.914	0.26571

a. Predictors: (Constant), FA3, FA2, FA1

Source: developed from the survey data

It is seen from the Table 5.31 that the co-efficient of determination (R^2) was 0.915 indicating that 91.50 per cent of the variation in the financial awareness of Sikkim Co-operative bank ltd. in financial inclusion can be explained by and influenced by the three explanatory variables (*I am not aware about the banking products (deposit a/c, interest on deposits etc.), I am not aware about loans made available by banks and I am not aware about different financial services provided by banks (ATM/Credit card/money transfer/internet banking etc.)*) by 91.50 percent which is a good indicator for establishing a well set relationship.

Table 5.32: ANOVA (Financial Awareness)

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	280.008	3	93.336	1322.021	0.000
	Residual	25.981	368	0.071		
	Total	305.989	371			

a. *Dependent Variable: FA*

b. *Predictors: (Constant), FA3, FA2, FA1*

Source: developed from the survey data

ANOVA: Analysis of Variance, **df:** degrees of freedom

The ANOVA (F-test) indicates that the scale/ factor – financial awareness initiatives of Sikkim State Co-operative Bank Ltd. was quite significant since it is seen from the table 5.32, that the significant value (p-value) of F-test are 0.000, which means that explanatory variables (*I am not aware about the banking products (deposit a/c, interest on deposits etc.), I am not aware about loans made available by banks and I am not aware about different financial services provided by banks (ATM/Credit card/money transfer/internet banking etc.)*) are highly significant with respect to the explained factor i.e. “Financial Awareness”.

Table 5.33: Regression Coefficients (Financial Awareness)

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics		
	B	Std. Error	Beta			Tolerance	VIF	
1	(Constant)	-0.049	0.046					
	FinA1	0.346	0.013	0.445	26.065	0.000	0.790	1.266
	FinA2	0.331	0.013	0.423	26.200	0.000	0.886	1.128
	FinA3	0.330	0.013	0.434	26.215	0.000	0.842	1.188

a. Dependent Variable: FA

Source: developed from the survey data

For the application of multiple regressions, all the independent variables should be categorical variables i.e. multicollinearity should not exist among independent variables. We know that if tolerance is less than 0.20 or 0.10 / a VIF (Variance inflation factor) is 5 or 10 and above it indicates a multicollinearity problem (see

O'Brien 2007). But in our case as shown in the Table 5.16. The value of tolerance of all items is more than 0.20 and the value of VIF of all items are less than 5. This suggests that no multicollinearity exists among the explanatory variables which explained the explained factor i.e. Financial Awareness measures of the Sikkim State Co-operative Bank Ltd. The dependent variable has been derived by taking the average of three independent variables of financial awareness.

Based on the Multiple Regression output table of “Financial Awareness (Y)” and its constituent variables, we are able to derive the following equation.

$$\mathbf{Financial\ Awareness\ (Y) = -0.049 + 0.346\ (FinA1) + 0.331\ (FinA2) + 0.330\ (FinA3)}$$

All the three independent variables have been found statistically significant since significant value of t-test is coming less than 0.05. Out of these three variables, the variable - *I am not aware about the banking products (deposit a/c, interest on deposits etc.)* (0.346) is contributing maximum towards financial awareness measures of Sikkim State Co-operative Bank Ltd. in financial inclusion since regression coefficient is the highest.

5.4.3 Access to Information (AI)

5.4.3.1 Reliability Analysis (Access to Information)

Table 5.34: Reliability Analysis (Access to Information)

Sl.	Items	Mean	Std. Deviation	Cronbach's Alpha (Item wise)	Cronbach's Alpha	N of Items
1	I do not have access to information about zero balance a/c of the bank	2.68	1.17	0.538	0.608	3
2	I do not have access to information about modern financial services of the bank	3.06	1.16	0.565		
3	I do not have access to information about interest rate in force in the bank	2.89	1.09	0.521		

Source: developed from the survey data

The above table 5.34 represents the reliability statistics of the scale (Access to Information) used for the measurement of financial inclusion in the State of Sikkim by the Sikkim Cooperative Bank Ltd. The combined Cronbach's alpha value of all the items is coming more than 0.5 which reveals that the items used in the questionnaire are internally homogenous and consistent. Therefore, the factors and variables in the questionnaire are significantly contributing the study.

5.4.3.2 Multiple Regression Analysis (Access to Information)

Table 5.35: Model Summary (Access to Information)

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0.959	0.921	0.920	0.25500

a. Predictors: (Constant), AI3, AI2, AI1

Source: developed from the survey data

It is seen from Table 5.35 that the co-efficient of determination (R^2) was 0.921 indicating that 92.10 per cent of the variation in the access to information of Sikkim Co-operative Bank Ltd. for financial inclusion can be explained by and influenced by the three explanatory variables (*I do not have access to information about zero balance a/c of the bank, I do not have access to information about modern financial services of the bank, I do not have access to information about interest rate in force*) by 92.10 percent which is a good indicator for establishing a well set relationship.

Table 5.36: ANOVA (Access to Information)

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	277.132	3	92.377	1420.596	0.000
	Residual	23.930	368	0.065		
	Total	301.062	371			

a. Dependent Variable: AI

b. Predictors: (Constant), AI3, AI2, AI1

Source: developed from the survey data

ANOVA: Analysis of Variance, **df:** degrees of freedom

The ANOVA (F-test) indicates that the scale/ factor – Access to information measures of the Sikkim State Co-operative Bank Ltd. for financial inclusion was quite significant since it is seen from the table, that the significant value (p-value) of F-test are 0.000, which means that explanatory variables are highly significant with respect to the explained factor i.e. “Access to information”.

Table 5.37: Regression Coefficients (Access to Information)

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics		
	B	Std. Error	Beta			Tolerance	VIF	
1	(Constant)	-0.041	0.047		-0.886	0.376		
	AI1	0.321	0.012	0.418	25.853	0.000	0.827	1.209
	AI2	0.346	0.012	0.446	27.894	0.000	0.847	1.181
	AI3	0.346	0.014	0.417	24.884	0.000	0.769	1.300

a. Dependent Variable: AI

Source: developed from the survey data

For the application of multiple regressions, all the independent variables should be categorical variables i.e. multicollinearity should not exist among independent variables. We know that if tolerance is less than 0.20 or 0.10 / a VIF (Variance inflation factor) is 5 or 10 and above it indicates a multicollinearity problem (see O'Brien 2007). But in our case as shown in the Table 5.37, the value of tolerance of all items are more than 0.20 and the value of VIF of all items are less than 5. This suggests that no multicollinearity exists among the explanatory variables which

explained the explained factor i.e. Access to information measures of the financial inclusion of Sikkim State Co-operative Bank Ltd. The dependent variable has been derived by taking the average of three independent variables.

Based on the Multiple Regression output table of “Access to Information measures for the financial inclusion of the Sikkim State Co-operative Bank Ltd. (Y)” and its constituent variables, we are able to derive the following equation.

$$\text{Access to Information (Y)} = -0.041 + 0.321 (\text{AI1}) + 0.346 (\text{AI2}) + 0.346 (\text{AI3})$$

All the three independent variables were found statistically significant, since significant value of t-test is coming less than 0.05. Out of these three variables, the variable—*I do not have access to information about modern financial services of the bank (AI2) and I do not have access to information about interest rate in force in the bank (AI3)* is contributing maximum towards Access to information measures of Sikkim State Co-operative Bank Ltd. for the financial inclusion.

The table 5.38 below represents the reliability statistics of the scale (Attitude of the people) used for the measurement of financial inclusion in the State of Sikkim by Sikkim State Co-operative Bank Ltd. The combined Cronbach’s alpha value of all the items is coming more than 0.5 which reveals that the items used in the questionnaire are internally homogenous and consistent. Therefore, the factors and variables in the questionnaire are significantly contributing the study.

5.4.4 Attitude of the People (AP)

5.4.4.1 Reliability Analysis (Attitude of the People)

Table 5.38: Reliability Analysis (Attitude of the People)

Sl.	Items	Mean	Std. Deviation	Cronbach's Alpha (Item wise)	Cronbach's Alpha	N of Items
1	I do not have any interest in opening bank a/c	2.68	1.37	0.605	0.608	3
2	I do not have any interest in availing loans provided by bank	2.67	1.16	0.648		
3	I do not have any interest in taking advice regarding money/financial matter	2.62	1.06	0.684		

Source: developed from the survey data

5.4.4.2 Multiple Regression Analysis (Attitude of the People)

Table 5.39: Model Summary (Attitude of the People)

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0.966	0.934	0.933	0.24134

a. Predictors: (Constant), AP3, AP1, AP2

Source: developed from the survey data

It is seen from Table 5.39 that the co-efficient of determination (R^2) was 0.934 indicating that 93.40 per cent of the variation in the attitude of the people (AP) can be explained by and influenced by the three explanatory variables (*I do not have any interest in opening bank a/c, I do not have in availing loans provided by bank, I do not have any interest i taking advice regarding money/financial matter*) by 0.934 percent which is a good indicator for establishing a well set relationship for Sikkim State Co-operative Bank Ltd. for financial inclusion of Sikkim.

Table 5.40: ANOVA (Attitude of the People)

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	303.111	3	101.037	1734.669	0.000
	Residual	21.434	368	0.058		
	Total	324.546	371			

a. Dependent Variable: AP

b. Predictors: (Constant), AP3, AP1, AP2

Source: developed from the survey data

ANOVA: Analysis of Variance, **df:** degrees of freedom

The ANOVA (F-test) indicates that the scale/ factor – attitude of the people of Sikkim State Co-operative Bank Ltd. for financial inclusion measures was quite significant since it is seen from the table, that the significant value (p-value) of F-test are 0.000, which means that explanatory variables (*I do not have any interest in opening bank a/c, I do not have in availing loans provided by bank, I do not have any interest in taking advice regarding money/financial matter*) are highly significant with respect to the explained factor i.e. “Attitude of the People”.

Table 5.41: Regression Coefficients ANOVA (Attitude of the People)

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics		
	B	Std. Error	Beta			Tolerance	VIF	
1	(Constant)	-0.030	0.040		-0.755	0.451		
	AP1	0.349	0.010	0.511	35.457	0.000	0.865	1.156
	AP2	0.317	0.012	0.392	25.679	0.000	0.769	1.300
	AP3	0.336	0.013	0.380	25.061	0.000	0.782	1.278

Source: developed from the survey data

For the application of multiple regressions, all the independent variables should be categorical variables i.e. multicollinearity should not exist among independent variables. We know that if tolerance is less than 0.20 or 0.10 / a VIF (Variance inflation factor) is 5 or 10 and above it indicates a multicollinearity problem (see O'Brien 2007). But in our case as shown in the Table 5.41, the value of tolerance of all items are more than 0.20 and the value of VIF of all items are less than 5. This suggests that no multicollinearity exists among the explanatory variables which explained the explained factor i.e. “Attitude of the people” measures of the Sikkim State Co-operative Bank Ltd for financial inclusion of the state. The dependent variable has been derived by taking the average of three independent variables (AP1, AP2 and AP3).

Based on the Multiple Regression output table of “Attitude of the People (Y)” and its constituent variables, we are able to derive the following equation:

$$\text{Attitude of the People (Y)} = -0.030 + 0.349 (\text{AP1}) + 0.317 (\text{AP2}) + 0.336 (\text{AP3})$$

All the three independent variables were found statistically significant, since significant value of t-test is coming less than 0.05. Out of these three variables, the variable - *I do not have any interest in opening bank a/c (AP1), I do not have any interest in taking advice regarding money/financial matter (AP2)* is contributing maximum towards Attitude of the People to measure the financial inclusion of the Sikkim State Co-operative Bank Ltd.

5.4.5 Financial Necessity (FN)

5.4.5.1 Reliability Analysis (Financial Necessity)

Table 5.42: Reliability Analysis (Financial Necessity)

Sl.	Items	Mean	Std. Deviation	Cronbach's Alpha (Item wise)	Cronbach's Alpha	N of Items
1	I do not have any necessity to open a/c with the bank	2.46	1.09	0.593	0.606	3
2	I do not have in taking loan from the bank	2.92	1.02	0.599		
2	I do not have any necessity in taking financial services from the bank	2.88	1.13	0.568		

Source: developed from the survey data

The above table 5.42 represents the reliability statistics of the scale (Financial Necessity) used for the measurement of financial inclusion in the state of Sikkim by the Sikkim State Co-operative Bank Ltd. The combined Cronbach's alpha value of all the items is coming more than 0.6 which reveals that the items used in the questionnaire are internally homogenous and consistent. Therefore, the factors and variables in the questionnaire are significantly contributing the study.

5.4.5.2 Multiple Regression Analysis (Financial Necessity)

Table 5.43: Model Summary (Financial Necessity)

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0.948	0.898	0.897	0.26901

a. Predictors: (Constant), FN3, FN2, FN1

Source: developed from the survey data

It is seen from the **Table 5.43** that the co-efficient of determination (R^2) was 0.898 indicating that the variation in the financial necessity can be explained and influenced by the three explanatory variables (*I do not have any necessity to open a/c with the bank, I do not have in taking loan from the bank, I do not have any necessity in taking financial services from the bank*) by 89.80 percent which is a good indicator for establishing a well set relationship with Sikkim State Co-operative Bank Ltd for financial inclusion.

Table 5.44: ANOVA (Financial Necessity)

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	234.817	3	78.272	1081.585	0.000
	Residual	26.632	368	0.072		
	Total	261.449	371			

a. Dependent Variable: FN

b. Predictors: (Constant), FN3, FN2, FN1

Source: developed from the survey data

ANOVA: Analysis of Variance, **df:** degrees of freedom

The ANOVA (F-test) indicates that the scale/ factor – financial necessity of the accountholders of Sikkim State Co-operative Bank Ltd. for financial inclusion measures was quite significant since it is seen from the table 5.44, that the significant value (p-value) of F-test are 0.000, which means that explanatory variables (*I do not have any necessity to open a/c with the bank, I do not have in taking loan from the bank, I do not have any necessity in taking financial services from the bank*) are highly significant with respect to the explained factor i.e. “**Financial Necessity**”.

Table 5.45: Regression coefficients (Financial Necessity)

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	0.102	0.051		2.014	0.045		
	FN1	0.298	0.014	0.389	21.126	0.000	0.816	1.225
	FN2	0.330	0.015	0.401	21.814	0.000	0.820	1.220
	FN3	0.350	0.015	0.470	23.429	0.000	0.686	1.457

a. Dependent Variable: FN

Source: developed from the survey data

For the application of multiple regressions, all the independent variables should be categorical variables i.e. multicollinearity should not exist among independent variables. We know that if tolerance is less than 0.20 or 0.10 / a VIF (Variance inflation factor) is 5 or 10 and above it indicates a multicollinearity problem (see O'Brien 2007). But in our case as shown in the Table 5.45, the value of tolerance of all items are more than 0.20 and the value of VIF of all items are less than 5. This suggests that no multicollinearity exists among the explanatory variables which

explained the explained factor i.e. Financial Necessity of the accountholders of Sikkim State Co-operative Bank Ltd. for financial inclusion of Sikkim. The dependent variable has been derived by taking the average of three independent variables.

Based on the Multiple Regression output table of “Financial necessity (Y)” and its constituent variables, we are able to derive the following equation.

$$\text{Financial necessity (Y)} = 0.102 + 0.298 (\text{FN1}) + 0.330 (\text{FN2}) + 0.350 (\text{FN3})$$

All the three independent variables were found statistically significant, since significant value of t-test is coming less than 0.05. Out of these three variables, the variable- *I do not have any interest in taking advice regarding money/financial matter (FN3)* is contributing maximum towards financial necessity of the people to measure the financial inclusion of the Sikkim State Co-operative Bank Ltd.

The below table 5.46 represents the reliability statistics of the scale (**Availability of financial products**) used for the measurement of financial inclusion in the state of Sikkim by the Sikkim State Co-operative Bank Ltd. The combined Cronbach’s alpha value of all the items is coming more than 0.5 which reveals that the items used in the questionnaire are internally homogenous and consistent. Therefore, the factors and variables in the questionnaire are significantly contributing the study.

5.4.6 Availability of financial products (AFP)

5.4.6.1 Reliability Analysis (Availability of financial products)

Table 5.46: Reliability Analysis (Availability of financial products)

Sl.	Items	Mean	Std. Deviation	Cronbach's Alpha if Item Deleted	Cronbach's Alpha	No. of Items
1	I am unable in getting various services as these are not available in the nearby locality	3.07	1.32	0.586	0.515	4
2	I am unable to use various loan facility as these are not available in the nearby locality banks	2.35	1.10	0.589		
3	I am unable to use various insurance facility as these are not available in the nearby locality banks	2.53	0.96	0.513		
4	I am unable to use various other financial services as these are not available in the nearby locality banks	2.56	1.05	0.582		

Source: developed from the survey data

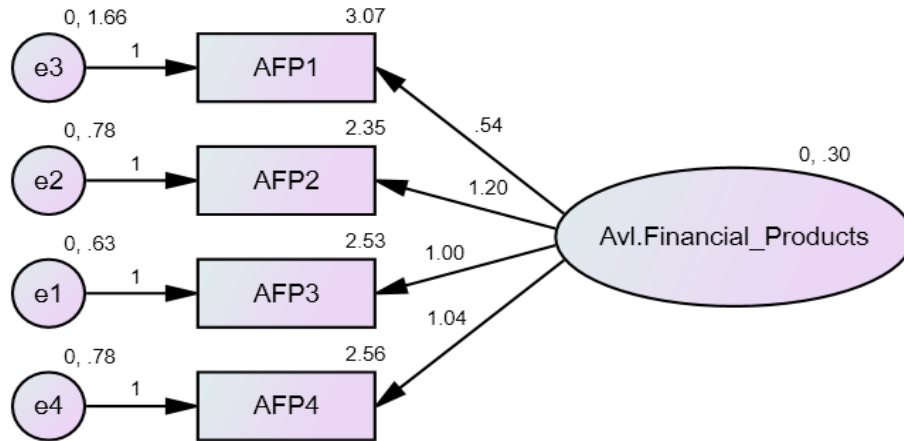


Fig. 5.23: SEM of Availability of financial products

Source: developed from the survey data

AFP1: I am unable in getting various services as these are not available in the nearby locality; **AFP2:** I am unable to use various loan facility as these are not available in the nearby locality banks; **AFP3:** I am unable to use various insurance facility as these are not available in the nearby locality banks; **AFP4:** I am unable to use various other financial services as these are not available in the nearby locality banks.

Table 5.47: SEM results of Availability of financial products (AFP)

Particulars	CFI	RMSEA	GFI	NFI
Chi-square = 2.233	0.923	0.072	0.916	0.925
Degrees of freedom = 2		RFI		
Probability level = 0.000		0.919		

Source: developed from the survey data

CFI: Comparative fit index, **RMSEA:** Root Mean Square Error of Approximation, **NFI:** Normed fit index, **GFI:** Goodness – of-fit, **RFI:** Relative fit index

For construct adequacy and discriminate validity of the test of factors influencing availability of financial products of Sikkim State Co-operative Bank Ltd for financial inclusion of Sikkim, a confirmatory factor analysis through AMOS was used to test whether the observed measures were associated with their respective constructs. The fit of the model was examined and verified, that each indicator loaded significantly with its intended construct. In the model, Chi-square = 2.233, df = 2, $p < 0.001$, CFI=0.923, GFI=0.916, NFI=0.925, RFI = 0.919, RMSEA=0.072, provided a good fit to the data (Browne and Cudek, 1993; Hu and Bentler, 1999). Each item loaded significantly with its intended construct, as the significant value of $p < .01$. All the p value of regression weights was acceptable at a significant level of 0.05.

Regression Analysis of Variable (Availability of financial products)

Table 5.48: Regression Weights (Variables influencing Availability of financial products)

Particulars			Estimate	S.E.	C.R.	P	Label
AFP3	<---	Avl.FinancialProducts	1.000				
AFP2	<---	Avl. Financial Products	1.201	0.219	5.474	***	
AFP1	<---	Avl. FinancialProducts	0.538	0.174	3.088	***	
AFP4	<---	Avl. FinancialProducts	1.040	0.187	5.546	***	

Table 5.49: Regression weights of Independent Variables (AFP1, AFP2, AFP3)

Particulars	Estimate	S.E.	C.R.	P	Label
AFP3	2.527	0.050	50.560	***	
AFP2	2.355	0.057	41.278	***	
AFP1	3.067	0.069	44.717	***	
AFP4	2.565	0.054	47.083	***	

Source: developed from the survey data

In the availability of financial products, the variable (**AFP2**: I am unable to use various loan facility as these are not available in the nearby locality banks) and (**AFP4**: I am unable to use various other financial services as these are not available in the nearby locality banks) contributes maximum since regression coefficient is more and the p-value of the variable are *** (0.000).

5.5 PART E: Testing of Hypothesis

H_{01} : There is no correlation between financial availability and financial awareness.

Table 5.50: Correlation between financial availability (F. Avl) and financial awareness (FA)

	FA1	FA2	FA3	F.Avl1	F.Avl2	F.Avl3	F.Avl4
FA1	1						
FA2	0.323	1					
FA3	0.387	0.214	1				
F.Avl1	0.177	0.350	0.089	1			
F.Avl2	0.222	0.099	0.191	0.119	1		
F.Avl3	0.116	0.139	0.080	0.095	0.349	1	
F.Avl4	0.206	0.158	0.208	0.170	0.314	0.302	1

Source: developed from the survey data

The above table 5.50 shows the correlation matrix between independent variables of financial availability and financial awareness. The correlation values of all the independent variables are coming positive. This reveals that null hypothesis is rejected and alternative hypothesis is accepted i.e. there is a positive correlation exists between financial availability and financial awareness.

H₀₂: There is no significant variation in the mean scores of set of variables describing financial service exclusion among the districts under study.

Table5.51: Financial service exclusion (ANOVA)

Particulars		Sum of Squares	df	Mean Square	F	Sig.
Taking advice finance matter	Between Groups	30.085	3	10.028	5.115	0.002*
	Within Groups	523.465	267	1.961		
	Total	553.550	270			
Advice was helpful	Between Groups	1.835	3	.612	5.231	0.002*
	Within Groups	21.636	185	0.117		
	Total	23.471	188			
Availability of fin advice centre	Between Groups	9.369	3	3.123	5.834	0.001*
	Within Groups	142.912	267	0.535		
	Total	152.280	270			
How much satisfied with centre	Between Groups	0.485	3	0.162	0.420	0.739
	Within Groups	38.506	100	0.385		
	Total	38.990	103			

Source: developed from the survey data

**Significant at 1 percent level*

The above table 5.51 shows the output of the ANOVA analysis and whether there is a statistically significant difference between the group means of financial service

exclusion. We can see that the significance value in all variables are coming less than 0.05 except the variable ‘How much satisfied with centre’ (0.739). Therefore, there is statistically significant difference between the mean of the variable -Taking advice finance matter, Advice was helpful *and* Availability of fin advice centre *since significant value of ANOVA (F-test) is less than 0.05.*

Further, the significant value of ANOVA (F-test) in case of ‘how much satisfied with centre’ is more than 0.05 i.e. 0.739. This reveals that there is no significant means difference observed between the mean of ‘how much satisfied with centre’.

H₀₃: There is no significant difference in the satisfaction level of the beneficiaries of SISCO Bank on the usage of bank products.

Table 5.52: ANOVA (Satisfaction level of the beneficiaries of SISCO Bank on the usage of bank products)

Particulars		Sum of Squares	df	Mean Square	F	Sig.
AFP1	Between Groups	1.415	3	0.472	0.258	0.856
	Within Groups	192.255	105	1.831		
	Total	193.670	108			
AFP2	Between Groups	7.055	3	2.352	1.669	0.178
	Within Groups	147.918	105	1.409		
	Total	154.972	108			
AFP3	Between Groups	1.255	3	0.418	0.411	0.745
	Within Groups	106.855	105	1.018		
	Total	108.110	108			
AFP4	Between Groups	1.973	3	0.658	0.681	0.566
	Within Groups	101.422	105	0.966		
	Total	103.394	108			

Source: developed from the survey data

***AFP1:** I am unable in getting various services as these are not available in the nearby locality; **AFP2:** I am unable to use various loan facility as these are not available in the nearby locality banks; **AFP3:** I am unable to use various insurance facility as these are not available in the nearby locality banks; **AFP4:** I am unable to use various other financial services as these are not available in the nearby locality banks.*

The above table 5.52 shows the output of the ANOVA analysis and whether there is a statistically significant difference between our group means. We can see that the significance value in all variables ***AFP1, AFP2, AFP3 and AFP4*** are coming more than 0.05. Therefore, there is no statistically significant difference between the mean ***AFP1, AFP2, AFP3 and AFP4***. On the above table no significant means difference observed between the group in the area of **Availability of financial products (AFP1, AFP2, AFP3 and AFP4)**. This is a fact that there is no significant difference in the satisfaction level of the beneficiaries of SISCO Bank on the usage of bank products.

Since, significant value of ANOVA in all cases of the case of ***AFP1, AFP2, AFP3 and AFP4*** is more than 0.05, so the null hypotheses is accepted i.e. there is no significant difference in the satisfaction level of the beneficiaries of SISCO Bank on the usage of bank products.

H₀₄: There is no difference among the preferences of bank managers associated with the reasons for account refusal.

Table 5.53: ANOVA (Reasons for account refusal)

Particulars	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	6.779	1	6.779	1.824	0.178
Within Groups	877.276	236	3.717		
Total	884.055	237			

Source: developed from the survey data

The above table 5.53 represents that there is no difference among the preferences of bank managers associated with the reasons for account refusal. The significant value of ANOVA (F-test) is coming 0.178 which was not significant as it is more than 0.05. So the null hypotheses can not be rejected i.e. there is no difference among the preferences of bank managers associated with the reasons for account refusal.

CHAPTER 6

SUMMARY OF FINDINGS, CONCLUSIONS AND RECOMMENDATIONS

a) Savings of the respondents

- Out of the total number of respondents, majority of the respondents (93.50%) are having multiple bank account and few respondents (6.50%) are having no multiple bank account.
- The cross tabulation between respondents having bank account and type of a/c, the result shows that out of the 207 number of respondents having bank account, majority of the respondents are having saving bank account (79.60%), then coming current account (17.30%) and fixed deposit account (3.10%).
- In cross tabulation between respondents having bank account and reasons for no account, some of the respondents do not have bank account because of 'no bank nearby' (22.20%) and then follows 'not important in opening bank account'() and 'lengthy process of opening of account' (15.90%).
- The reasons that the respondents are opening account in SISCO bank shows, majority of the respondents are saying 'for saving purpose' 68.80% and then coming 'to receive NREGP' 19.40%. Few of the respondents are giving reason as 'to receive government payments'. 9.70%.

b) Borrowings

- In reasons to borrow from banks, majority of the responses is coming as ‘arranged by banks’ 20.40% and low interest rate 20.10%.
- In association between frequency of borrower or loan taken from bank with respect to reason for borrow from other source. The result reveals that the majority of the responses is coming ‘yes from bank with no-security’ as 56.10%, and then coming because of ‘locally available’ (25.20%).
- It is found that there is a significant association between **borrowed or loan taken w.r.t reason for borrow from other source**. Since, significant value of chi-square test is coming 0.020, null hypothesis is rejected and alternative hypothesis is accepted i.e. *there exists a significant association between borrowed or loan taken w.r.t reason for borrow from other source (H₁)*.
- In using of other financial product, majority of the responses is coming to ‘Yes Debit card’ 71.70% and then coming to ‘Yes Insurance’ 14.0%. Out of the total responses, 11.10% has come under the category of ‘not using other financial products’.
- In the frequency and percentage figures of cross tabulation between availability of financial advice centre w.r.t how much satisfied with centre, majority of the responses is coming of ‘yes’ (107 nos) to the category of availability of financial service centre. In ‘yes’ category again, majority of the respondents are ‘satisfied’ 83.20% with the centre and few number of respondents are unsatisfied i.e. 8.40%.

c) Other financial services

- The reliability statistics of the scales (Financial Access, Financial Awareness, Attitude of the People, Financial necessity and Availability of financial products)

used for the financial inclusion of Sikkim. The combined Cronbach's alpha value of all the items is coming more than 0.6 which reveals that the items used in the questionnaire are internally homogenous and consistent. Therefore, the factors and variables in the questionnaire are significantly contributing the study.

- For financial access, we have used eight independent variables and all the variables are found statistically significant since significant value of t-test is coming less than 0.05. Out of these three variables, the variable - I find difficulties in taking loans from banks due to delay in sanctioning and getting loans (**3.167**) is contributing maximum towards financial access measures of Sikkim State Co-operative Bank Ltd. in financial inclusion since regression coefficient is the highest. Eight variables of financial access reduced to three factors. **Factor 1 (FA1):** Delay in Process and not-cooperative; **Factor 2 (FA2):** Loan approval Process; **Factor 3 (FA3):** Saving habit are significantly contributing to the dependent factor i.e. financial access. Out of the three factors, factor 1 (1.071) and factor 3(1.00) contributes maximum to financial access.
- For measurement of financial awareness, three variables have been used. The coefficient of determination (R^2) was 0.915 indicating that 91.50 per cent of the variation in the financial awareness of Sikkim State Co-operative Bank Ltd. in financial inclusion can be explained by and influenced by the three explanatory variables (*I am not aware about the banking products (deposit a/c, interest on deposits etc.), I am not aware about loans made available by banks and I am not aware about different financial services provided by banks (ATM/Credit card/money transfer/internet banking etc.)*) which is a good indicator for establishing a well set relationship. All the three independent variables are being

found statistically significant since significant value of t-test is coming less than 0.05. Out of these three variables, the variable - *I am not aware about the banking products* (deposit a/c, interest on deposits etc.) (0.346) is contributing maximum towards financial awareness measures of Sikkim State Co-operative Bank Ltd. in financial inclusion since regression coefficient is the highest.

- For the measurement of Access to Information, three variables have been used. The co-efficient of determination (R^2) was 0.921 indicating that 92.10 per cent of the variation in the access to information of Sikkim State Co-operative Bank Ltd. for financial inclusion can be explained by and influenced by the three explanatory variables (*I do not have access to information about zero balance a/c of the bank, I do not have access to information about modern financial services of the bank, I do not have access to information about interest rate in force*) which is a good indicator for establishing a well set relationship. **(Validity/reliability of the relationship i.e. model is required or not)** All the three independent variables were found statistically significant, since significant value of t-test is coming less than 0.05 . Out of these three variables, the variable – *I do not have access to information about modern financial services of the bank* (AI2) and *I do not have access to information about interest rate in force in the bank* (AI3) is contributing maximum towards Access to information measures of Sikkim State Co-operative Bank Ltd. for the financial inclusion.
- Similarly, in the study of ‘attitude of the people’ (AP), three variables have been used. The co-efficient of determination (R^2) was 0.934 indicating that 93.40 per cent of the variation in the attitude of the people (AP) can be explained by and influenced by the three explanatory variables (*I do not have any interest in*

opening bank a/c, I do not have in availing loans provided by bank, I do not have any interest i taking advice regarding money/financial matter) which is a good indicator for establishing a well set relationship for Sikkim State Co-operative Bank Ltd. for financial inclusion of Sikkim. All the three independent variables were found statistically significant, since significant value of t-test is coming less than 0.05. Out of these three variables, the variable '*I do not have any interest in opening bank a/c (AP1), I do not have any interest in taking advice regarding money/financial matter (AP2)*' is contributing maximum towards Attitude of the People to measure the financial inclusion of the Sikkim State Co-operative Bank Ltd.

- All the three independent variables of Financial Necessity (FN) were found statistically significant, since significant value of t-test is coming less than 0.05. Out of these three variables, the variable - *I do not have any interest in taking advice regarding money/financial matter (FN3)* is contributing maximum towards financial necessity of the people to measure the financial inclusion of the Sikkim State Co-operative Bank Ltd. The co-efficient of determination (R^2) was 0.898 indicating that 89.80 per cent of the variation in the financial necessity can be explained and influenced by the three explanatory variables (*I do not have any necessity to open a/c with the bank, I do not have in taking loan from the bank, I do not have any necessity in taking financial services from the bank*) which is a good indicator for establishing a well set relationship with Sikkim State Co-operative Bank Ltd for financial inclusion.
- For construct adequacy and discriminate validity of the test of factors influencing availability of financial products of Sikkim State Co-operative Bank Ltd for

financial inclusion of Sikkim, a confirmatory factor analysis through AMOS was used to test whether the observed measures were associated with their respective constructs. In the availability of financial products, the variable (**AFP2**: I am unable to use various loan facility as these are not available in the nearby locality banks) and (**AFP4**: I am unable to use various other financial services as these are not available in the nearby locality banks) contributes maximum.

d) Hypothesis Testing

- The correlation matrix between independent variables of financial availability and financial awareness shows positive value. This reveals that null hypothesis is rejected and alternative hypothesis is accepted i.e. there is a positive correlation exists between financial availability and financial awareness.
- For the test of hypothesis 'There is no significant difference in the satisfaction level of the beneficiaries of SISCO Bank on the usage of bank products', the output of the ANOVA analysis in all the variables are coming less than 0.05 except the variable 'How much satisfied with centre' (0.739). Therefore, there is statistically significant difference between the mean of the variables - **Taking advice finance matter, Advice was helpful and Availability of financial advice centre** since significant value of ANOVA (F-test) is less than 0.05. Further, the significant value of ANOVA (F-test) in case of 'how much satisfied with centre' is more than 0.05 i.e. 0.739. This reveals that there is no significant means difference observed between the mean of 'how much satisfied with centre'.

- The ANOVA analysis of the variables **AFP1, AFP2, AFP3 and AFP4** (*I am unable in getting various services as these are not available in the nearby locality; I am unable to use various loan facility as these are not available in the nearby locality banks; I am unable to use various insurance facility as these are not available in the nearby locality banks and I am unable to use various other financial services as these are not available in the nearby locality banks*) are coming more than 0.05. Therefore, there is no statistically significant difference between the mean **AFP1, AFP2, AFP3 and AFP4**. This is a fact that there is no significant difference in the satisfaction level of the beneficiaries of SISCO Bank on the usage of bank products. Since, significant value of ANOVA in all cases of the case of **AFP1, AFP2, AFP3 and AFP4** is more than 0.05, so the null hypotheses is accepted i.e. there is no significant difference in the satisfaction level of the beneficiaries of SISCO Bank on the usage of bank products.
- For the test of hypothesis '*There is no difference among the preferences of bank managers associated with the reasons for account refusal*', the significant value of ANOVA (F-test) is coming 0.178 which was not significant as it is more than 0.05. So the null hypotheses were accepted i.e. there is no difference among the preferences of bank managers associated with the reasons for account refusal.

RECOMMENDATIONS

The following are the suggestions which are made on the basis of the findings of the study:

1. When the beneficiaries of SISCO Bank Ltd are taken into consideration for the financial inclusion schemes, the bank management has to monitor the operational

status of the accounts of the account holders and initiatives have to be taken in converting the non-operational or dormant accounts into active condition.

2. The banks have to facilitate the beneficiaries with other financial products like no frill accounts, general credit card and overdraft facility along with basic savings account for encouraging them to actively operate the accounts.

3. Due to hilly terrain in Sikkim, most of the areas are not suitable for movement from one place to another place for banking operations SISCO Bank Ltd has to take the initiatives in increasing the bank branches in consultation with the Government and civil societies with the identification of unbanked and under banked areas of those remote places and also make an arrangement in reaching to the disadvantaged and under privileged sections of the society with financial inclusion schemes.

4. The bank management has to take the initiatives for financial literacy campaign along with promotional drive with more frequently in creating awareness about financial products and services which will have far-reaching effects on the masses.

5. The availability of financial products and services of SISCO Bank Ltd. with the features and benefits need to be advertised through mass media, preferably local news papers, FM radio channel, documentaries, pamphlets and road shows with a motive to reach to the larger section of society.

6. The study reveals that delay in processing loan and non-cooperative from the side of bank staff are the main reasons in making financial access facility among the beneficiaries of SISCO Bank Ltd and so the management has to look after the matter in minimizing the problems associated with it.

7. The study of financial awareness initiatives of SISCO Bank Ltd reveals that the bank needs to focus on improving awareness campaign about the financial products and services among its beneficiaries.
8. The study of capital adequacy analysis of SISCO Bank Ltd in terms of Advances to Total Asset ratio reflects that it kept on decreasing from 2013 which says that the aggressiveness in lending activities of the SISCO Bank has come down over the periods of time. So, SISCO Bank Ltd needs to give more emphasis on improving Advances to Total Asset ratio.
9. The study of management efficiency analysis of SISCO Bank Ltd. in terms of Credit Deposit ratio shows that the management was not able in converting high yielding advances. So, the management needs to focus to improve this ratio by way of making the optimal use of available resources of the bank.
10. The study of liquidity analysis of SISCO Bank Ltd. in terms of cash to total asset ratio shows a declining trend from 2014 which is not a good signal on the part of the bank as the liquidity position of the bank is worsening. So, the bank requires improving the ratio at a higher side to maintain the confidence of the creditors.
11. The study reveals that SISCO Bank Ltd is not in a position to facilitate its customers with modern financial products and services. Therefore, the management is required in making more thrust on the accessibility of modern financial services to its customers in the same way as followed by the commercial banks in the state of Sikkim.

12. Policies of SISCO Bank Ltd. need to be reviewed to come out with new product lines in place of conventional financial products and services like basic banking services to match the demands of its customers.

13. With the advancement and penetration of technology in the banking arena, Internet banking and online money transfer are still accessible for the customers of SISCO Bank Ltd. Therefore, the management should take initiatives in making accessible of core banking and technology driven financial products and services to its customers with the motive of attracting them.

14. As a measure of social security concern especially for the poor and disadvantaged section of the society, SISCO Bank management should think of offering insurance products in the form of micro-insurance at a affordable cost.

15. Keeping in mind the better customer services, SISCO Bank Ltd. should give focus on staff shortage in the office as well proper training to its existing staffs in view of the importance and necessity of financial inclusion initiatives. Therefore, SISCO Bank requires extending services to its customers in a holistic manner to minimize the problems associated with service exclusion, saving exclusion and credit exclusion.

16. To upgrade the professionalism among the bank managers, SISCO Bank management should initiate a proper human resource management system which ultimately helps in upgrading the efficiency level of them.

SCOPE OF FURTHER RESEARCH

1. A study on the role of commercial banks in financial inclusion in Sikkim.
2. Financial Inclusion as a medium of empowering women

3. Kisan Credit Card scheme - an instrument for financial inclusion among farmers.
4. Financial Inclusion through Cooperative Banks – A study on the opinion of Bank employees.
5. Financial Inclusion through Cooperative Banks – A study on the opinion of Bank customers.
6. A study on the role of Primary Agricultural Credit Societies in Financial Inclusion.

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APPENDIX

Department of Management, Sikkim University, Sikkim

Research Topic:

Role of Sikkim State Co-operative Bank Ltd. (SISCO) in Financial Inclusion

Survey Questionnaire

Dear Respondents,

We are conducting an academic survey regarding your opinion on the availability and accessibility of financial products and services in Sikkim and the role played by SISCO therein. We solicit your participation and cooperation in this study. Your support will have immense benefit not only to our study but to the entire population of Sikkim for a long term economic well-being and inclusive growth. Your valuable responses will help us to understand the current status of financial inclusion better and suggest possible interventions in improving the same. We assure you that the information provided would be kept confidential and strictly used only for research purpose.

Section - A

Profile of the Respondents

(Please tick the appropriate box)

1. Age (Yrs.): 18 – 27 28 – 37 38 – 47 48 – 57 57 and above
2. Religion: Hindu Muslim Christian Buddhist Others
3. Gender: Male Female Others (please tick whichever is relevant)
4. Caste: General SC ST OBC (please tick whichever is relevant)

5. Are you a resident of Sikkim: Yes No (please tick whichever is relevant)
6. Education: Illiterate Upto class X Undergraduate Graduate
Postgraduate Any other (please tick whichever is relevant)
7. (a) Employment status: Employed Unemployed (please tick whichever is relevant)

(b) If employed: Govt Private Self-employed (please tick whichever is relevant)
8. Income (per month): Upto Rs 5000 Rs 5000 to Rs 10,000 Rs 10,000 to Rs 15,000
Rs 15,000 and above (please tick whichever is relevant)

Section - B

A. SAVINGS: (please tick whichever is relevant)

1. Is your household having multiple bank accounts? Yes No
2. If Yes, then which type of account do you have?
Saving bank a/c Current a/c Fixed deposit a/c Recurring a/c
If others, please specify -----
3. How often do you use your account?
Daily once Monthly once 6 Monthly once Yearly once
Frequently (pl state)
4. Are you aware of products of the bank? Yes No
5. If yes, then please mention: Saving a/c Fixed deposit a/c Recurring a/c
Personal Loan Agriculture loan Vehicle loan
6. If No in Q -4, then why? Not needed Afraid of asking Unable to find time
Not educated enough

7. Do you think that the products that you are getting from the banks are affordable:

Yes No

8. Do you have an idea of comparable price of these bank products: Yes No

9. Reasons for not having multiple bank accounts:

I have no money Tried to open but refused Lengthy Process

No bank in this area Not important to me

10. Reasons for being refused a bank account:

Previous bad credit history No job, unemployed

Had to have a minimum amount Had debts Thought I was not trustworthy

Reasons unknowns

11. Reasons for no interest in opening a/c with Bank.

Concerned there may be too many charges Tried to open but was refused

Lengthy processes Not important to me

If others, (please specify) _____

12. What were the reasons that your household opened the account?

To receive Govt. payments from NREGP

To receive Govt. payments from schemes other than NREGP

For receiving remittances For saving money To request a loan

If others, (please specify) _____

13. Who helped you open the account?

Village Panchayat Officials Bank Officials Neighbour Friends

Relatives If others, (please specify) _____

B. BORROWINGS: (please tick whichever is relevant)

14. Have you ever borrowed or taken loan? No , if Yes, from Banks Relatives

Friends Money lenders

15. If borrowed from banks, which of the following led to this choice?

Low rate of interest offered or arranged by the bank It is easy

Trustworthy lender If others

16. If borrowed from sources other than banks, which of the following reasons led to this choice?

Being able to borrow relatively small sums security or guarantee not

required locally available Repayment is possible

weekly/fortnightly/monthly in small sums Convenient as they come to the door to collect

C. OTHER FINANCIAL SERVICES

17. Are you using any other form of financial services? No If Yes, then which

one: Insurance Credit card Debit card

18. Over the past couple of years, have you been anywhere for taking advice about money matter?

No If Yes, where from Family Friends Banks

Financial advisor Social worker Others

19. Would you say this advice was

Very helpful Helpful Not helpful

20. Is there any financial advice centre/ credit counselling centre in your area?

a. Yes No

21. If Yes, how much satisfied are you with its workings and the advice it has provided?

Completely satisfied Satisfied Just ok Unsatisfied

D. FINANCIAL ACCESS

Indicate how much you agree with the following statements, using the scale given below:

(1 – Strongly Disagree/ 2 – Disagree/ 3 – Neutral/ 4 – Agree/ 5 – Strongly Agree)

Sl. No.	Schedule	1	2	3	4	5
1.	I do not open a/c with bank since it is time taking process					
2.	I do not open a/c with bank since bank employees are not cooperative					
3.	I do not open a/c with bank Because I am unable to keep minimum balance in the account as prescribed by the banks					
4.	I do not open a/c with bank Because filling up form for opening an account is complex process					
5.	I do not open a/c with bank I do not have savings habit					
6.	I find difficulties in taking loans from banks due to delay in sanctioning and getting loans					
7.	I do not open a/c with bank since bank charges heavy interest on loans					
8.	I find difficulties in taking loans from banks since there is restriction in the use of loan amount					

E. FINANCIAL AWARENESS

Sl. No.	Schedule	1	2	3	4	5
9.	I am not aware about the banking products (deposit a/c, interest on deposits etc.)					
10.	I am not aware about loans made available by banks					
11.	I am not aware about different financial services provided by banks (ATM/Credit card/money transfer/internet banking etc.)					

F. ACCESS TO INFORMATION

Sl. No.	Schedule	1	2	3	4	5
12.	I do not have access to information about zero balance a/c of the bank					
13.	I do not have access to information about modern financial services of the bank					
14.	I do not have access to information about interest rate in force i the bank					

G. ATTITUDE OF THE PEOPLE

Sl. No.	Schedule	1	2	3	4	5
15.	I do not have any interest in opening bank a/c					
16.	I do not have any interest in availing loans provided by bank					
17.	I do not have any interest in taking advice regarding money/financial matter					

H. FINANCIAL NECESSITY

Sl. No.	Schedule	1	2	3	4	5
18.	I do not have any necessity to open a/c with the bank					
19.	I do not have any necessity in taking loan from the bank					
20.	I do not have any necessity in taking financial services from the bank					

I. AVAILABILITY OF FINANCIAL PRODUCTS

Sl. No.	Schedule	1	2	3	4	5
21.	I am unable in getting various services as these are not available in the nearby locality					
22.	I am unable to use various loan facility as these are not available in the nearby locality banks					
23.	I am unable to use various insurance facility as these are not available in the nearby locality banks					

24.	I am unable to use various other financial services as these are not available in the nearby locality banks					
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