

ROLE OF NABARD IN RURAL DEVELOPMENT OF NAGALAND

**THESIS SUBMITTED IN PARTIAL FULFILLMENT OF THE
REQUIREMENTS FOR THE DEGREE OF DOCTOR OF
PHILOSOPHY IN COMMERCE**

by

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JUNE, 2024

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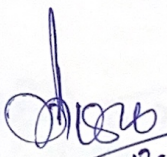
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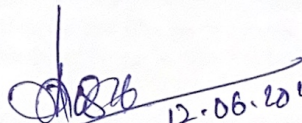
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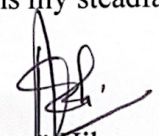
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Place: Kohima


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Date: 12/06/24

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Abbreviations and Acronyms

NGO	Non-Government Organisations
SDGs	Sustainable Development Goals
MSME	Micro Small Medium Enterprises
BPL	Below Poverty Line
MGNREGA	Mahatma Gandhi National Rural Employment Guarantee Act
PMAY-G	Pradhan Mantri Awaas Yojana- Gramin
NRLM	National Rural Livelihoods Mission
PMGSY	Pradhan Mantri Gram Sadak Yojana
NRuM	National Rurban Mission
MoRD	Ministry of Rural Development
MoHUA	Ministry of Housing and Urban Affairs
DDU- GK Y	Deen Dayal Upadhyaya Grameen Kaushalya Yojana
NSAP	National Social Assistance Program
SAGY	Saansad Adarsh Gram Yojana
NABARD	National Bank for Agriculture and Rural Development
NIRD	National Institute of Rural Development
DONER	Ministry of Development of North Eastern Region
NESIDS	North East Special Infrastructure Development Scheme
NESRIP	North Eastern States Roads Investment Program
SIDF	Social and Infrastructure Development Fund
NERSDS	The North East Road Sector Development Scheme
NLCPR	Non-Lapsable Central Pool of Resources
NESIDS	North East Special Infrastructure Development Scheme
VDB	Village Development Board
DRDA	District Rural Development Agency
DEA	Data Envelopment Analysis
RIDF	Rural Infrastructure Development Fund
SBI	State Bank of India
RBI	Reserve Bank of India
TDF	Tribal Development Fund
FGDs	Focus Group Discussions
PIAs	Project Implementing Agencies
KIIs	Key Informant Interviews
CD	Credit Deposit
FPO	Farmers Producer Organisation

SHG	Self-Help Group
CRAFICARD	Committee to Review Arrangements for Institutional Credit for Agriculture and Rural Development
CB	Commercial Banks
RRB	Regional Rural Banks
ARDC	Agricultural Refinance and Development Corporation
NBSC	National Bank Staff College
BIRD	Bankers Institute of Rural Development
RO	Regional Offices
SFP	State Focus Paper
PLP	Potential Link Credit Plans
RFI	Rural Financing Institutions
DCCB	District Central Co-operative Banks
ODI	Organizational Development Initiatives
DCCB	District Central Cooperative Banks
SCARDB	State Cooperative Agriculture and Rural Development Banks
NIRB	National Institute of Rural Banking
DDM	District Development Manager
GVA	Gross Value Added
ST-SAO	Short-Term Seasonal Agricultural Operations
SFB	Small Finance Banks
JLG	Joint Liability Group
SLF	Special Liquidity Facility
NCES	Non-Conventional Energy Source
OFD	Off-Farm Development
SGSY	Swarnajayanti Gram Swarogar Yojana
PF	Poultry Farming
SGP	Sheep, Goat, and Pig
NSCB	Nagaland State Cooperative Bank
NRB	Nagaland Rural Bank
LTRCF	Long Term Rural Credit Fund
FSDD	Farm Sector Development Department
FSPF	Farm Sector Promotion Fund
WDF	Watershed Development Fund
TDF	Tribal Development Fund
PODF	Producers Organization Development Fund
PRODUCE	Producers Organization Development and Upliftment Corpus Fund

CCF	Climate Change Fund
GoN	Government of Nagaland
DoLR	Department of Land Resources
PSI	People's Science Institute
ACWADAM	Advanced Centre for Water Resource Development & Management
SLNA	State Level Nodal Agency
GEMS	Group for Environment Management and Services
NEIDA	North East Initiative Development Agency
ECS	Eleutheros Christian Society
RBAN	Rongmei Baptist Association Nagaland
PH	Prodigals Home
BLF	Better Life Foundation
CWWS	Chakesang Women Welfare Society
PBCA	Phom Baptist Christian Association
DAC	Department of Agriculture and Cooperation
ISAM	Integrated Scheme for Agricultural Marketing
MRIN	Marketing Research and Information Network
SAGF	Strengthening of Agmark Grading Facilities
ABD	Agribusiness Development
VCA	Venture Capital Assistance
PDF	Project Development Facility
NIAM	Choudhary Charan Singh National Institute of Agriculture Marketing
EDEG	Entrepreneurship Development and Employment Generation
PVCF	Poultry Venture Capital Fund Scheme
SRMBC	Salvaging and Rearing of Male Buffalo Calves
IDSRR	Integrated Development of Small Ruminants and Rabbits
PD	Pig Development
POPI	Producer Organization Promoting Institution
NEIDA	North East Initiative Development Agency
ATMS	Agro Tea Management Services
CBBO	Cluster-Based Business Organization
SHPI	Self-Help Promoting Institution
VLP	Village level Program
MEDP	Micro Enterprise Development Program
LEDP	Livelihood and Enterprise Development Program
DEDS	Dairy Entrepreneurship Development Scheme
ACABC	Agri Clinic and Business Center

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1.1. INTRODUCTION

In a developing country like India, with 65 per cent¹ of the people living in rural villages, rural development is strategically important to the policy planners for the overall economic growth of the country. This is evident from the innumerable policies and programs framed by the central and state governments over the years to foster rural prosperity and development. While tremendous efforts have led to substantial growth, there is still a gap in meeting rural people's economic and social needs. With two-thirds of the Indian population still living in the villages, the rural economy is an indicator of the country's overall economic growth. Therefore, the overall development of the Indian economy calls for attention to improve the rural economy. Rural developments aim at bridging the gap to bring about economic and social prosperity. It aims at inclusive growth through increased participation of the rural masses in various developmental activities.

The present chapter provides an overview of the various aspects relating to the research study. The chapter is divided into sections and sub-sections to provide the necessary context to understand the role of NABARD in fostering rural development in the state. The sections in the chapter begins with the dimensions of rural development exploring the multifaceted nature of rural development highlighting on the physical, economic, social, institutional and environmental dimension. A brief mention is made on rural enterprise development that aims at promoting small and medium enterprise in the rural regions. A small section also discusses on sustainable development and its implications for social and economic stability. A section on institutional role in rural development in the Indian, northeast and state context is discussed in promoting rural development. The section on the rural occupational structure provides an overview of the total workforce in the state covering three decades. A section on poverty alleviation schemes will review the major schemes implemented by Central and State government including NABARD implemented poverty alleviation programs is discussed. A section on review of literature is also discussed, followed by a profile on the state of Nagaland and the banking scenario in the state. Other sections which follow are statement of the problem, significance of the study, objectives of the study, hypotheses of the study, methodology

adopted. The last section of the chapter provides an overview of the chapterization of the study.

The World Bank (1975)² defines Rural Development as the strategy designed to improve the economic and social life of a specific group of people - the rural poor. It involves extending the benefits of development to the poorest among those who seek a livelihood in the rural areas. In simple connotation, rural development refers to the development of the rural areas in order to improve the standard of living and socio-economic conditions of the rural people.

The concept of Rural Development is broad and dynamic; the focus areas significantly change over time with the economy's growth and progress. This paradigm shift in focus areas is discussed in Ellis and Biggs (2001)³ where they highlight on the evolving and dynamic trajectory of rural development over the years. From the 1950s theme of community-based development, it shifted towards technology transfer, mechanization and green revolution in the 1960s. The 1970s theme was marked by integrated rural development, rural growth linkages, state agricultural policies and induced innovation. The rise of free markets, NGOs, rapid rural appraisal, poverty alleviation, food security gained momentum in the 1980s. The theme in 1990s shifted to micro credit, environment and sustainability, poverty reduction, gender inequality. The rural development themes in the 2000s were marked by good governance, sustainable livelihoods, sector-wide approaches, social protection, poverty eradication and people participation. The shift of focus over the decades indicates the rigorous efforts and attention on rural development and its successful implementation. It is evident that rural development has a broad dimension, and it calls for a comprehensive and well-planned development program.

1.2. DIMENSIONS OF RURAL DEVELOPMENT

The concept of rural development has a broad dimension which is aimed at removing poverty and increasing employment opportunities in the country to improve the living standard. Rural development implies bringing about improvements in the areas of education, housing, transport and communication, health, drinking water, electrification

and other activities, which will bring about socio-economic improvements in the lives of the rural people. Rural development caters to the economic, social, human and social objectives. Thus, the dimensions of rural development are multi-faceted, covering many aspects from individual involvement to people participation alongside the efforts of both central and state governments.

Rural development is one of the most reliable and potent forces for alleviation of poverty and broad-based social and economic development⁴. Rural development essentially focuses on the overall development of rural areas including development of human resources and infrastructure development. Strengthening the strategies for rural development is conducive with the United Nations Sustainable Development Goals (SDGs) 2030 which aim at ending poverty, zero hunger, sustainable growth, clean water and sanitation and others. With 3/4th of the population living in rural areas, rural development remains the core of the overall development of the country. It remains the forefront in policy making and implementation of the policy makers to enhance the socio- economic growth of the country. The dimensions of rural development are: -

1.2.1. Physical dimension -

Strengthening of physical infrastructure is a necessary component for rural development. Road connectivity, electrification, drinking water supply, drainage facilities are some key elements of physical infrastructure. The lack of adequate physical infrastructure can act as an impediment to the growth and development of rural areas. Physical infrastructure not only contributes to enhance productivity but also assists in the realization of the potential of human capital and creating conditions in which the potential can fully function (Agrawal, 2015)⁵. Improving the physical infrastructure can improve the rural economy and lead to long term economic growth. For instance, improving the road infrastructure can help the rural community get better access to markets, better health care, education and credit facility and other benefits.

1.2.2 Economic dimension -

Economic dimension of rural development encompasses providing income earning opportunities for the rural households and decreasing the inequality in the distribution of rural income. The promotion of non-farm activities for strengthening the livelihood and employment opportunities is gaining momentum. Diversifying into various non-farm productions such as food processing, horticulture, sericulture etc. increases the economic opportunities for the rural community.

1.2.3 Social dimension -

The social dimension of rural development aims at improving the quality of life and implementing poverty alleviation program to improve the social well-being. The challenges of poverty and inequality continue to hinder the development in rural areas. Lack of access to public utility services, lack of critical infrastructure, rural migration, low levels of literacy and social exclusion are common indices of underdeveloped rural areas. Rural development aims to strengthen the social infrastructure by improving the social well-being and empowering the rural community particularly the women and youth.

1.2.4 Institutional dimension -

The institutional agencies have become important components for fostering the growth and development of rural areas. Access to credit is particularly instrumental in empowering rural communities to augment their agricultural productivity, thereby alleviating poverty and improving living standards. The financing institutions serve as key facilitators by providing access to formal credit, which serve as catalyst for agricultural expansion and overall rural development.

1.2.5 Environmental dimension -

Conservation of environment is a key factor to sustainable rural development. The effects of climate change and climate related natural disaster pose the greatest challenge for the farmers. Natural calamities such as famine, drought, landslides, floods and heavy rains can adversely impact the agricultural productivity. These natural disasters become

environmental threats leading to land abandonment, land degradation, deforestation, and loss of biodiversity and thereby pose subsequent endangerment to rural livelihood practices. Such issues can be addressed through proper land use management practices with the participation of the local government.

1.3 RURAL ENTERPRISE DEVELOPMENT

Rural enterprises play an important role in the growth and development of the rural economy. Rural enterprises stimulate the growth of farming and non-farming activities. Setting up rural enterprises provides the means to generate income and employment opportunities for the rural households. Rural enterprise encourages local entrepreneurship which can contribute to income, jobs, innovation, and economic stability and raise the standard of the rural poor. The rural enterprises can be in the form of micro, small and medium enterprises (MSME) set up all over the country to tackle the problems of poverty and provide stable means of income for the rural poor. Rural enterprises particularly the micro, small and medium enterprises (MSMEs) are considered as engines of economic growth and play a key role in the economic development of rural areas.

Haider et al in their analysis note states that MSMEs account for 90% of businesses, 60 to 70% of employment and 50% of GDP worldwide and contributing to local and national economies and to sustaining livelihoods particularly among the working poor, women, youth, and groups in vulnerable situations⁶.

The Government of India puts considerable focus on the promotion and development of rural enterprises through various initiatives and programs. The Ministry of Micro, Small & Medium Enterprises (MSME), GoI envisions MSMEs as a vibrant and thriving sector by actively fostering the growth and development of the MSME Sector, including Khadi Village and Coir Industries. It works with concerned Ministries/Departments, State Governments and other Stakeholders. It also extends support to existing enterprises while also encouraging establishment of new enterprises. Through this collaborative effort, the Ministry of Micro, Small & Medium Enterprises (MSME) aims to stimulate economic growth, generate employment opportunities, and enhance the overall socio-economic fabric of the nation. NABARD has made significant contributions in developing rural enterprises

in the rural areas through its various programs and promotion. The programs are aimed at promoting rural entrepreneurship to provide gainful employment and supplement the income of the rural community. It provides promotional assistance and refinance support to implementing agencies to develop rural enterprises and create employment opportunities.

1.4 SUSTAINABLE DEVELOPMENT

The Brundtland Commission (1987)⁷ defines Sustainable development as development that meets the needs of the present without compromising the ability of future generations to meet their own needs. Rural communities face several challenges in the context of climate change, land degradation, deforestation, biodiversity loss and fragmentation of natural habitats, poverty and geographical isolation (Mihai et al, 2020)⁸ Sustainable rural development aims at addressing such issues through sustainable practices that improve the quality of life and preserve the natural resources. Sustainable rural development supports services that promote community participation, access to health and education, protecting natural resources and addressing food security.

The United Nations Member States have adopted 17 Sustainable Development Goals popularly known as SDGs or Global goals which is attempted to be achieved by 2030. The SDG forms the framework for improving the lives of people around the world and adopting sustainable practices to use the earth's natural resources in a judicious manner.

The Johannesburg Declaration (2002)⁹ reinforced economic development, social development and environmental protection at local, national, regional and global levels as the pillars of sustainable development. The rural development programs are being undertaken with the aim of providing the base to build a sustainable community development in the country. Sustainable rural development thus involves a holistic approach where daily basic needs of rural populations is covered by reliable public utilities combined with technical, socio-economic, and environmental conditions to support regional economies and urban-rural linkages (Mihai et al, 2020)⁸

1.5 . INSTITUTIONAL ROLE IN RURAL DEVELOPMENT

Institutions play an important role in implementing rural development programs. Institutions provide access to resources and assistance to poor rural households. Institutions help in improving the delivery of public services and meeting the development needs of rural communities. With agriculture as the primary source of livelihood in the developing countries, the role of agricultural institutions and other similar organizations assume an important role in the agricultural and rural development. Institutions can act as a catalyst to meet sustainable agriculture and rural development in developing regions. In this context, the emphasis is on government as an institutional body aimed to bring rural prosperity through its various development and welfare activities.

1.5.1 Indian context

The Ministry of Rural Development is the nodal agency for formulating the overall development strategy of the country. It was set up as a full-fledged Ministry in 1979. It is entrusted with the task of formulating policies, plans, regulations and acts relating to the development of the rural sector.

The Ministry of Rural Development consists of two Departments-

- i. Department of Rural Development
- ii. Department of Land Resources

The objectives of the Ministry are highlighted below: -

- i) Providing livelihood opportunities for women and other vulnerable sections of the society
- ii) Providing basic housing to Below Poverty Line (BPL) households.
- iii) Providing social assistance to the elderly, widow and disabled persons.
- iv) Providing all weather rural connectivity for rural inhabitants and upgrading existing rural roads for better market access.
- v) Capacity development and training of rural development functionaries.

vi) Promoting involvement of voluntary agencies and individuals for rural development.

The Ministry of Rural Development has implemented a number of schemes and programs for improving the economic and social conditions and upliftment of the rural people in the country. It envisages better prospects for the rural people through increased participation of people in the rural development programs, decentralization of planning, better enforcement of land reforms and greater access to credit. The programs undertaken are:

- i) The National Rural Employment Guarantee Act (MGNREGA)
- ii) Pradhan Mantri Awaas Yojana- Gramin (PMAY-G)
- iii) National Rural Livelihoods Mission (NRLM)
- iv) Pradhan Mantri Gram Sadak Yojana (PMGSY)
- v) National Rurban Mission (NRuM)
- vi) Deen Dayal Upadhyaya Grameen Kaushalya Yojana (DDU- GKY)
- vii) National Social Assistance Program (NSAP)
- viii) MISSION ANTYODAYA
- ix) Saansad Adarsh Gram Yojana (SAGY)

Apart from the administrative set up for Rural Development at the center, other institutions have also been established to provide a framework for rural development institutions in the country. The Panchayati Raj Institutions is the oldest form in India primarily functioning through people participation and involvement at the grassroot level. It is a form of rural local self-governance through village councils who are the elected representatives. The Panchayati Raj Institutions was introduced through the 73rd Constitutional Amendment Act of 1992.

Some of the other rural development institutions are:

- i) National Bank for Rural Development (NABARD)
- ii) National Institute of Rural Development (NIRD)
- iii) Center of Science and Technology for Rural Development

1.5.2 North East Region

The Ministry of Development of North Eastern Region (DONER) functions as the nodal department for matters relating to the socio-economic development of the 8 Northeast states (Assam, Meghalaya, Nagaland, Arunachal Pradesh, Tripura, Manipur, Mizoram and Sikkim). It is assigned with the responsibility of planning, execution and monitoring of development schemes and projects. It coordinates with various ministries and departments which are primarily concerned with developmental activities in the North-eastern Region (NER). Some of the schemes under the Ministry of DONER are mentioned below:

- Non-Lapsable Central Pool of Resources (NLCPR)
- North East Special Infrastructure Development Scheme (NESIDS)
- North Eastern States Roads Investment Program (NESRIP)
- Social and Infrastructure Development Fund (SIDF)
- The North East Road Sector Development Scheme (NERSDS)

In the year 2017, the Non-Lapsable Central Pool of Resources (NLCPR) was restructured as North East Special Infrastructure Development Scheme (NESIDS) and Special Packages through State Governments of NER and some Central Ministries.

1.5.3 Nagaland state

In the state, the Department of Rural Development undertakes the developmental programs for the rural areas of Nagaland. The programs are aimed at improving the social and economic well-being of the inhabitants of the state. All the activities of the Department are implemented through the Village Development Board (VDB) which is a grass root level organization. The State Institute of Rural Development (SIRD) Nagaland is the apex training institute for rural functionaries in the state which conducts need based training programs for the rural poor as well as creating awareness of the government's flag-ship programs. The District Rural Development Agency (DRDA) set up as an autonomous body under the Societies Registration Act 1860 undertakes planning and implementation of anti-

poverty, wage employment programs and coordination with other government and non-government agencies in the state. The DRDA monitors and oversees the implementation of the various anti-poverty programs under the Ministry of Rural Development in the state.

1.6 RURAL OCCUPATIONAL STRUCTURE

With agriculture dominantly undertaken as a source of livelihood and economic activity in the state, it is evident that the rural occupational structure would be mostly agricultural in nature. The cultivators and agricultural laborers form the backbone of the rural economy. Cultivators are typically small-scale farmers while the agricultural laborers provide manual labor usually on seasonal basis.

Table 1.1 Composition of Rural workforce in Nagaland from 1991-2011

Census Year	Cultivators			Agricultural Laborers		
	Male	Female	Total	Male	Female	Total
1991	178974	192623	371597	5109	2124	7233
2001	232652	226025	458677	7330	4729	12059
2011	208221	212158	420379	12899	9672	22571

Source: Statistical Handbook (Nagaland), 2021

Table 1.1 presents a summary of the workforce pattern in the state comprising of Cultivators and Agricultural laborers covering 3(three) decades from 1991 onwards to 2011.

1.7 POVERTY ALLEVIATION SCHEMES

900 million or over three quarters of the world's poor live in rural areas and many of them depend on agriculture to earn a living (FAO, 2017)¹⁰. Several poverty alleviation programs have been launched by the central government to bring about prosperity and development in the rural areas. Rural development programs began in India with the implementation of the Community Development Programs in the early 1950s. Since then, several programs have been formulated and restructured for successful and effective implementation. India has a population of 121 crores (2011 census), with the rural population forming the majority of the total population. While consistent efforts have been made to yield broader outreach of the rural programs, many continue to be outside the folds of the programs. Multiple problems compound this lack of outreach. Lack of awareness, people participation, ineffective implementation and corruption are some constraints hindering the successful implementation of the rural programs. In retrospect, the impacts of the programs have been positively noted in eradicating poverty and improving the living standards of the rural poor.

Table 1.2 gives a brief timeline of the various initiatives undertaken post-independence to promote rural development in the country.

Table 1.2 Rural Development initiatives post-independence

1951	First Five-Year Plan launched
1952	Community Development program launched
1958	Three tier structure of local self (Panchayati Raj) introduced
1969	Rural Electrification Corporation set up.
1971	“Garibi Hatao” initiated
1972-73	Pilot Intensive Rural Employment Project (PIREP) Accelerated Rural Water Supply Program (ARWSP)

1973-74	Drought Prone Areas Programs (DPAP)
1977	Food for Work Program
1977-78	Desert Development Program (DDP)
1978-79	Integrated Rural Development Program (IRDP)
1979	Training of Rural Youth for Self-Employment (TRYSEM)
1980	National Rural Employment Program (NREP)
1982	Development of Women and Children in Rural Areas (DWCRA)
1985-86	Indira Awaas Yojana (IAY)
1986	National Drinking Water Mission (NDWM) [rechristened as “Rajiv Gandhi National Drinking Water Mission” (RGNDWM) in 1991]
1986	Council for Advancement of People’s Action and Rural Technology (CAPART) Central Rural Sanitation Program (CRSP)
1988	“Bekari Hatao” initiated
1988-89	Million Wells Scheme (MWS)
1989	Jawahar Rozgar Yojana (JRY)
1992	Constitutional 73rd Amendment Act to grant constitutional status to the Panchayati Raj institutions
1993	Employment Assurance Scheme (EAS)
1995	National Social Assistance Program (NSAP)

1999	Jawahar Gram Samridhi Yojana (JGSY) Swarnjayanti Gram Swarozgar Yojana (SGSY)
2000	Pradhan Mantri Gram Sadak Yojna (PMGSY)/Annapurna Scheme
2001	Sampoorna Grameen Rozgar Yojana (SGRY)
2004	National Food for Work Program
2005	Bharat Nirman/Common Minimum Program/Varsha Bima Scheme
2006	Mahatma Gandhi National Rural Employment Guarantee Act (MGNREGA)

Source: (Hazra, 2014)

1.7.1 Initiatives of the Central Government

Some of the more recent development interventions undertaken by the central government to eradicate poverty and improve the social and living conditions of the rural poor are discussed briefly below:

1.7.1.1 Mahatma Gandhi National Rural Employment Guarantee Act (MGNREGA)

The MGNREGA Act was passed in 2005 under the prime ministership of Dr. Manmohan Singh. The National Rural Employment Guarantee Act aims to provide 100 days of guaranteed wage employment to enhance livelihood to every household whose adult members volunteer to do unskilled manual work in a financial year. The program has made positive impact on agricultural productivity and led to an increase in the wages of small and marginal workers. As on 2020-21, over 7.55 crore households were covered under the program benefitting 11.19 crore individual workers¹¹.

1.7.1.2 Pradhan Mantri Awaas Yojana- Gramin (PMAY-G)

The Pradhan Mantri Awaas Yojana- Gramin (PMAY-G) was launched in 2016. The program is a revamped version of the Indira Awaas Yojana (IAY) which aims at providing rural housing for all. The program aims to provide a pucca house with basic amenities to all the houseless and those living in kutchha and dilapidated houses. Introduced on April 1, 2016, the Pradhan Mantri Awaas Yojana Gramin (PMAY-G) stands as the central government's primary initiative. It is led by the Ministry of Rural Development (MoRD) and executed by the Ministry of Housing and Urban Affairs (MoHUA). Under the program, the beneficiaries are selected on the basis of criteria outlined in the Socio-Economic and Caste Census (SECC) and confirmed by the Gram Sabhas. The funds are then directly transferred to the bank or post-office accounts linked to the beneficiary's Aadhaar number. A cumulative amount of ₹2.15 crore has been sanctioned and 1.68 crore houses completed under the program as on 2020-21¹¹.

1.7.1.3 National Rurban Mission (NRuM)

The Shyama Prasad Mukherji Rurban Mission (SPMRM) also known as NRuM aims at the development of rural areas through an enhanced social, economic and physical infrastructure and bridging the urban rural divide. The National Rurban's Mission is to follow the vision of the development of cluster villages with optimum benefits of infrastructure that preserve and nurture the essence of rural community life. It aims to bridge the rural-urban divide by operating through 'Rurban' – a cluster-based approach that possess the essence of both rural and urban lifestyles. The mission is indicative of the governments approach to create a balanced and inclusive development for all sections of the society.

1.7.1.4 Pradhan Mantri Gram Sadak Yojana (PMGSY)

The Pradhan Mantri Gram Sadak Yojana (PMGSY) was launched in 2000 by the GoI to provide better road connectivity to the unconnected rural areas of the country. The program provides connectivity in rural habitations to reduce poverty by promoting access

to economic and social services. The program aims at connecting all habitations with a population of 500 persons and above in the plain areas and 250 persons and above in special category states (states of North East, Jammu and Kashmir, Himachal Pradesh, Uttarakhand), desert areas and 88 selected backward districts.

1.7.1.5 National Rural Livelihoods Mission (NRLM)

The National Rural Livelihoods Mission (NRLM) was launched in 2011 by the Ministry of Rural Development to increase the rural poor's household income through an efficient and effective institutional platform to enhance their livelihood and improve financial services. The program was renamed as Deendayal Antyodaya Yojana (DAY-NRLM) in 2015. It is a poverty alleviation program aimed at improving livelihood opportunities for the rural poor. The NRLM aims to reach 70 million rural impoverished households, spanning 600 districts, 6000 blocks, 250,000 Gram Panchayats, and 600,000 villages nationwide, within an 8 to 10-year timeframe¹¹. This initiative involves the establishment of self-managed Self Help Groups (SHGs) and federated institutions to provide support for collective livelihoods.

1.7.1.6 Deen Dayal Upadhyaya Grameen Kaushalya Yojana (DDU-GKY)

The Deen Dayal Upadhyaya Grameen Kaushalya Yojana (DDU-GKY) launched in 2014 is an undertaking of the GoI to provide employment to rural youths. It aims to enhance the employability of rural youth so as to transform them into an economically independent and globally relevant workforce. The DDU-GKY imparts placement linked trainings, where candidates undergo skill trainings. On successful completion of the training, the youths are provided with placement assistance in nearby areas. As of March 2022, a cumulative of 11,97,603 youths have been trained and 7,37,268 have been provided placements¹¹. The program imparts the required skills for the poor rural youth in the age group of 15-35 years and provides placements for minimum of 70% of the trained youths under the program.

1.7.2 Initiatives of the State Government

According to 2011 census, the rural population in the state constitutes 71.14% of the total population with agriculture as the primary source of livelihood for the rural population. Even after 58 years of attaining statehood, the state is economically and industrially backward and lacks basic infrastructures. Except for few districts like Kohima, Dimapur and Mokokchung, the spheres of development are quite negligible in other districts. A number of central flagship programs and schemes have been introduced in the state. While some programs have been successfully implemented, many others have not been successful owing to multiple problems.

Some of the rural development programs implemented in the state are mentioned briefly below:

- Swarnajayanti Gram Swarozgar Yojana (SGSY)
- Pradhan Mantri Awaas Yojana -Gramin (PMAY-G)
- Nagaland State Rural Livelihood Mission (NSRLM)
- Indira Awaas Yojana (IAY)
- Mahatma Gandhi National Employment Scheme (MGNREGA)

Table 1.3 below indicates the volume of expenditures incurred under Rural Development Schemes implemented by the Government of Nagaland during the period 2011-12 to 2020-21.

Table 1.3 Expenditure incurred under Rural Development Programs (Lakh INR)

Year	Pradhan Mantri Awaas Yojana - Gramin (PMAY-G)	Indira Awaas Yojana (IAY)	Nagaland State Rural Livelihood Mission (NSRLM)	Mahatma Gandhi National Employment Scheme (MGNREGA)	Grant in Aid (GIA)	Backward Regions Grand Fund (BRGF)
2011-12		4670.49	1169.83	66748.20	27.79	3257.53
2012-13		4028.77	291.81	54465.79	25.84	4593.98

2013-14		7741.40	197.16	30640.36	27.13	1267.45
2014-15	Earlier known as Indira	4891.5	592.04	19651.29	No allocation	436.69
2015-16	Awaas Yojana (IAY)	NA	NA	20345.79	NA	delinked
2016-17		782.42	544.44	63131.24	3200	delinked
2017-18	148.33	Renamed as (PMAY-G) 2016 onwards	1101.66	95501.18	3200	delinked
2018-19	0.00		2320	22746.85	3200	delinked
2019-20	1571.60		5522.66	39369.77	1750	delinked
2020-21	232.81		6047.78	43763.23	NA	delinked

Source: Statistical Handbook (Nagaland) compiled

NA=Not available

1.7.3 NABARD implemented poverty schemes

As the apex bank for agriculture and rural development, NABARD has been implementing a number of programs to improve the credit outreach for the poor rural masses. Notable among them is the SHG-Bank Linkage which is a rural poverty alleviation program. It was set up in 1992 targeting rural poor woman to provide economic emancipation from the vicious cycle of poverty. NABARD acts as the channel partner for many of the government subsidy linked credit schemes both in the farm and non-farm sector. Some of the government schemes implemented by NABARD are - Dairy Entrepreneurship Development Scheme, Agri Clinics & Agri Business Centres Schemes, National Livestock Mission, Capital Investment Subsidy Scheme, Interest Subvention Scheme, Credit Linked Capital Subsidy Scheme. The poverty eradication programs, rural development programs of NABARD will be discussed in detail in the proceeding chapters ahead.

1.8 REVIEW OF LITERATURE

A review of literature on earlier research works relating to agricultural development and the role of NABARD in rural development as well as the credit financing has been studied and categorized under different heads. This was done to get a broader perspective on the various aspects and dimensions relating to rural development.

- Agricultural Credit
- Rural Development
- Rural Banking
- Utility of Physical Infrastructure on Rural Development
- Microfinance
- Reports of Committees
- NABARD programs for rural development

1.8.1 Agricultural Credit

Mohan Rakesh (2004)¹² examines the importance of agricultural credit and the various reforms taking place to strengthen credit flow to the rural sector. The paper states how credit flow to the agricultural sector continued to face constraints and it was in this context, various committees and reforms were adopted. The paper highlights some substantial changes over a period of time such as setting up of RBI, nationalisation of banks, setting up of regional rural banks as reforms. The overall flow of institutional credit has improved but there are still several gaps which need to be addressed.

Das Abhiman et al (2009)¹³ states how a large portion of the population depend on agriculture for a living. Despite the efforts of RBI and the Government to improve the flow of credit to the rural sector, the growth of agricultural sector has been low and volatile. The volatility indicates that agricultural output remains low even after enhancing the agricultural credit. The paper examines the role of direct and indirect agriculture credit in agriculture production using statistical methods indicating that direct agricultural credit has far-reaching impact on agricultural production.

Mehrotra Nirupam (2011)¹⁴ discusses the issues relating to the uneven dispersal of agricultural credit. He states that the flow of agricultural credit over the last decade has not been an inclusive one for some regions of the country. Even among the various regions, the southern region fares better compared to other regions (northern, eastern, western, north-eastern, central) with respect to distribution of credit (both amount and account). Aside from the regional imbalance in the credit flow, there is also lack of synchronized credit flow with the requirement of the agricultural season.

Maurya et al (2021)¹⁵ in their paper examines the status of agricultural credit and indebtedness from several states in India. The study determines the flow of agricultural credit among different land size groups and the indebtedness of agricultural households among different classes of land possessed. The study concludes that most of the agricultural loans are taken for marginal size landholdings. The percentage of agricultural households in debt to the total agricultural households also increases as the land size increases.

Chaiya et al (2023)¹⁶ in their paper determines the impact of agricultural credit on farm productivity and its utilization. Findings from their study show that agricultural credit increased the crop productivity. Farmers used the credit for land preparation, purchase of fertilizers, seeds, pesticides and daily labor. Credit was also used by the farmers to meet their personal and domestic needs. However, the study finds that the percentage of misuse of agricultural credit was more than its proper utilization. The paper suggests more agricultural credit should be provided as it plays a key role in food security and reducing alleviation. It also suggests that measures should be undertaken to control the misuse of the agricultural credit.

1.8.2 Rural Development

Mishra SK (2007)¹⁷ states the challenges faced in the NER that act as constraints for rural development. The author highlights various challenges that need to be addressed. Some challenges may be because of geographical distance, lack of institutional and technological support, and lack of a conducive environment for investment prospects in the region. The paper stresses the need for a strategy for developing rural economy and employment in the region. It concludes that before implementation of any strategy for rural development, an evaluation should be done so as to choose the best possible results from among alternatives.

Dev et al (2003)¹⁸ in their working paper examines the trends in migration and rural non-farm employment and how growth in agriculture and development of the non-farm sector are important for generating employment which in turn helps in reducing poverty. The diversification into non-farm activities and migration have helped in improving the income status of the rural population. The study concludes that improvement in the policies and governance and addressing the short run and long-term issues of migration will help in higher levels of rural development in the underdeveloped regions of the country.

Karmarkar KG (2008)¹⁹ examines the issues relating to agriculture and rural development in the NER, the strategies required to address them, and NABARDs initiative. The paper highlights how NABARD has prioritized the NER by devising special measures such as increased refinance ratio, reduced rate of interest for refinance, relaxation in refinance norms, preparation of innovative schemes, and promotion of an alternative credit delivery system.

Singh Manoj Kumar (2009)²⁰ discusses about the importance of people's participation in rural development and how it is a necessary component in rural development. Participation from local institutions, high-level statutory bodies, village cooperatives, village schools and other associate organizations such as farmer's forums, youth clubs, and women's club is a necessary component in rural development. The paper also highlights some of the major obstacles to people participation such as the absence of commitment on

the part of government, unhelpful attitude of civil servants, division among rural people and monopoly of local organizations in the localities. The paper concludes with some measures that can be taken for people participation in the development activities.

1.8.3 Rural Banking

Rawal Vikas (2004)²¹ highlights the growth of rural banking post nationalization of banks. The trend in growth of banking infrastructure and provision of banking services continued till the 1980's before the economic reform policies were adopted. The paper noted on the declining role of formal sector banking institutions in the era of economic reforms. The paper mentions measures that should be taken to improve the overall flow of rural credit such as increasing the rural bank branch, interest rates on agricultural credit to be cut down, strengthening linkages between banks and cooperative credit institutions etc.

Khankhoje et al (2008)²² examines the efficiency of rural banks before and after restructuring of the regional rural banks in India. The study uses a non-parametric technique of Data Envelopment Analysis (DEA) to measure the production efficiency. An improved production efficiency in provision of services would mean lower cost and financially sustainable operations. The study finds that efficiency of rural banks has significantly improved after restructuring of banks in 1993-94.

Reddy (2010)²³ reviews the current scenario of rural banking and examines the developments in rural banking in the post-liberalization period. The paper suggests measures to improve the economic viability of regional banks by adopting innovative methods without compromising the credit outreach to the rural people. The paper suggests a new approach for banks to reach wider population in rural areas by establishing mobile-banks/ representatives/ agents who work on commission basis as a cost-effective method to assist banks in better service and deposit mobilization.

Shetty Megha et al (2022)²⁴ in their paper examines the role of regional rural banks and their contribution to the Indian banking system. The study focuses on the expansion of

bank branches and the mergers of regional banks during the period of 2012-21. The findings of the study determine that there has been growth in the number of bank branches and their performances have also increased considerably. The banking sector plays a crucial role in the economic health of the country by generating more employment opportunities and facilitating financial transactions.

1.8.4 Utility of Physical Infrastructure on Rural Development

Nakhro K H (2009)²⁵ discusses how public facilities and amenities such as roads, safe drinking water, electricity, schools, hospitals, transport and communication provide the basis for Rural Development. The transport network and road accessibility become significant factor for development program. It also highlights the role of financial institutions in providing financial assistance to farmers, small scale industries, cottage industries, artisans etc and how it is of prime importance for setting up of new units/upgradation/modernization of existing activities.

Rajeev Meenakshi (2008)²⁶ critically examines issues relating to the utilization of funds under Rural Infrastructure Development Fund (RIDF) and how certain measures can be adopted to make proper utilization of funds. RIDF was introduced by NABARD with the objective to finance projects undertaken by the government which were incomplete for lack of funds. The paper suggests that there is a need for prioritization of purposes for which loan is borrowed needs to be considered and uniformity in the rules in all the regions across a state.

Sahoo et al (2009)²⁷ in their paper highlight the importance of infrastructure development to the overall economic growth and enhancing trade and business activities in India. To determine the impact of infrastructure development on output, the paper develops an index of infrastructure stocks and estimate growth accounting equations to investigate the impact of infrastructure development on output. Results reveal that the infrastructure stocks, labour force and total investment play a key role in economic development. Findings of the paper conclude that infrastructure development has made a significant and

positive contribution toward growth than both public and private investments. There is also a unidirectional causality from infrastructure development to output growth.

Dutta P C (2003)²⁸ states how due to infrastructural backwardness, industrialization was either absent or started very late in some parts of the NER. The paper also highlights the progress and growth of Infrastructure in the NER relating to transport and communication, electrification, banking and the health sector. The paper concludes with some suggestions on how the Government can promote more direct investments in the projects that can help improve the infrastructure of the state such as power, roads, social and health care facilities. Credit facilities from banks and other financial institutions should also easily be available for promoting industrial activity.

Ghosh (2017)²⁹ in his paper evaluates the rural infrastructure facilities in 16 states in India and their impact on income and non-income dimensions of rural development. The study highlights on the slow and unsatisfactory performance of development across the states. Findings of the study indicate how improvement in the physical and social infrastructure can lead to agricultural productivity, improve life expectancy and literacy, reduce infant mortality and poverty. The government should prioritize on policies and programs with additional investments to improve the various infrastructure services to the rural people.

1.8.5 Micro Finance

Khandker, Shahidur R (1998)³⁰ states that microfinance reduces poverty by increasing per capital consumption among program participants and their families. He states that microcredit programs have helped smooth consumption and improve children's nutritional status. The nutritional impact of credit is large for girls and the impact larger for loans made to women. Microcredit also significantly and positively impacted schooling, especially for boys.

Goyal and Goel (2015)³¹ highlight how micro-finance has helped increase income and savings and asset creation among the rural poor. It also states how micro finance intervention has helped in women empowerment and social justice, improving the quality of life, satisfaction and esteem of the members. It concludes with how microfinance positively impacts the socio-economic life of the women members of the SHGs.

Chakravorty Madhumanjari (2015)³² emphasizes on women empowerment playing a key role in sustainable development. The author examines on the mixed opinions of role of micro finance on poverty alleviation and women empowerment. Certain hypotheses are drawn and determined in the paper. While micro finance increased the income level there were certain drawbacks observed in group borrowings which resulted in not making the maximum benefits out of the groups. The author concludes that though the outcomes of micro finance are micro the potential is infinite.

Ribeiro et al (2022)³³ in their paper reviews the most recent literature on the trends in the outcomes for microfinance recipients through the application of bibliometric analysis on 524 studies indexed in web of science database to determine the socioeconomic outcomes of microfinance in reducing poverty and empowering the vulnerable groups through entrepreneurial activities and financial innovation. Findings of the study indicate that a holistic approach should be adopted to boost micro finance outcomes through a better understanding of the beneficiaries of micro finance.

1.8.6 Reports of Committees

In order to address the problems of credit delivery system and the ineffective role of cooperatives in discharging its credit function, various expert committees and commissions were set up by the Government of India with the involvement of RBI. The recommendations of Committees led to various reforms in the field of rural credit in general and agricultural credit in particular. The findings, recommendations and suggestions of some committees are briefly mentioned below.

1.8.6.1 Report of the All India Rural Credit Survey Committee (1954)

The All India Rural Credit Survey Committee was formed in 1951 under the chairmanship of Prof Gorwala to assess the demand of credit by the rural workforce and the supply of credit by credit agencies. The survey covered 75 districts, 8 villages from each district and 15 households from each village. The findings indicated that even after 50 years of the existence of cooperatives, it had supplied only about 3% of the total credit requirements. The non-institutional agencies supplied 70% of the total credit requirements. The Committee of Direction summed up, "Cooperation has failed, but cooperation must succeed" In order to strengthen the cooperative movement, the committee recommended an integrated scheme of rural credit. The report's findings laid the foundation for increasing the role of institutional credit through the formal institutions namely the cooperatives and commercial banks. One of the recommendations of the committee was the setting up of National Agricultural Credit (Long term operation fund) under the Reserve Bank of India. The Committee also recommended nationalization of the Imperial Bank of India and to be renamed as State Bank of India (SBI). The findings of the report were submitted in 1954³⁴.

1.8.6.2 Report of the All India Rural Credit Review Committee (1969)

The All India Rural Credit Committee (Venkatappiah Committee) was formed in 1966 to review the supply of rural credit and to examine the progress made in institutional arrangements for agricultural credit. The Committee disavored setting up of a separate national level institution beyond the Reserve Bank of India (RBI) and strongly expressed RBI to continue its function to regulate the credit operations in the country. It recommended setting up of Agricultural Credit Corporation under RBI. It also recommended adopting a multi-agency approach by involving the commercial banks and co-operatives to meet the credit requirements and strengthen the Cooperatives' role. The report of the committee was submitted in 1969.³⁵

1.8.6.3 Report of the CRAFICARD Committee (1981)

The CRAFICARD Committee was formed in March 30, 1979 at the insistence of the Government of India and RBI to review the arrangements for agriculture and rural

development. The Committee reviewed the credit delivery system, its effectiveness, and what further improvements were needed for its effective functioning. It felt that there was a lack of direction and proper guidance for effective implementation of the concept of integrated rural development. The Committee felt that there was a need for decentralization of the RBI in discharging its credit function to a lower-level organization to handle the increased magnitude of work in the field of rural credit for integrated rural development. The Committee favored setting up a separate institution, namely NABARD to integrate all activities relating to rural credit at the national level. Based on the recommendations of the CRAFTICARD Committee NABARD was established in 1982.³⁶

1.8.7 NABARD programs for Rural Development

A study by Symbiosis School of Economics³⁷ have made an impact assessment on the tribal beneficiaries of NABARDs Tribal Development Fund (TDF) program. The impact study was done on income, provision of basic facilities, formation of SHGs & FPOs, migration, asset holding, credit creation, consumption expenditure, education and health, environment, role of PIA. It has been found that the TDF made significant improvements in all the areas with the PIAs making a major contribution in bridging the gap between the poor tribal families and lending institutions. The study concludes that the ‘wadi project’ has created a sense of stakeholdership among the tribal communities.

ASCI (2020)³⁸ in their study undertaken for NABARD supported Tribal Development Fund (TDF) beneficiaries towards creation of “Maa Thota” horticulture plantations in Andhra Pradesh found that the program resulted in improved economic and social benefit to the tribal farmers. Various methods such as recall method, Focus Group Discussions (FGDs), Key Informant Interviews (KIIs) were employed to collect relevant data and information to meet the objectives of their study. The detailed study concludes with key recommendations for long term sustainability through regular maintenance, water conservation efforts, access to scientific knowledge and convergence of Project Implementing Agencies (PIAs) with state department flagship programs of the government.

Another study by Tripathi et al. (2020)³⁹ to determine the impact of NABARD supported Watershed program in six districts of Vidarbha regions of Maharashtra found

that the program is an effective tool for overall development of rural areas. The study finds that the program led to significant improvements in the literacy levels of beneficiaries and also had a positive impact on education through the adoption of the program. The overall findings of the study indicate that the program has led to positive changes in income and improvement in basic infrastructure, availability of electricity, gas cylinders, medical services, and proper sanitation facilities.

1.9 NAGALAND PROFILE

The state of Nagaland officially came into existence on Dec 1st 1963 as the sixteenth state of India. Nagaland is hilly terrain with a geographical area of 16,579 sq kilometers. It is a landlocked state surrounded by Assam in the west, Arunachal Pradesh in the north, Myanmar in the east and Manipur in the south. It is administratively divided into 16 districts namely Kohima as the capital, Dimapur, Phek, Mokokchung, Peren, Mon, Tuensang, Kiphire, Zunheboto, Wokha, Longleng, Noklak, Shamator, Niuland, Tseminyu and Chumoukedima. The population of the state as per 2011 census is 19.78 lakhs with a population density of 119 persons per sq. km. The sex ratio stands at 931 females per 1000 males. The district of Dimapur is the most populated with 3, 79,769; while Longleng district registered the lowest populated with 50,593 (2011 census)

The rural population constitutes 71.14% of the total population, of which 60% is engaged in farming activities. The state's literacy rate stands at 79.55% (2011 census), which is above the average literacy rate of 72.98% of the country. English is the official medium of language in the state. Nagamese creole is the commonly spoken language among the inhabitants of the state.

The state has a total of 1428 villages, 74 development blocks, 1238 Village Development Boards (VDBs) forming part of the administration. Nagaland state is inhabited by 16 recognised tribes each having own distinct lingual, cultural and customary practices. The tribes recognised include Ao, Chakhesang, Sema, Lotha, Angami, Phom, Konyak, Chang, Khiamniungan, Kuki, Zeliang, Kachari, Pochury, Rengma, Sangtam, and Yimchunger.

Dimapur railway station and Shokhuvi railway station located at Chumoukedima connect the state to the rest of the country. A railway line project of the Dhansiri (Assam) to Zubza-Thizama will be completed in the near future. Nagaland has only one operational airport located at Dimapur which provides commercial flight services to the rest of the country. Roads are the only mode of connectivity to other districts of the state.

Table 1.4 Nagaland Profile at a Glance

Physical feature		Population (2011 census)	19,78,502
Geographical Area	16,579 km ²	Male	1024649
		Female	953853
Longitude	93°.20'E to 95°15'E	Rural Population (71.14%)	1407536
Latitude	25°.6' N to 27°.4'N	Urban Population (28.86%)	570966
Time Zone	IST (UTC+05:30)	Sex Ratio	931 females per 1000 male
Forest cover area	8.62 lakh hec	Density of population (per sq km)	119
Administration	Total	Literacy rate (2011 census)	79.55%
Districts	16	Male	83.29%
Circles	133	Female	76.69%
Development Blocks	74	Highways	Total
Statutory towns (2011)	19	National Highways	1507.88 km.
Census towns (2011)	7	State Highways	650 km
Police stations (2012)	61	Rural Roads	4420.5 km
Police outpost (2012)	28	Urban Roads	459.3 km
		Town Roads	941.8 km

Source- Statistical Handbook (Nagaland), 2021

1.10 BANKING NETWORK IN NAGALAND

Banks play an essential role in the dispersal of credit and facilitate the economic growth of a state. As of 31st March 2021, 186 bank branches are catering to the financial needs of the state. The performance of banks for target achieved under Priority Sector lending accounted for 47.35 % out of total target of ₹905.10 crores.

Table 1.5 Number of bank branches as on 31st March, 2021.

Agency	No. of bank(s)	No. of bank branches
Public Commercial Bank	12	120
Private Commercial Bank	9	35
Nagaland Rural Bank	1	10
Nagaland State Cooperative Bank	1	21
Total	23	186

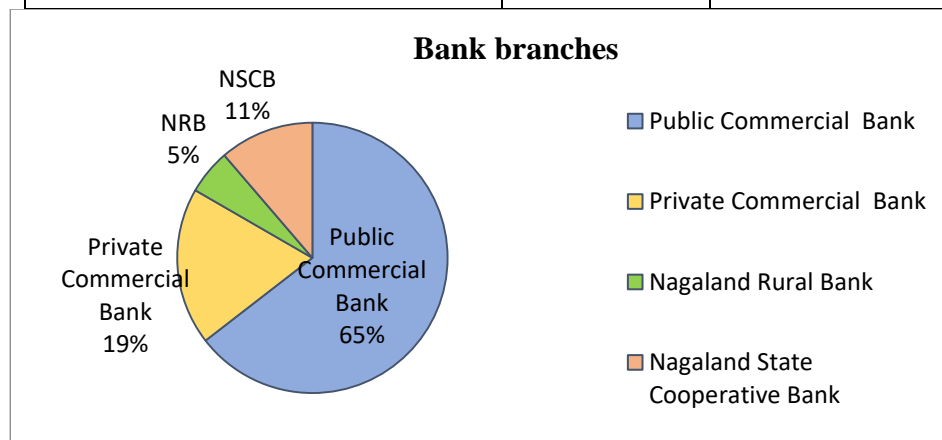


Fig 1.1 Number of bank branches

Source: SLBC (Nagaland) Report, 2021

Table 1.6 District-wise number of bank branches in Nagaland (as on 31st March, 2021)

Sl no	Districts	Public Sector Bank	Private Sector Bank	Nagaland Rural Bank	State Cooperative Bank	Total bank branches	% share
1	Kohima	27	11	3	4	45	24
2	Dimapur	38	17	4	5	64	34.5
3	Phek	5	0	0	3	8	4
4	Mokokchung	17	4	1	3	25	13.5
5	Peren	3	0	0	1	4	2
6	Mon	6	0	0	1	7	4
7	Tuensang	7	0	0	1	8	4
8	Kiphire	2	0	0	1	3	2
9	Zunheboto	7	0	1	1	9	5
10	Wokha	7	3	1	1	12	6.5
11	Longleng	1	0	0	0	1	.5
12*	Noklak, Tseminyu,,Shamator, Niuland, Chumoukedima						
	Total	120	35	10	21	186	100

Source: SLBC (Nagaland) Report, 2021 * No separate data was available on the newly created districts at the time of data collection.

Table 1.6 shows the distribution of bank branches in the state. It is evident that there is an uneven distribution of bank branches across the state. While more than 60% of the total bank branches are located in the districts of Dimapur, Kohima and Mokokchung, districts such as Longleng and Kiphire have minimal bank branches of the total bank branches.

Table 1.7 Bank wise Credit Deposit (CD) Ratio as on 31st March, 2021 (Lakh INR)

Banks	Deposits	Advances	CD ratio%
Public	1017913.91	491600.87	48.29
Private	347129.84	95938.81	27.64
RRB	11670.4	3286.13	28.16
Cooperative Bank	97313.04	61831.66	63.54
Total	1474027.19	652657.47	44.28

Source: SLBC (Nagaland) Report, 2021

Table 1.7 shows the Bank wise credit deposit ratio in the state. It can be seen that Cooperative Bank registered the highest CD ratio (63.54) while the remaining banks in the state are below the minimum stipulated CD ratio i.e 60%. A low CD ratio indicates that banks have not mobilized much of their deposits for lending activities. The Credit Deposit (CD) Ratio was registered at 44.28% as on 31st March 2021.

Table 1.8 District-wise Credit Deposit (CD) Ratio as on 31st March, 2021

Sl. no	Districts	CD ratio %
1	Kohima	22.94
2	Dimapur	47.95
3	Mokokchung	82.58
4	Phek	70.67
5	Longleng	110.25
6	Peren	97.36
7	Tuensang	114.69
8	Kiphire	111.21
9	Wokha	73.65
10	Zunheboto	102.64
11	Mon	69.46
12	Noklak, Tseminyu, Shamator, Nuiland, Chumoukedima	*

Source- Statistical Handbook, Nagaland 2021

* No separate data on the newly created districts was available at the time of data collection.

As shown in Table 1.8, the CD ratio district wise indicates wide variations with highest of 114.69% and lowest of 22.94%. As of 31st March, 2021 Tuensang district registered the highest CD ratio while Kohima district registered the lowest CD ratio.

1.11 STATEMENT OF THE PROBLEM

Traditionally, agriculture has been the main occupation for the people in the state and agriculture continues to be a primary a source of livelihood. Credit is required for any agricultural activity to sustain and increase productivity. However, lack of awareness about financial assistance from banks and poor credit flow from formal financial institutions (banks) hinders growth and development. The rural people of the state engaged in agriculture are unable to get timely financial access to credit and other financial services which is the key for increasing the agricultural production and productivity. There is a need for easy availability to credit at grass root level.

People's participation is a necessary component of rural development. But lack of awareness and knowledge, lack of initiation and lack of participation in the developmental efforts act as a hindrance to bringing about development in the rural areas. There is a need for intervention to encourage more participation from the rural people to avail the various schemes, programs and policies introduced. NABARD's mandate continues to be rural development and easy access to agricultural credit for the farmers. In this regard, NABARD has taken many initiatives to strengthen the credit delivery system. NABARD supports many programs relating to agriculture and rural development.

1.12 SIGNIFICANCE OF THE STUDY

The study is an attempt to assess the role played by NABARD in rural development of Nagaland. The study will focus on promoting employment opportunities to the rural people of the state for which a case study of 4 districts namely Kohima, Mokokchung, Dimapur and Phek have been chosen for the study. The study reviews the workings of NABARD in the state and how it has diversified its activities from a refinancing agency to undertaking developmental and promotional programs through its various initiatives and interventions. NABARD has made significant contributions in developing the rural areas by providing direct finance to the state government to improve the rural infrastructure.

Though the present study is limited to 4 districts (Kohima, Dimapur, Mokokchung, Phek), the findings of the study will be relevant to other districts having similar socio-

economic conditions. The period of study will be for ten years i.e., 2011-2021. There is a need to provide more employment opportunities to absorb the increasing rural work force and reduce the increasing dependence on agriculture. In this regard, NABARD has made a significant contribution to provide alternate livelihood options by diversifying its refinance activities even in the promotion of non-farm activities such as housing, education, infrastructure support etc.

NABARD's refinancing caters to a wide range of activities from farm to non-farm sector like Minor Irrigation, Land Development, Dry Land Farming, Watershed Development, Farm Mechanization, Plantation & Horticulture, Poultry, Dairy & other animal husbandry activities, Forestry, Self Help Groups, Agro Processing, Government sponsored programs etc. NABARD's purpose for undertaking various promotional schemes under these activities is to provide greater credit flow to the rural people which will thereby help in bringing about sustenance for rural livelihood and raise the standard of living of rural poor.

1.13 OBJECTIVES OF THE STUDY

The objectives of the study are outlined as follows-

- a) To study the role of NABARD in facilitating rural livelihood in Nagaland.
- b) To study the impact of refinancing schemes of NABARD.
- c) To study the loan recovery performance of selected credit agencies/financial institutions availing the NABARD refinance.
- d) To analyze the implementation of Government schemes and their impact on rural development.
- e) To study the role of NABARD in rural infrastructure development.

1.14 HYPOTHESES OF THE STUDY

- a) The refinance schemes of NABARD have accelerated the rural development process in Nagaland during the last decade.
- b) NABARD has played a significant role in regulating the functioning of Co-operatives and Regional Rural Banks in the state by providing an efficient credit delivery system in Nagaland.
- c) NABARD has made a significant impact in generating rural employment opportunities in the state.

1.15 METHODOLOGY

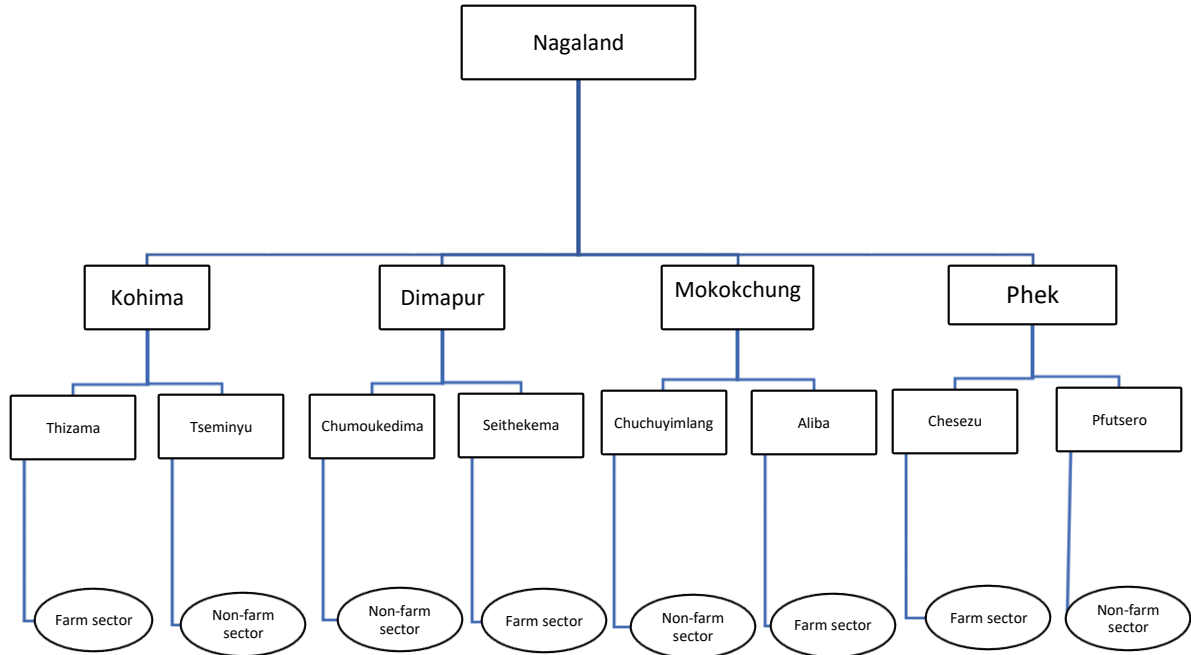
1.15.1 Data Collection

The study is based both on primary and secondary data. Both primary and secondary data play a crucial role to provide a comprehensive information. Primary data has been collected by administering a structured questionnaire to the beneficiaries of NABARD. Secondary data has been collected from Annual Reports, Statistical Statements of NABARD from various years, books, journals and research reports.

1.15.2 Sampling frame

The sampling frame was selected from the beneficiaries of NABARD comprising of different areas of finance belonging to both farm and non-farm sector. A multi-stage sampling technique has been used for the study. In the first stage, 4 districts were selected as a sample study for the state of Nagaland. In the second stage, several villages were selected from each district. The villages were purposively selected where the NABARD schemes were implemented. In the third stage, NABARD beneficiaries were identified and simple random sampling was used to select the beneficiaries.

Figure 1.2 Multistage sampling



Multistage sampling stage

Stage 1- Selection of districts

Stage 2- Selection of Villages

Stage 3- Selection of farm/non-farm sector activities

Stage 4- Selection of beneficiaries

1.15.3 Sampling size

A total of 300 respondents were chosen for the study and their response collected through a structured questionnaire. The present study covers the beneficiaries of NABARD programs namely Farmers Producer Organisation (FPO), Tribal Development Fund (TDF), Springshed based Watershed Program, Self-Help Group (SHG) and beneficiaries availing NABARD support finance from the non-farm sector.

1.15.4 Research Variables

The beneficiaries were identified from various programs implemented by NABARD under farm and non-farm sector. The research variables used in the study from the varied programs are indicated in the figure below:

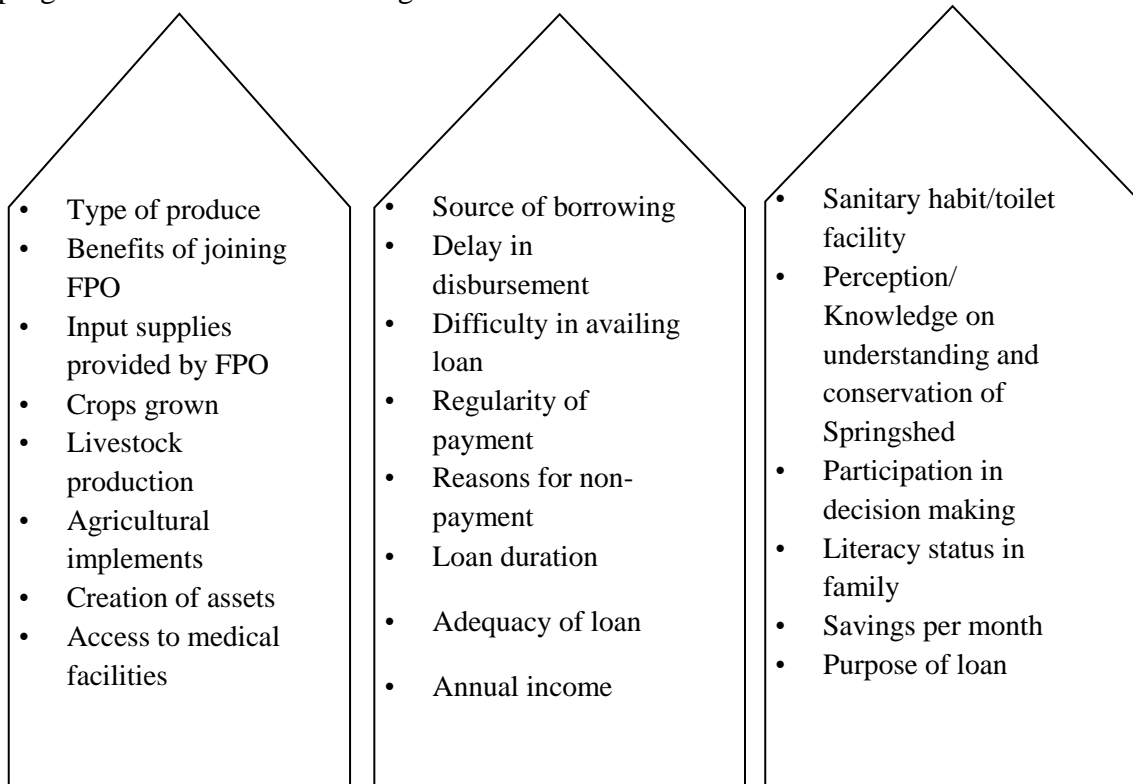


Figure 1.3 Research Variables

The role of NABARD in the rural development of Nagaland is determined by the physical performance of NABARD through micro finance, refinance, supervision, livelihood sponsored programs and Government supported programs.

The dependent and independent variables used in the research study are underlined below:

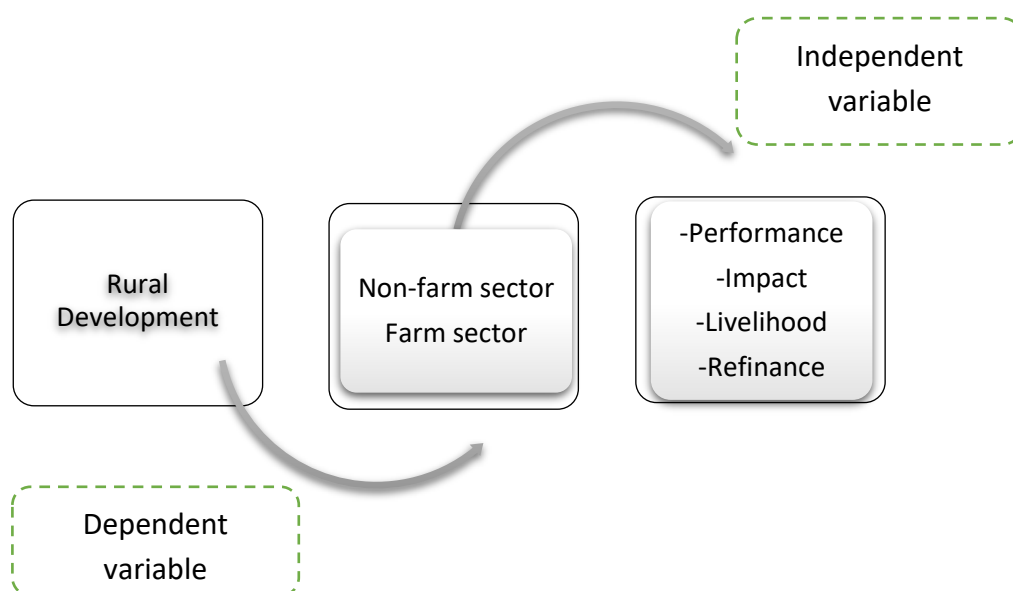


Figure 1.4 Research Model

1.15.5 Statistical Tools and Techniques used

To meet the objectives of the study, data of different aspects has been collected from primary and secondary source. Primary data was collected from various beneficiaries of NABARD supported programs namely members of Farmers Producer Organizations (FPOs), beneficiaries of TDF (Wadi) programs, members of Self-Help Groups (SHGs), and rural inhabitants. Both descriptive and inferential statistical analyses were employed in accordance with the study's objectives using statistical software like SPSS. Descriptive statistics such as frequency, percentage, means, and standard deviation were utilized to provide an overview and summary of the collected data. Meanwhile, inferential statistics techniques including regression analysis, factor analysis, analysis of variance, and Structural Equation Modeling (SEM) were employed to draw meaningful conclusions and identify relationships between variables. Furthermore, Cronbach's Alpha was applied to each developed scale to assess the reliability of the data, ensuring the robustness of the findings derived from the analysis.

1.16 CHAPTERIZATION SCHEME

Chapter 1 – Introduction and review of literature

The first chapter is an introduction to the profile of the state, banking/financial sector profile in the state and the role of NABARD in rural development, statement of the problem, objectives of the study, hypotheses, methodology, scope of the study, limitations of the study, and review of literature.

Chapter 2- Functions of NABARD – a theoretical perspective

The second chapter is based on the organizational set up, functions, objectives and management of NABARD.

Chapter 3 – Role of NABARD in the Farm Sector

The third chapter deals with the role of NABARD in the farm sector through the various programs implemented in the state namely Tribal Development fund (TDF), Springshed based Watershed Development Program, Farmers Producer Organization (FPOs) and Self-Help Group (SHGs). NABARD has been facilitating the growth of the farm sector through its various programs. The interventions in the state have been undertaken with partner organizations such as Government departments, NGO's, church-affiliated bodies and registered societies.

Chapter 4 – Role of NABARD in the Non-Farm Sector

The fourth chapter pertains to the role of NABARD in the non-farm sector to provide credit flow for small, cottage and village industries, handloom, handicrafts and other rural services in the rural areas.

Chapter 5- Data Analysis and Interpretation

The fifth chapter deals with the data analysis and interpretation relating to the various programs undertaken by NABARD.

Chapter 6- Summary of findings and conclusion

The sixth chapter presents the summary of findings, recommendations and conclusion.

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CHAPTER 2 FUNCTIONS OF NABARD- A THEORETICAL PERSPECTIVE

2.1 Introduction

2.2 Agricultural credit- A Historical Overview

2.3 Genesis of NABARD

2.4 Board of Directors

2.5 Organizational Structure of NABARD

2.5.1 Chairman

2.5.2 Managing Director and Whole time Directors

2.5.3 Various Departments

2.5.4 Management of NABARD Offices

2.6 Functions of NABARD

2.6.1 Credit Function

2.6.2 Developmental & Promotional Function

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2.6.4 Other Functions

2.7 Objectives of NABARD

2.8 Committees of NABARD

2.9 NABARD Partner Institutions and Clients

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2.9.2 Development oriented

2.10 NABARD in Nagaland

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2.1 INTRODUCTION

The second chapter is a theoretical framework of study into the organizational set up, functions, objectives and management of NABARD. This would provide a background to review the operations of NABARD and its role as the apex bank for agriculture and rural development. Since its inception in 1982, NABARD has dedicated itself to bring rural India forward and empowering the agriculture and rural sector. It has enabled to build a rural ecosystem empowering the rural people in their pursuit of economic and social opportunities.

The chapter begins with a section on the historical background of agricultural credit through institutional and non-institutional sources- its growth and trend. The remaining sections dive into the genesis of NABARD, its operational and functional aspects.

India's economy is basically an agrarian economy. As per Food and Agriculture Organization, agriculture with its allied sector is the largest source of livelihood in India. It is a means of livelihood and employment for 70% of rural households.¹ This increasing dependence on agriculture has made it an important national policy to focus by the policymakers of the country.

As stated by then Prime Minister Jawaharlal Nehru, "Everything else can wait, but not agriculture." This statement made over 70 years ago holds weightage even today. Agriculture is often regarded as the backbone of the Indian economy and the foundation of economic growth and development. Rigorous efforts have since then been made towards the development of agriculture in the country. Agriculture is thus the top most priority with the center and states working effectively towards achieving its vision of "Doubling of farmers income by 2022" as set by the Ministry of Agriculture and Farmers Welfare, Government of India². It is also pertinent to mention that while concerted efforts are made at central and state level, there are still many constraints hindering the progress of agricultural development. Among the constraints, a major factor is the flow of finance for sustaining agriculture and its allied activities.

2.2 AGRICULTURAL CREDIT- A HISTORICAL OVERVIEW

Agriculture plays an important role in the development of the rural economy while credit occupies an important role in the development of agriculture. The progress and growth of agriculture can be achieved only if adequate and timely rural credit is made available to the rural sector. The importance of agricultural credit and its availability is a prerequisite for the development of agricultural. Credit continues to occupy an important place in the strategy for development of agriculture. There are two sources supplying agricultural credit in India namely institutional and non-institutional. The institutional sources include Government, Commercial Banks, Cooperative Societies, Regional Rural Banks and other financial institutions. The non-institutional sources include traders, moneylenders, families, relatives and friends.

Since independence, Government made concerted efforts to augment the flow of credit to the rural sector. Emphasis was given to the development of credit institutions catering specifically to agricultural credit. This is evident from the Cooperative institutions which were set up under the Cooperative Societies Act 1904 which were seen as the premier institutions for disbursing agricultural credit. The Cooperatives were considered the most suitable agencies for agricultural financing. But with the increasing credit needs it was felt that the cooperatives failed in meeting the needs significantly. Early studies conducted by RBI during 1936 and 1937 found that entire finance required by agriculturists were supplied by money lenders and negligible part was played by cooperatives and other credit agencies.

Traditionally, the small and marginal farmers depended heavily on the non-institutional agencies such as moneylenders and traders to meet their daily need requirements since their savings were negligible. They were thus exploited and trapped in the vicious cycle of rural indebtedness and bonded labour. Subsequent to the nationalization of banks in 1969 and the increase in the spread of rural branches, the share of moneylenders in agricultural credit reduced considerably.

Table 2.1 Credit borrowing from institutional and non-institutional source

	1951	1961	1971	1981	1991	2001
	<i>Share in per cent</i>					
Institutional agencies (Government, Commercial Banks (CB), cooperatives, Regional Rural Banks (RRBs), other financial institutions)	7.2	14.8	29.2	61.2	64.0	57.1
Non-institutional agencies	92.8	85.2	70.8	38.8	36.0	42.9
Total	100	100	100	100	100	100

Source- All India Rural Credit Survey (1954)

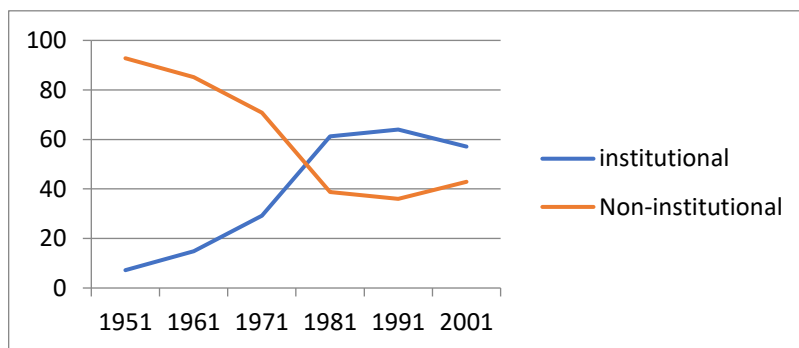


Figure 2.1 Credit borrowing

Table 2.1 and Fig 2.1 presents the growth of agricultural credit decade wise from 1951 to 2001. As depicted, credit from the non-institutional sources saw a decline over the decades while the institutional formal lending sources witnessed a steady growth.

Even by 1951, the provision of credit through formal institutions such as cooperatives and Commercial Banks (CB) contributed only about 4 per cent of the total outstanding debt. Realizing the importance of institutional credit, the Government and the RBI set up various expert committees to study and improve the flow of credit to the rural sector. Some of the Committees worth mentioning are All India Rural Credit Survey

Committee (1954), All India Rural Credit Review Committee (1969), Narasimhan Credit Committee (1975), National Commission on Agriculture (1976), Committee to Review Arrangements for Institutional Credit for Agriculture and Rural Development CRAFTCARD (1979) Agricultural Credit Review Committee (1989).

The findings of various Committees highlighted the lacunae of credit outreach to the rural poor. Some Committees recommended vigorous implementation of cooperative structure as exclusive agencies and increasing the participation of Commercial Banks (CB). The outcome of such recommendations led to the nationalization of 14 largest Commercial Banks (CB) in 1969. Other Committees such as the National Commission on Agriculture recommended setting up of a separate credit institution providing short, medium and long-term credit and also providing inputs and services. The Narasimhan Credit Committee suggested setting up of RRBs for more effective outreach, while the All India Rural Credit Review Committee recommended setting up of a multi-agency approach involving the Commercial Banks (CBs) and Regional Rural Banks (RRBs) and not just the cooperative banks in the provision of credit on a large scale³.

In a nutshell, it can be summed up that the various Expert Committees and their recommendations echoed the need for an increased banking facility to the rural section and improving the overall credit delivery system. While some Committees favored setting up of an All-India organization for agricultural development, others disfavored creation of such separate bank for agricultural development. As pointed by Narasimham Committee (1975)⁴ the creation of multiple institutional agencies in the field of rural credit have only led to increase in the number of problems such as uncoordinated credit disbursal, diversion to unproductive purposes and the inability of the credit agencies in discharging their functions⁴. It was felt that only a separate institution which could channelize and integrate the total structure for financing agricultural and rural development from ground level upwards would resolve these problems. The only plausible solution would be creation of an apex institution which would provide undivided attention, forceful direction and pointed focus to the credit problems arising out of integrated rural development. Thus, a need was felt for a single broad-based organization which would not only just be a supplier of credit but provide handholding support in implementation and formulation.

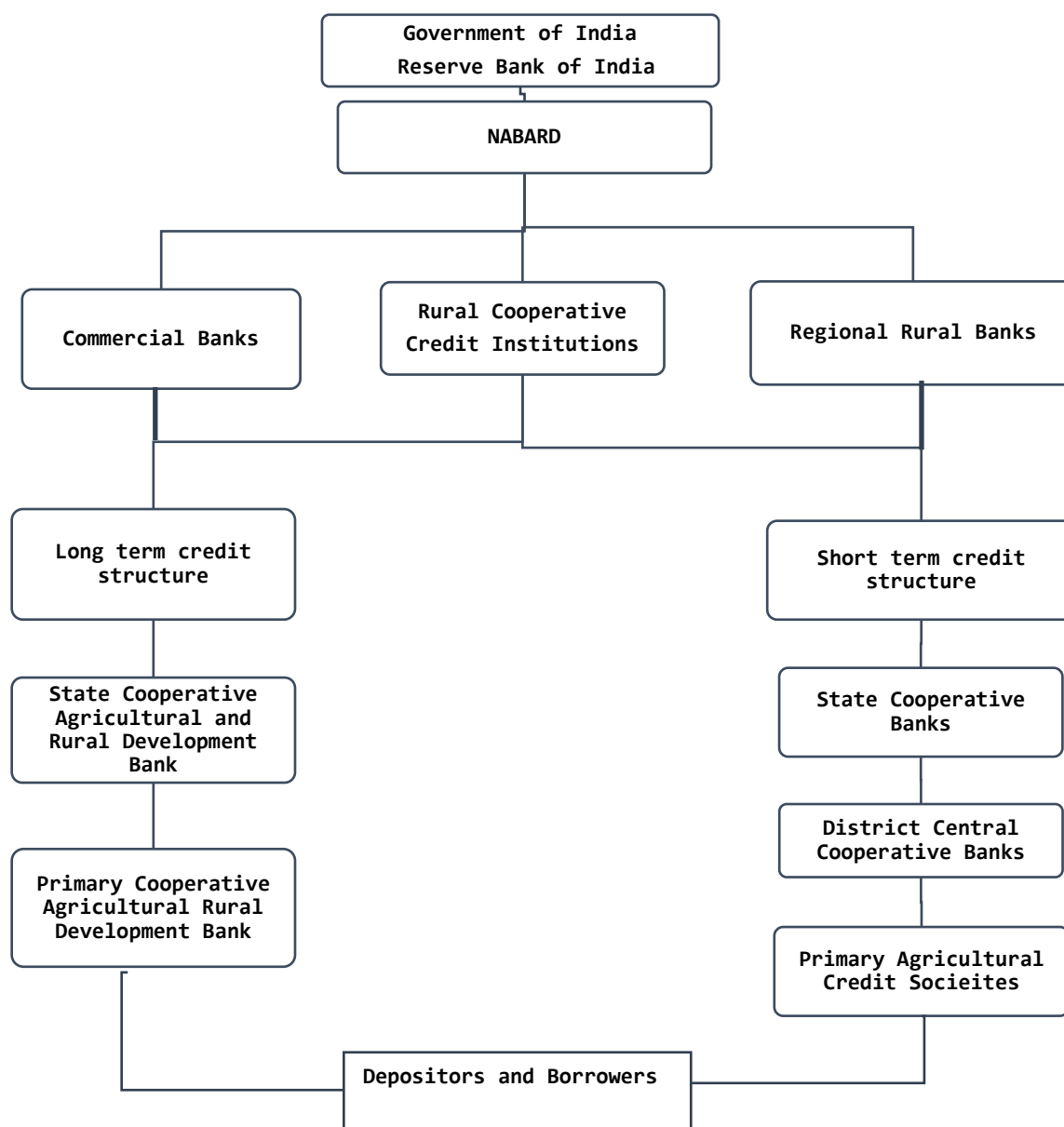


Fig 2.2 Agricultural Credit Structure in India

The Indian Agricultural credit structure is depicted in Fig2.2 with Reserve Bank of India (RBI) as the regulating body. NABARD was created to monitor and supervise the agricultural credit activities. The Commercial Banks, Cooperative Banks and Regional Rural Banks form the institutional sources for lending agricultural credit.

2.3 GENESIS OF NABARD

The CRAFTICARD Committee was set up on 30 March 1979, at the insistence of RBI and Government of India under the chairmanship of Shri B Sivaraman, former member of Planning Commission, Government of India. The Committee gave recommendations for setting of an apex institution at the national level which catered specifically to credit requirements in relation to rural development. The Committee reviewed the credit delivery system and related issues and what further improvements were needed for its effective functioning. It reviewed the workings of the then ARDC and felt that there was lack of direction and proper guidance for an effective implementation of the concept of integrated rural development. As such, it highlighted on the deficiencies and doubts of the ARDC as a supplementing agency for provision of funds. The Agricultural Refinance Corporation (ARDC) was set up by an act of Parliament in 1963 primarily as a refinancing agency. Since its establishment it also undertook activities which were developmental and promotional in nature. Therefore, in 1974 it was renamed as Agricultural Refinance and Development Corporation (ARDC) by amending the original act. As per the statute, the Corporation was “to provide such financial assistance to eligible institutions as it considers necessary for promoting the development of agriculture in India.”

On the role of RBI in dispensing its credit function, the CRAFTICARD Committee states “As regards the RBI, which historically as well as by the nature of its organization has had to combine diverse functions and duties including rural credit, it is legitimate to ask whether its top management and policy making bodies will, in practice, be able to set aside, amidst its multifarious responsibilities, the necessary time for giving attention, direction and focus to the details of the complex credit problems of integrated rural development in future.”⁵ As such, the Committee felt that there was need for decentralization of the RBI in discharging its credit function to a lower-level organization to handle the increased magnitude of work in the field of rural credit for an integrated rural development.

Thus, based on the recommendations of the CRAFTICARD committee, the National Bank for Agriculture and Rural Development (NABARD) was established by an act of parliament in 1981⁶. Accordingly, NABARD came into existence on 12th July 1982 by taking

over the agricultural credit functions of RBI and the refinance functions of the then Agricultural Refinance and Development Corporation (ARDC)

The National Bank for Agriculture and Rural Development (NABARD) is the apex organization handling all matters relating to policy, planning and operational aspects in the field of credit for the promotion of, agriculture and allied activities in rural areas.

NABARDs mandate continues to be development through credit and non-credit initiatives in order to bring rural prosperity in the field of agriculture, cottage & village industries, handicrafts and small-scale industries.

In order to improve the flow of credit to the agricultural sector, NABARD provides refinancing facilities to eligible banks and financial institutions. NABARDs refinancing enables banks to get the funding of term loans both for farm and non-farm sector. The funding from NABARD is released to eligible institutions viz SCARDBs, SCBs, RRBs or Scheduled commercial banks or any other financial institution approved by Reserve Bank of India as defined under section 25 of the NABARD Act 1981.

2.4 BOARD OF DIRECTIONS

The supervision, direction and management of the business affairs of NABARD are vested in a Board of Directors which shall exercise all powers and do all acts and things which may be exercised or done by the NABARD. The Board in discharging its functions shall act on business principles with due regard to public interest. As per section 6(1) of the NABARD Act 1981, the composition of the Board of Director shall consist of the following:

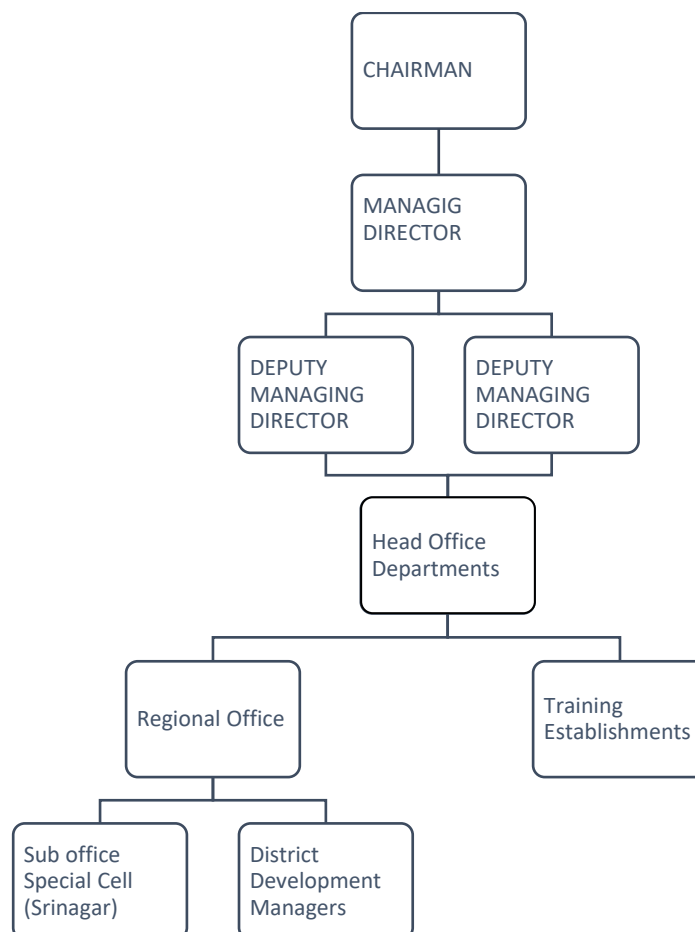
- a) a Chairman
- b) three directors from amongst experts in rural economics, rural development village and cottage industries or persons who have experience in the working of Cooperative Banks, Regional Rural Banks (RRBs) or Commercial Banks (CBs) or any other matter the special knowledge or professional experience which is considered by the Central Government as useful to the NABARD
- c) two directors from amongst the directors of the Reserve Bank

- d) three directors from amongst the officials of the Central Government
- e) four directors from amongst the officials of the State Government
- f) a managing director

2.5 ORGANIZATIONAL STRUCTURE OF NABARD

Like any organization, the success of management of a development Bank depends to a great extent on its organizational set-up, the degree of delegation of authority that exists and the extent of independence it enjoys in its day-to-day functioning. The structure of an organization will determine the modes in which it operates and performs. Presented in Figure 2.3 is the organization structure of NABARD.

Figure 2.3 Organizational set up of NABARD



2.5.1 CHAIRMAN

Section 7(1) of the Act specifies the term of office of the Chairman which shall not exceed more than 5 years and shall receive salary and allowance as specified by the Central Government at the time of appointment and shall be eligible for re-appointment.

Section 7 (1A) also states that the Central Government shall have the right to terminate the term of office of the Chairman at any time before the expiry of the term specified under that sub-section by giving him a notice of not less than three months in writing or three months' salary and allowances in lieu of such notice.

Section 7 (1B) states that in case of a vacancy in the office of the Chairman, the Managing Director shall perform the functions and duties of the Chairman during such vacancy.

2.5.2 MANAGING DIRECTOR AND WHOLE TIME DIRECTORS

Section 8 specifies the term of office for the Managing Director and any whole-time director which shall be for 5 years and shall be eligible for re-appointment.

The Managing Director and whole-time Directors shall receive such salary and allowances and be governed by such terms and conditions of service as the Board may, with the previous approval of the Central Government and in consultation with the Reserve Bank

The Central Government shall have the right to terminate the term of office of the Managing Director or of any whole-time director before expiry of the term by giving him a notice of not less than three months in writing or three months' salary and allowances in lieu of such notice.

2.5.3 VARIOUS DEPARTMENTS OF NABARD

The various departments function from NABARD's head office situated at Mumbai. The number and strength of departments have increased over the years since its inception 40 years ago. The various departments of NABARD are mentioned below: -

Business Initiatives Department

Accounts Department

Central Vigilance Department

Corporate Communications Department

Corporate Planning Department

Department of Climate Action and Sustainability

Department for Data Management Analytics and Business Intelligence

Department of Economic Analysis & Research

Department of Financial Inclusion and Banking Technology

Department of Information Technology

Department of Premises, Security and Procurement

Department of Refinance

Department of Storage & Marketing

Department of Subsidiaries and Strategic Investments

Department of Supervision

Farm Sector Development Department

Finance Department

Human Resource Management Department

Inspection Department

Institutional Development Department

Law Department

Micro Credit Innovations Department

Off Farm Development Department

Risk Management Department

State Projects Department

Strategic Planning and Product Innovation Department

2.5.4 MANAGEMENT OF NABARD OFFICES

NABARDs headquarter is situated at Mumbai with 31 Regional offices set up in the states and union territories with 405 District offices. It has a special cell functioning at Srinagar and 3 training establishments located at Lucknow, Bolpur and Mangalore. As of 31st March 2019, NABARD has 2481 professionals supported by 1312 other staff.

2.5.4.1 Regional Offices (ROs)

- ❖ Northern Region- Chandigarh (Haryana); Shimla (Himachal Pradesh); Chandigarh (Punjab); Jaipur (Rajasthan); Jammu(J&K); New Delhi (Delhi)
- ❖ Southern Region- Hyderabad (Andhra Pradesh); Bengaluru (Karnataka); Chennai (Tamil Nadu); Thiruvananthapuram (Kerala); Pondicherry; and Lakshadweep
- ❖ Eastern Region- Patna (Bihar); Ranchi (Jharkhand); Bhubaneswar (Orissa); Kolkata (West Bengal); and Port Blair (Andaman and Nicobar)
- ❖ Western Region- Ahmedabad (Gujarat); Panaji (Goa, Daman and Diu); Pune (Maharashtra); and Dadra Nagar Haveli
- ❖ Central Region- Bhopal (Madhya Pradesh); Raipur (Chhattisgarh); Lucknow (Uttar Pradesh); and Dehradun (Uttarakhand)
- ❖ North-Eastern Region- Guwahati (Assam); Itanagar (Arunachal Pradesh); Imphal (Manipur); Shillong (Meghalaya); Aizawl (Mizoram); Dimapur (Nagaland); Gangtok (Sikkim); and Agartala (Tripura)

2.5.4.2 Training Establishments-

NABARD has set up in-house training institutions at various locations namely National Bank Staff College (NBSC) at Lucknow, Bankers Institute of Rural Development (BIRD), at Mangalore, Bolpur and Lucknow.

2.5.4.3 Sub Office-

NABARD has a sub office special cell functioning at Srinagar, Jammu & Kashmir.

2.5.4.4 Regional Office organizational set up

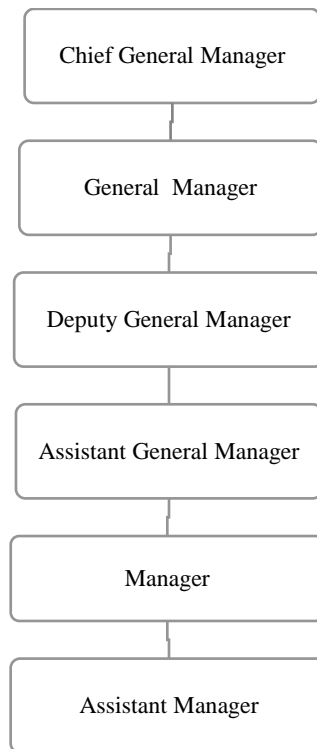


Figure 2.4 Organizational set up at Regional Offices (ROs)

2.6 FUNCTIONS OF NABARD

The functions of NABARD can be classified into 4 categories-

- Credit Function
- Developmental and Promotional Function
- Supervisory Function
- Other Functions

2.6.1 Credit Function-

NABARDs credit function broadly includes credit planning and monitoring, credit dispensation. Some of the credit functions include:

- Credit planning at State Level by preparing State Focus Paper (SFP) and Potential Link Credit Plans (PLP) at district level
- Framing policies and operational guidelines for Rural Financing Institutions (RFIs)
- Monitoring and evaluating projects financed by NABARD
- Provide direct loans to the state governments for developing rural infrastructure

NABARD provides refinance on short-term, medium-term basis and direct finance to the state governments. Short term credit is provided for seasonal agricultural operations such as purchase of agricultural inputs. Refinance is provided for the production purpose at concessional rates of interest to SCBs on behalf of District Central Co-operative Banks (DCCBs) and RRBs. The duration for repayment of the short-term loan is within 12 months.

Medium term loans are provided for conversion of short-term loans to medium term in case of natural calamities affecting the farmer's productivity and income. Refinance is provided to SCBs and RRBs for farmers to acquire productive assets to carry out agricultural investment purposes.

The National Bank sanctions direct long-term loans to the State Governments towards contribution to the share capital of the SCBs, sanctioning loans to the state government for development of infrastructure through the RIDF.

2.6.2 Developmental and Promotional Function-

In order to augment the flow of credit to the agriculture and rural sector, NABARD undertakes promotional and developmental function. In this regard, the Institutional Development Department of NABARD has taken many initiatives to perform this function. Some of the initiatives include:

- Provide financial support for the training institutes of cooperative banks
- Provide financial assistance to cooperative banks for building improved management information system, computerization of operations and

development of human resources.

- Provide training for senior and middle level executives of CBs, RRB's and cooperative banks
- Preparing developmental action plans for rural cooperative banks
- Entering into MoUs with state governments and cooperative banks specifying their obligations to improve affairs of the bank within a stipulated time
- Providing Organizational Development Initiatives (ODI) for Rural Credit Cooperative Banks and Regional Rural Banks (RRBs) through its in-house training centers
- Monitor preparation of developmental action plan of banks and fulfillment of obligations under MoUs

2.6.3 Supervisory Function-

A Board of Supervision is constituted under NABARD to act as an internal committee which gives direction and guidance in respect of policies and matters relating to supervision and inspection. The Board also periodically reviews the financial position of Cooperative Banks and Regional Rural Banks.

Under section 35(6) of the Banking Regulation Act 1949, NABARD is empowered to undertake statutory inspection of Cooperative Banks, District Central Cooperative Banks (DCCBs) and Regional Rural Banks (RRBs). NABARD also undertakes voluntary inspection of state level cooperative institutions such as State Cooperative Agriculture and Rural Development Banks (SCARDBs), Apex Weavers Societies, Marketing Federations etc.

The supervisory role of NABARD also involves on-site inspections and off-site surveillance of Cooperative Banks and Regional Rural Banks. The credit monitoring arrangements in SCBs and CCBs are administered by NABARD. RRB's and SCB's have to obtain the recommendation of NABARD for seeking permission of RBI to open new branches.

2.6.4 Other Functions-

Over the years NABARD has diversified from its role as a refinancing agency to various other fields. It has also set up a Research & Development fund to find innovative approaches to deal with issues relating to agricultural and rural development. NABARD has set up grant support for undertaking extensive research projects and studies, holding seminars and conferences, summer internship programs, tying up with academic institutions etc. It has also set up training institutes at various states within the country namely Bankers Institute of Rural Development (BIRD), National Institute of Rural Banking (NIRB).

2.7 OBJECTIVES OF NABARD –

- a) To facilitate the credit delivery for promotion and development of agriculture, cottage and village industries, small scale industries, handicrafts and handlooms and other rural crafts
- b) To coordinate the activities of rural financial institutions for promotion of credit and strengthening its supply
- c) To promote sustainable and equitable agriculture and rural prosperity through effective credit support, related services, institution development and other innovative initiatives
- d) To monitor and supervise the functioning of Cooperative Banks and Regional Rural Banks

2.8 COMMITTEES OF NABARD -

a) Executive Committee-

As per section 13 clause 1 of the NABARD Act, the Board may constitute an Executive Committee consisting of such number of Directors as maybe prescribed. The Executive Committee shall discharge such functions as may be prescribed or may be delegated to it by the Board. The Executive Committee of the NABARD shall meet at such

times and places and shall observe such rules or procedures in regard to the transaction of business at its meetings as may be prescribed.

b) Other Committees -

The Board may also constitute such other committee and discharge such other functions as may be delegated to it by the Board. Some of the other Committees formed are Audit Committee, Risk Management Committee, Sub Committee on HR policy, Sanctioning Committee for loans under RIDF, Building sub-Committee.

2.9 NABARD PARTNER INSTITUTIONS AND CLIENTS-

NABARDs role as a refinancing agency entails it to work with different institutions and agencies. With direct links with the Government and RBI, it executes its role as the apex institution for agricultural financing.

The following are the partner institutions and clients of NABARD:

2.9.1 Credit Related-

State Governments, State owned Bodies and Cooperatives, Scheduled Commercial Banks, Regional Rural Banks, State Cooperative Banks, District Central Cooperative Banks, Scheduled Urban Cooperative Banks, Small Finance Banks, Farmers' Collectives and Producers' Organization, Corporates/ Companies, individual entrepreneurs, SPV under PPP mode etc. for projects under Warehouse Infrastructure Fund and Non-banking Finance Companies

2.9.2 Development Oriented-

Rural Financial Institutions, NGOs and Voluntary Agencies, Development and Self Employment Training Institutions, Self-Help Groups, Rural Innovators, Joint Liability Groups, Farmers' Clubs and Research Organisations.

2.10 NABARD IN NAGALAND

NABARD's presence in the state commenced in April 1990 with its sub-office set up in Kohima to meet the credit requirements of the state. In 1998, it set up its Regional office in Dimapur headed by a General Manager.

It has also set up District Development Offices in 3 District Head Quarters at Kohima, Mokokchung and Phek headed by District Development Managers (DDMs). In addition to augmenting the credit flow to agriculture and priority sectors, NABARD also supports various promotional and developmental programs in the state. Since its inception in 1990, NABARD continues to play an important role in the agricultural and rural development of the state through its credit flow support system and other commendable initiatives. The workings and operations of NABARD in the state will be discussed in detail in the ensuing chapters ahead.

2.11 FUTURE OUTLOOK

Since its inception in 1982, NABARD has made significant progress in the field of rural development in the country. NABARD has made tremendous contributions to the growth and development of rural areas and diversified its role from a refinancing institution to undertaking various developmental and promotional programs. It continues its role as the apex bank for agricultural credit and bringing effective reforms in the agricultural sector. While working closely with banks, financial institutions, partner institutions (NGOs, JLGs, SHGs etc) NABARDs interventions have made significant contributions in the economic well-being of the rural people. Over the years, NABARD has been infusing funds towards the rural banking system particularly the cooperative banks and the regional rural banks for meeting the credit needs of the rural people. As of 2020-21, an amount of ₹107464 crores has been infused under short term refinance to meet the production needs and ₹92786 crores under long term refinance to meet the investment credit needs for capital formation. NABARD has been tirelessly bringing about changes in the lives of the rural mass through their innovative programs and schemes in tune with their popular slogan "Taking Rural India forward" As the apex bank providing institutional credit and credit related services,

NABARD plays a key role in disbursing finance through the innumerable policy initiatives of the Central Government. The present study focuses on the role of NABARD in rural development of Nagaland particularly the districts of Kohima, Dimapur, Phek and Mokokchung.

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CHAPTER 3- ROLE OF NABARD IN THE FARM AND OFF FARM SECTOR

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- 3.2 Characteristics of Indian Economy
- 3.3 NABARD's contribution to Gross Value Added (GVA)
- 3.4 Farm Sector- Indian scenario
 - 3.4.1 Sectoral Contribution to Gross Value Added (GVA)
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3.1 INTRODUCTION

The growth and development of the rural economy can be determined based on two sectors - the farm and non-farm sector. Agriculture as an economic activity helps generate on-farm and off-farm employment opportunities for the rural population. With 70% of the rural population engaged in farming in the country, agriculture becomes the primary source of livelihood.¹

The present chapter examines NABARD's contributions to the development of the agricultural sector, emphasizing on its developmental and promotional programs in the farm sector. The initial section explores the contributions of the primary, secondary and tertiary sectors to the Gross Value Added (GVA) of the Indian economy. The subsequent section focusses on NABARD's refinance disbursements, while the final section highlights NABARD's supported programs in the farm sector in the state. The chapter provides a comprehensive study at all India level and the state (Nagaland) scenario by analyzing data collected from various published secondary sources of information.

3.2 CHARACTERISTICS OF THE INDIAN ECONOMY

Agriculture and its allied sector are often regarded as the backbone of the Indian economy and the foundation of economic growth and development. The emphasis on developing the agricultural sector has been a priority for policymakers and Government over the years. This is evident from the Government's interventions through policies and programs aimed towards agricultural development.

The World Bank states, "Agricultural development is one of the most powerful tools to end extreme poverty, boost shared prosperity, and feed a projected 10 billion people by 2050. Growth in the agriculture sector is two to four times more effective in raising incomes among the poorest compared to other sectors."²

The contribution of the agricultural sector to the Indian economy is much higher than the world's average (6.4%), while the industry and services sector's contribution is lower than the world's average of 30% for the Industry sector and 63% for the Services sector.³ The agricultural sector is regarded as the most resilient sector of the Indian economy.

The Indian economy is divided into 3 sectors- Primary, Secondary and Tertiary sector.

Primary (Agri & allied) - Agriculture, Animal husbandry, Fisheries, Horticulture, Sericulture, Forestry, Mining & Quarrying.

Secondary (Industry) – Manufacturing, Construction, Electricity, Gas & Water supply & other utility services.

Tertiary (Services) - Transport, Communication, Trade, Hotels, Restaurants, Banking, Financial, Real Estate, Insurance, Business services, Tourism etc.

For analytical convenience, agriculture and allied activities are clubbed as the farm sector. The manufacturing and service sector are clubbed as non-farm sector.

3.3 NABARD's CONTRIBUTION TO GROSS VALUE ADDED (GVA)

Set up in 1982 as a key financial institution, NABARD aims at promoting sustainable and equitable agriculture and rural development. It has played a significant role in contributing to the Gross Value Added (GVA) particularly in the agricultural and rural sector through its multifaceted role. From rural infrastructure development to refinancing credit support, financial inclusion, technology transfer innovation to promotion of rural industries NABARD's diversified role has led to increased agricultural output and sustainable development of the rural areas directly contributing to the GVA. Through its initiatives, NABARD ensures that the rural areas not only contribute to the GVA but also a lead to a robust and balanced economic growth of the country.

3.4 FARM SECTOR- INDIAN SCENARIO

India's is predominantly an agrarian economy with 54.6% (Census 2011)* of the populace engaged in agriculture as a source of livelihood. This dependence on agriculture has consistently directed the policies of the central government towards transforming the rural economy for improving their livelihoods. The rural economy has two components- farm and non-farm sector through diversification of activities. The farm sector consists of farming activities such as crop plantation, animal husbandry (dairy, sheep, goat, poultry and piggery), fisheries (marine, inland and aqua farming), horticulture and other farming activities. The non-farm components include manufacturing and processing activities, construction, transport and communication, banking, insurance and other utility services.

With nearly two-thirds of the population living in the rural areas, the rural economy is dependent on agriculture and its allied sectors as a source of livelihood. India is a leading player and a global powerhouse in the agricultural sector worldwide. It is the leading producer of milk, pulses and spices in the world. India also has the world's second largest cattle herd and second largest producer of rice, sugarcane, farmed fish, cotton, groundnuts, sugar, fruits and vegetables. With India's increasing stand in the global position in terms of agriculture and its allied activities, the promotion of the farm sector is of paramount importance.

NABARD has been playing an instrumental role in developing the farm sector through its various programs and policies. Their interventions are aimed at improving the credit linkages to help increase agricultural production and productivity, enhancing livelihood opportunities and strengthening the rural economy. These interventions are undertaken directly or with partnering agencies such as banks, NGOs, Self Help Groups, Government departments and other stakeholders.

* 2011 census has been used for the purpose of the study as 2021 census was not released at the time of the study.

3.4.1 Sectoral contribution to Gross Value Added (GVA)

The GVA is an economic productivity metric that measures the sectoral contribution to the Indian economy. It is the sum of the values added in the agriculture, industry and service sector.

The contribution of the agri and allied, industry and service sector to the Gross Value Added (GVA) is tabulated and presented for the 10-year study (2011-2021) at constant and current (2011-12) basis prices.

Table 3.1 Sectoral share in Gross Value Added at constant price 2011-12 (Crore INR)

Year	Agri & allied	Industry	Services	Total
2011-12	1762982	1409986	4933978	8106946
2012-13	1786897	1486873	5272505	8546275
2013-14	1872305	1560709	5630635	9063649
2014-15	1894400	1683938	6133795	9712133
2015-16	1934120	1903850	6653902	10491872
2016-17	2075252	2054764	7198268	11328284
2017-18	2189271	2209428	7655109	12053808
2018-19*	2205413	2328992	8199393	12733798
2019-20 [@]	2304069	2261294	8654203	13219566
2020-21 [#]	2342056	2247740	7995276	12585072
CAGR	2.88%	4.77%	4.95%	4.50%
Average	2036677	1914757	6832706	10784140

Source- Agricultural Statistics at a Glance, 2021

*The data for 2018-19 is given at Third Revised Estimates; [@]2019-20 is given at Second Revised Estimates and [#] 2020-21 at First Revised Estimates.

Figure 3.1 Sectoral share in GVA at constant price

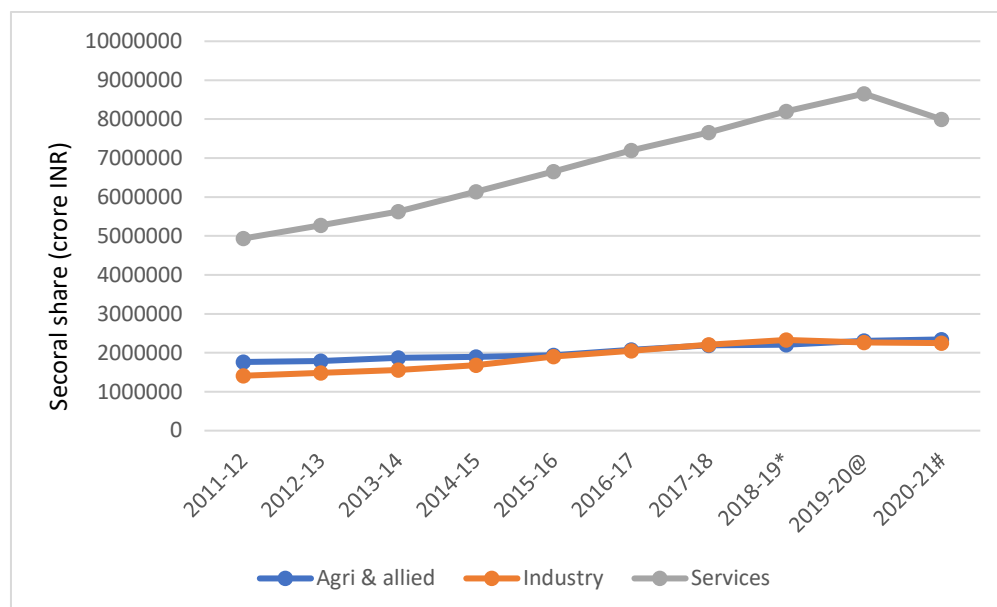


Table 3.1 and Figure 3.1 depicts the share of Agri & allied, industry and service sector at constant price. The service sector accounts for the highest share and shows an increasing trend from 2011-12 to 2020-21. The downward shift in 2020-21 is a result of the adverse impact of the covid pandemic (Economic Survey, 2021-22).⁴ The share of the Agri & allied sector does not show much visible growth with a compound annual growth rate of 2.88%. The industry sector registered a slow but gradual growth with compound annual growth rate of 4.77% and service sector registered a compound annual growth rate of 4.95%.

Table 3.2 Sectoral share in Gross Value Added at current price 2011-12 (Crore INR)

Year	Sectors			Total
	Agri & allied	Industry	Services	
2011-12	1762982	1409986	4933978	8106946
2012-13	1960949	1572837	5668907	9202693
2013-14	2222166	1713452	6427535	10363153
2014-15	2402088	1878369	7223822	11504279
2015-16	2521544	2146189	7906767	12574500

2016-17	2845470	2333721	8786009	13965200
2017-18	3165935	2566623	9773108	15505666
2018-19*	3407586	2812560	10954983	17175129
2019-20@	3716881	2704809	11933419	18355109
2020-21#	3934474	2709435	11413900	18057809
CAGR	8.36%	6.75%	8.75%	8.34%
Average	2794008	2184798	8502243	13481048

Source- Agricultural Statistics at a Glance, 2021

*The data for 2018-19 is given at Third Revised Estimates; @2019-20 is given at Second Revised Estimates and # 2020-21 at First Revised Estimates.

Figure 3.2 Sectoral share in GVA at current price

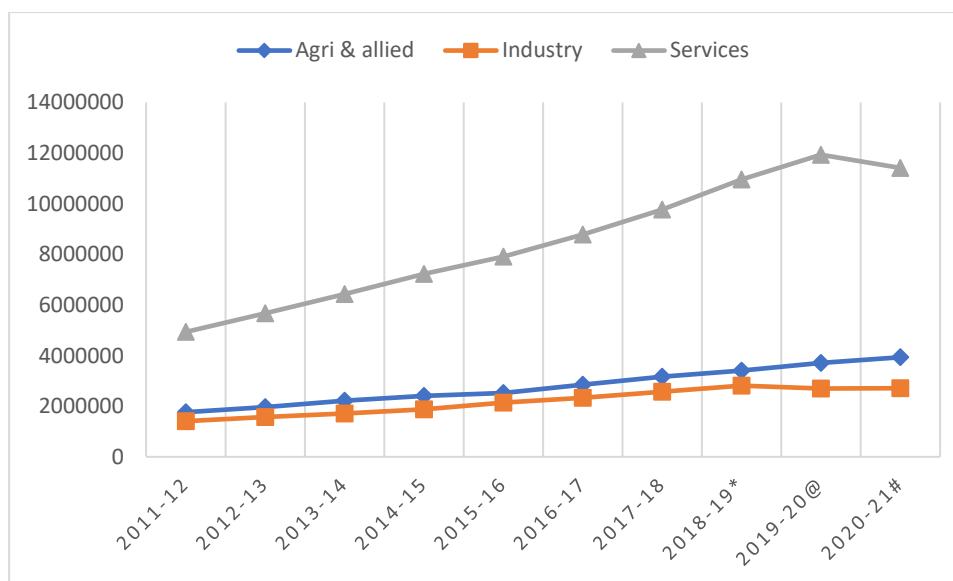


Table 3.2 and Figure 3.2 depicts the sectoral share of the Agri & allied, industry and service sector at current price. The service sector registered the highest contribution in the GVA. The Compound Annual Growth Rate for Agri & allied, industry and service sector during the 10-year study is at 8.36%, 6.75% and 8.75% respectively.

3.4.2 Contribution of Agri and allied sector to Gross Value Added (GVA)

The agricultural sector accounts for 20.2% of the country's Gross Value Added (GVA) for the year 2020-21 (at current prices). The agri & allied % share increased from 18.4 per cent in 2019-20 to 20.2 per cent in 2020-21 (at current prices). The development of the agricultural sector benefits those with lower income and contributes directly to poverty reduction. Its expansion has the potential to enhance the economic and social well-being of rural communities.

The sectoral contribution from the agri and allied sector in the Indian economy is presented under Table 3.3 and Table 3.4 at constant and current (2011-12) basis prices respectively.

Table 3.3 Contribution of agri and allied sector to Gross Value Added (GVA) at constant price – Indian context (Crore INR)

Year	Agri and allied activities				Total
	Crops	Livestock	Forestry & Logging	Fishing & aqua culture	
2011-12	982151	327334	124436	68027	1501947
2012-13	983809	344375	124743	71362	1524288
2013-14	1037060	363558	132093	76487	1609198
2014-15	998425	390449	134609	82232	1605715
2015-16	969344	419637	136960	90205	1616146
2016-17	1020258	461572	144547	99627	1726004
2017-18	1075111	497830	152351	114730	1840023
2018-19*	1049211	540970	163949	124468	1878598
2019-20@	1106545	581450	164416	129893	1982303
2020-21#	1127575	617117	165624	137716	2048032
Average	1034949	454429.2	144372.8	99474.7	1733225

Source- Agricultural Statistics at a Glance, 2021

*The data for 2018-19 is given at Third Revised Estimates; @2019-20 is given at Second Revised Estimates and # 2020-21 at First Revised Estimates.

Figure 3.3 Agri & allied sector contribution at constant price

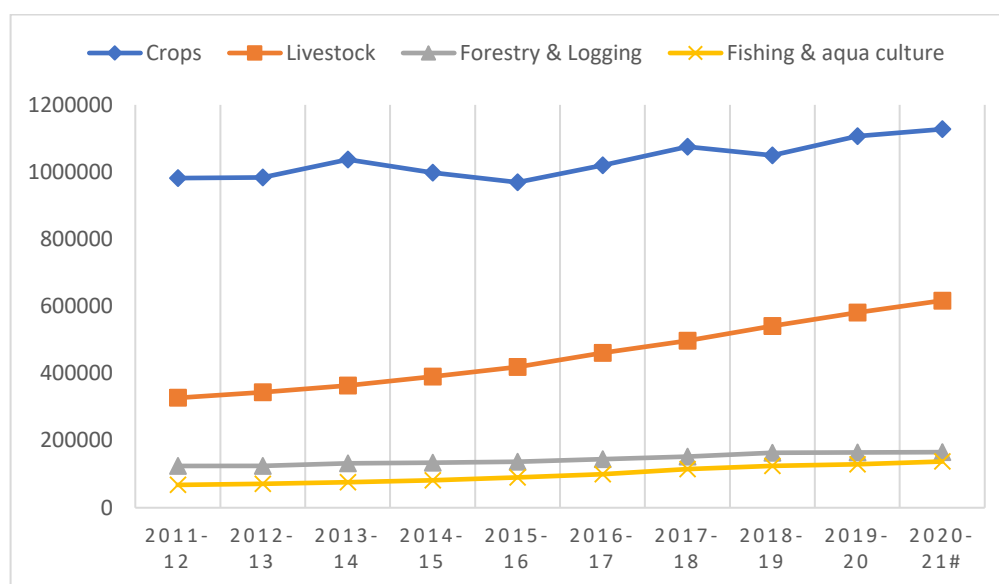


Table 3.3 and Figure 3.3 depicts the contribution of the Agri & allied sector to the GVA at constant price. Among the activities, crop production shows the highest contribution from ₹982151 crore in 2011-12 to ₹1127575 crore in 2020-21. Livestock registered a gradual increase over the years. Contributions from the Forestry & logging and Fishing & aqua culture show a slow but increasing trend from 2011-12 to 2020-21.

Table 3.4 Contribution of agri and allied sector to Gross Value Added (GVA) at current price – Indian context (Crore INR)

Year	Agri and allied activities				Total
	Crops	Livestock	Forestry & Logging	Fishing & aqua culture	
2011-12	982151	327334	124436	68027	1501947
2012-13	1088814	368823	137558	79911	1675107
2013-14	1248776	422733	156674	98190	1926372
2014-15	1292874	510411	173760	116567	2093612
2015-16	1327992	582410	184411	132720	2227533
2016-17	1486044	672611	205364	154643	2518662
2017-18	1633264	785683	217603	193275	2829826
2018-19	1680777	882009	255053	212087	3029925
2019-20	1891966	977730	260603	228065	3358364
2020-21	1997147	1114249	265479	232620	3609494
Average	1462981	664399.3	198094.1	151610.5	2477084

Source- Agricultural Statistics at a Glance, 2021

*The data for 2018-19 is given at Third Revised Estimates; @2019-20 is given at Second Revised Estimates and # 2020-21 at First Revised Estimates.

Figure 3.4 Agri & allied sector contribution at current price

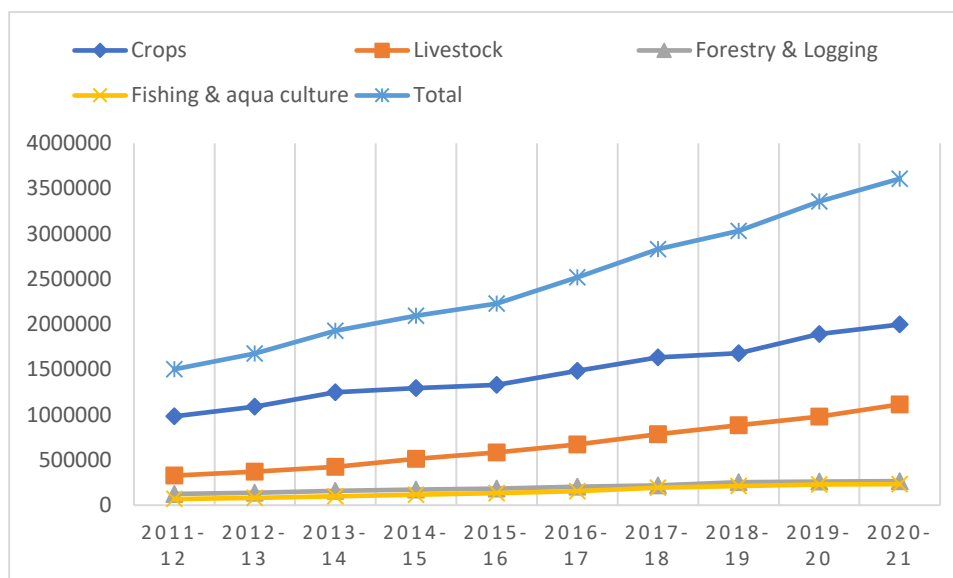


Table 3.4 and Figure 3.4 depicts the contribution of the Agri and allied sector to the GVA at current price. The activities under this sector show an upward increasing trend during the 10-year study from 2011-12 to 2020-21. The figure indicates that the total contribution from the agri & allied sector has increased from ₹15,01,947 crore in 2011-12 to ₹36,09,494 crore in 2020-21.

3.5 FARM SECTOR- NAGALAND SCENARIO

Nagaland is primarily an agrarian state, with more than 60% of the population primarily dependent on agriculture as a source of livelihood. Agriculture is the largest source of employment in the state. The Jhum system of cultivation is the most popular form of agricultural practice in the state. Agriculture has traditionally been a way of life for the people in the state and not just an economic activity. It is only in recent years that it has been undertaken as a commercially viable activity for livelihood generation.

As per Vision 2025 ‘Food for all’ document published by the Dept. of Agriculture & Allied Departments, Govt. of Nagaland, it aims to attract the educated youth towards earning through agricultural activities by establishing agro-based industries.

3.5.1 Sectoral contribution to Gross State Value Added (GSVA)

The contribution of the agri & allied, industry and service sector to the Gross State Value Added (GSVA) is presented under Table 3.5 and Table 3.6 at constant and current (2011-12) basis prices respectively.

Table 3.5 Sectoral contribution to Gross State Value Added at constant price (Lakh INR)

Year	Sectors			Total
	Agri & Allied	Industry	Services	
2011-12	379022	149803	677849	1206674
2012-13	400266	154044	722392	1276703
2013-14	442291	122371	798081	1362743
2014-15	460553	137600	831569	1429722
2015-16	438999	162054	843736	1444790
2016-17	462826	175266	886999	1525091
2017-18	446146	205169	939473	1590788
2018-19	423038	197824	1020192	1641053
2019-20*	444987	219511	1100941	1765439
2020-21#	449335	202647	1011202	1663183
CAGR	1.72%	3.07%	4.08%	3.26%
Average	434746.3	172628.9	883243.4	1490619

Source: Statistical Handbook (Nagaland) 2021

*Provisional #Advance estimates

Figure 3.5 Sectoral share in GVA at constant price (Nagaland)

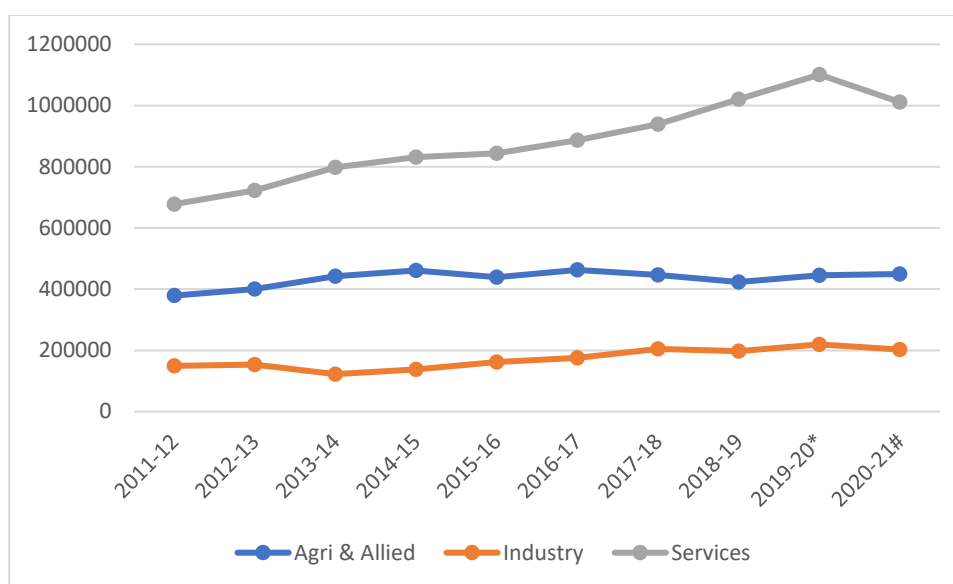


Table 3.5 and Figure 3.5 shows the GVA contribution at current price from the Agri & allied, Industry and Service sector. The figure depicts a fluctuating growth trend with increase or decrease in some years. However, the service sector shows a steep downward trend in 2020-21, mainly attributed to the adverse effects of the Covid pandemic.

Table 3.6 Sectoral contribution to Gross State Value Added at current price (Lakh INR)

Year	Sectors			Total
	Agri & Allied	Industry	Services	
2011-12	379022	149803	677851	1206674
2012-13	461941	166939	772339	1401219
2013-14	564614	169326	908121	1642062
2014-15	626923	197722	999749	1824394
2015-16	612888	220462	1093883	1927233
2016-17	698975	251084	1174548	2124607

2017-18	770506	299831	1305637	2375974
2018-19	784207	304546	1503862	2592614
2019-20*	844582	350036	1689009	2883626
2020-21#	899793	321481	1628878	2850152
Average	664345.1	243123	1175388	2082856

Source: Statistical Handbook (Nagaland) 2021

*Provisional #Advance estimates

Figure 3.6 Sectoral share in GVA at current price (Nagaland)

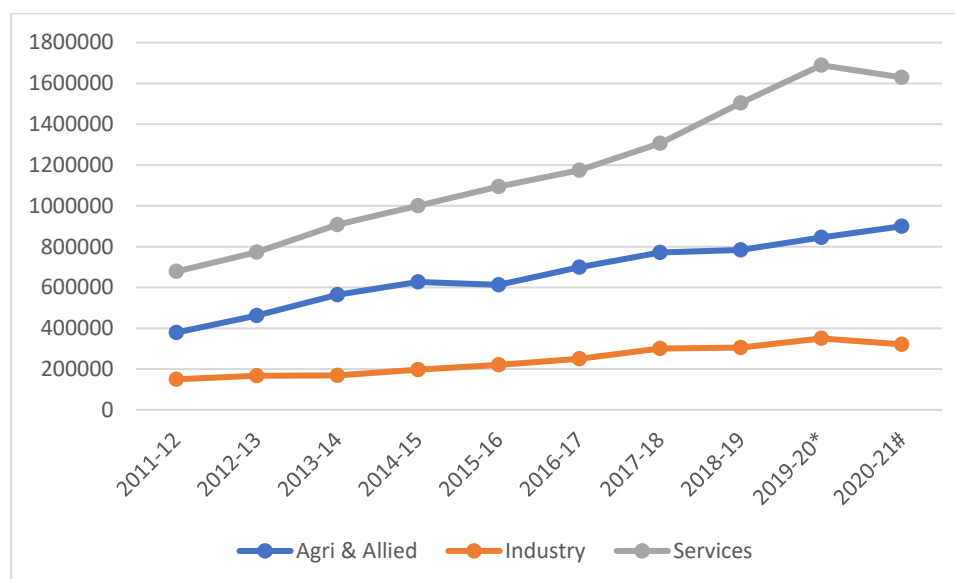


Table 3.6 and Figure 3.6 depicts the share of the agricultural sector to the GSVA from 2011-12 to 2020-21. Despite the agriculture and allied sector being a significant contributor to the state's economy, its share in the Gross State Value Added (GSVA) has declined considerably from 2011-12 to 2020-21.

3.5.2 Contribution of Agri and Allied sector to Gross State Value Added (GSVA)

The contribution of the agri and allied sector to GSVA is presented under Table 3.7 and Table 3.8

Table 3.7 Contribution of agri and allied sector to Gross State Value Added (GSVA) at current price (Lakh INR)

Year	Agri and allied activities				Total
	Crops	Livestock	Forestry & Logging	Fishing & aqua culture	
2011-12	204304	83147	79569	6344	373363
2012-13	262478	102361	83502	6978	455320
2013-14	340577	115312	93029	7690	556609
2014-15	380195	123896	105964	8470	618525
2015-16	405510	71416	110813	9248	596987
2016-17	439814	71576	172533	10360	694282
2017-18	485886	94484	173028	11102	764499
2018-19	473063	86062	203156	11646	773927
2019-20*	509204	90366	201711	11373	812655
2020-21#	559463	91315	213431	11671	875880
Average	406049.4	92993.5	143673.6	9488.2	652204.7

Source- Statistical Handbook (Nagaland) 2021

*Provisional #Advance estimates

Figure 3.7 Agri & allied sector contribution to GSVA at current price

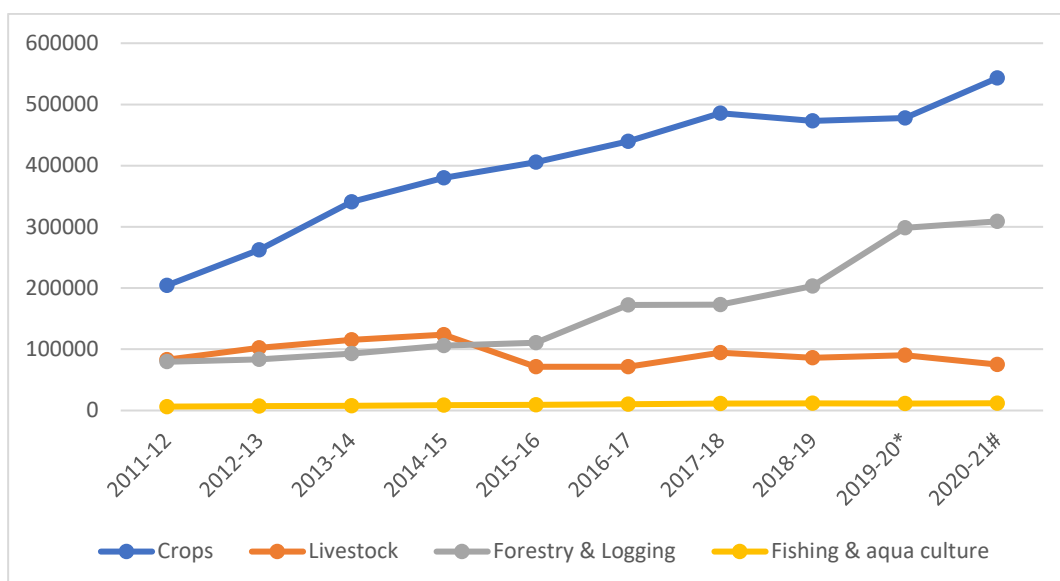


Table 3.7 and Figure 3.7 shows the contribution of Agri & allied sector contribution from crops, livestock, forestry & logging and fishing & aqua culture. As depicted, the share of crops registered the highest growth. All the activities show an increased trend in growth over the years (barring exceptions in some years which showed a slight decrease)

Table 3.8 Contribution of agri and allied sector to Gross State Value Added (GSVA) at constant price (Lakh INR)

Year	Agri and allied activities				Total
	Crops	Livestock	Forestry & Logging	Fishing & aqua culture	
2011-12	204304	83147	79569	6344	373363
2012-13	235469	77254	77109	6611	396443
2013-14	276327	75457	76564	6921	435269
2014-15	291145	74929	79475	7261	452811

2015-16	290469	43138	79081	7568	420256
2016-17	295189	41818	113546	7970	458524
2017-18	287378	48197	97054	8326	440956
2018-19	268325	37036	100539	8389	414289
2019-20*	277587	38646	93989	8750	418972
2020-21#	287802	37723	91912	9108	426546
Average	271399.5	55734.5	88883.8	7724.8	423742.9

Source- Statistical Handbook (Nagaland) 2021

*Provisional #Advance estimates

Figure 3.8 Agri & allied sector contribution to GSVA at constant price (Lakh INR)

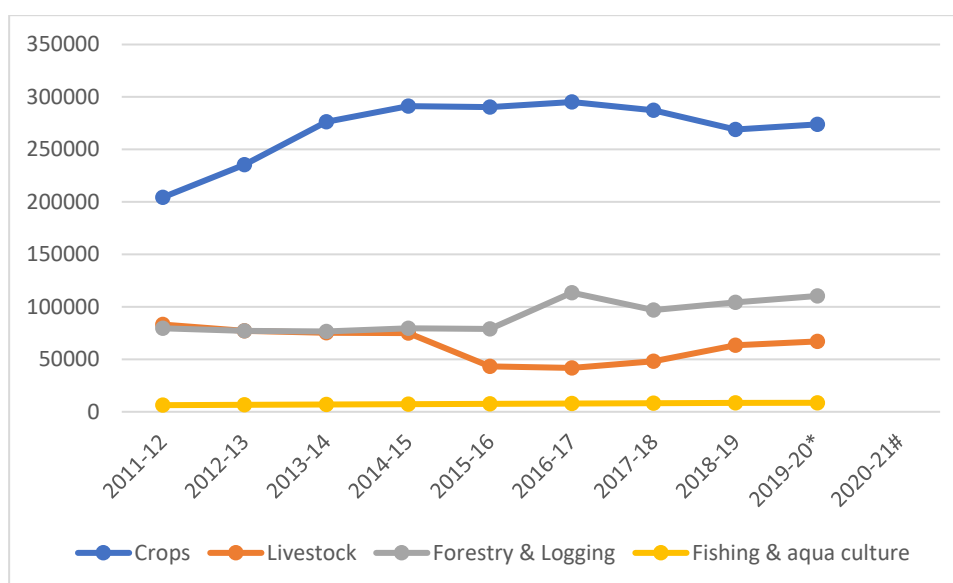


Table 3.8 and Figure 3.8 shows crops with the highest share in GVA and Fishing & aqua culture with the lowest share. The share of livestock which was ₹83147 lakh in 2011-12 substantially reduced by almost half the value from 2015-16 onwards.

3.6 REFINANCE

Refinance is a key function of NABARD aimed at improving the credit flow to the rural sector. NABARD provides the refinance facilities at 100% of the amount financed by the eligible institutions as term loans.

NABARD's mandate is "to promote sustainable and equitable agriculture and rural prosperity through effective credit support, related services, institution development and other innovative initiatives." Keeping this mandate in mind, NABARD has been facilitating an effective credit support through its refinance operations. The refinance facility is provided to Cooperative Banks, Commercial banks, Regional Rural Banks, Primary Urban Cooperative Banks and Non-Banking Finance Corporations in order to augment the supply of credit to the rural and agriculture sector.

NABARD refinance covers a wide range of activities such as Farm Mechanization, Plantation & Horticulture, Poultry / Dairy / Other Animal Husbandry Activities, Minor Irrigation, Land Development, Dry Land Farming, Watershed Development, Fisheries, Bio-gas, Forestry, Storage/Market Yard, Non - Farm Sector, Self Help Groups, Agri-clinics & Agri Business Centres, Financing in Agri Export Zones / Contract Farming/ Organic Farming, Agro Processing, Non-Conventional Energy, Rural Housing etc. NABARD's Refinance facilities are provided both in the farm and non-farm sector.

Table 3.9 NABARD Refinance type

Term	Eligible institutions	Purposes	Repayment period
Short term	Regional Rural Banks. State Cooperative Banks	Agriculture and allied activities for production purposes	Upto 12 months
	Scheduled Commercial Banks, State Cooperative Banks, State Cooperative Agricultural and Rural	Investment purposes relating to agriculture and allied activities	Minimum 18 months

Medium term & Long term	Development Bank (SCARDB), Regional Rural Banks, District Central Cooperative Banks, Primary Urban Cooperative Banks, Small Finance Banks NBFCs/NBFC-MFIs or any other financial institution approved by RBI		Maximum 3 years
		Farm Sector and Non-farm Sector activities	3-5 years and above

3.6.1 Short-term refinance

The short-term refinance is provided in order to meet the production, marketing and procurement-oriented credit needs of farmers. During 2020- 2021, an amount of ₹107513 crore was disbursed as short-term refinance to State Cooperative Banks and Regional Rural Banks. The main objective of short-term refinance is to augment the resources of the banks to improve the ground level credit flow. The short-term refinance is provided for the following activities:

3.6.1.1 Short-Term Seasonal Agricultural Operations (ST-SAO)

Refinance is provided for ST-SAO at concessional rate of interest to State Cooperative Banks and Regional Rural Banks by way of sanction of credit limits repayable on demand or within 12 months from the date of disbursement of the NABARD refinance.

3.6.1.2 Additional Short-Term Seasonal Agricultural Operations (ST-SAO)

In order to mitigate the liquidity constraints which can arise due to factors such as drought, shortage of ground level credit supply, low accretion of deposits etc. NABARD provides additional ST-SAO to the State Cooperative Banks (SCBs) and Regional Rural Banks (RRBs)

3.6.1.3 Short-Term ST (Others)

Refinance assistance is also given under ST (Others) for activities such as marketing of crops, pisciculture, working capital requirements of the professionals &

the self-employed, social infrastructure, annual maintenance of small road transport operators (SRTOs), micro, small, and medium enterprises (MSMEs) etc.

3.6.2 Medium term refinance

Medium term refinance is available to farmers in the event natural calamities affect the farmer's ability to repay the short term loans within the stipulated time. The short term crop loans provided for seasonal agricultural operations are converted into medium term loans to provide relief for the farmers whose crop loss is more than 33%. The medium-term credit limit for conversion is provided to State Cooperative Banks and Regional Rural Banks.

3.6.3 Long term refinance

For the purpose of capital formation and asset creation NABARD provides long term refinance support to SCBs, RRBs, Cooperative Banks, Small Finance Banks (SFBs) NBFCs and NBFC-MFIs and NABARD subsidiaries. The refinance support is provided for farm investments, allied activities, farm investments, micro, small, and medium enterprises, agro-processing, organic farming, self-help groups, joint liability groups (JLGs), non-conventional energy, and rural housing. The rate of interest are determined based on cost of funds, market conditions etc. The repayment under Long Term refinance ranges from more than 18 months to 5 years and above. An amount of ₹98,276 crore was disbursed under Long term refinance during the year 2020-21.

3.6.4 Special Liquidity Facility (SLF)

In order to enable unhindered flow of credit to banks, the Special Liquidity Facility (SLF) has been created under NABARD. The SLF is available for Cooperative banks and Regional Rural Banks and Micro Finance Institutions to supplement the resources of the banks to provide timely credit to the farmers. The SLF was created as a measure to meet the credit needs of farmers adversely impacted during the Covid pandemic.

3.6.5 Refinance Interest rates

The refinance interest rates are depicted in Table 3.10 with the lowest interest rate of 4.50% and the highest of 8.30%.

Table 3.10 Refinance interest rates

Type	Repayment Duration	Interest rate (%)	
		RRBs/StCBs	SCARDBs
ST- SAO	12 months	4.50	7.85
Short term additional SAO	12 months	7.70	7.85
ST-Others	12 months	7.95	7.85
Conversion to medium term	18 months upto 3 years	8.10	-
Long term	18 months to less than 3 years	8.30	8.35
		8.20	8.30
	3 years to less than 5 years	8.20	8.30
	5 years and above		

3.7 REFINANCE DISBURSEMENT OF NABARD

The refinance facilities provided by NABARD have been collected and analyzed from various secondary data through published sources pertaining to 10 years (2011-12 to 2020-2021). The tabulated data is presented with the following aspects of refinance into consideration:

- Agency wise refinance disbursement (All India level)
- Region wise refinance disbursement (All India level)
- Purpose wise refinance disbursement (All India level)

Table 3.11 Agency wise disbursement of Refinance (All India level) (Crore INR)

Agency	2011-12		2012-13		2013-14	
	Disbursement	% share	Disbursement	% share	Disbursement	% share
SCBs	8433.75	54.69	8708.77	49.27	13254.62	61.69
RRBs	3086.19	20.01	4753.66	26.90	4303.67	20.03
StCBs	1192.29	7.73	2071.06	11.72	1713.32	7.97
SCARDBs	2444.93	15.85	1741.31	9.85	1814.95	8.45
NABARD subsidiaries	264.54	1.72	399.49	2.26	399.61	1.86
NBFCs	0.00	0.00	0.00	0.00	0.00	0.00
Total	15,421.70	100	17674.29	100	21486.17	100

Agency	2014-15		2015-16		2016-17	
	Disbursement	% share	Disbursement	% share	Disbursement	% share
SCBs	13675.20	43.51	22,823.54	47.49	25,834.00	48.28
RRBs	10220.91	32.52	12,139.68	25.26	11,369.83	21.25
StCBs	3818.09	12.16	6,231.12	12.96	6,433.59	12.02
SCARDBs	2923.97	9.30	3,258.26	6.78	3,398.34	6.35

NABARD subsidiaries	489.13	1.56	611.12	1.27	531.75	0.99
NBFCs	300	0.95	3,000.00	6.24	5,938.00	11.1
Total	31,427.30	100	48,063.72	100	53,505.51	100

Agency	2017-18		2018-19		2019-20		2020-21	
	Disbursement	% share	Disbursement	% share	Disbursement	% share	Disbursement	% share
SCBs	40,000	61	54,082	60	52,042	67	57095	61.54
RRBs	11,537	18	13,862	16	10,849	14	15157	16.33
StCBs	7,086	11	6,464	7	8,069	10	6200	6.68
SCARDBs	2,594	4	1,936	2	2,147	3	2,976	3.21
NABARD subsidiaries	1,229	2	1,146	1	1,163	1	1121	1.21
NBFCs	2,794	4	12,764	14	3,910	5	10237	11.03
Total	65,240	100	90,254	100	78,180	100	92786	100

Source: NABARD Annual Reports compiled

Notes:

SCB=Scheduled Commercial Banks; RRBs=Regional Rural Banks; StCBs= State Cooperative Banks; SCARDBs= State Cooperative Agriculture and Rural Development Banks; NBFCs=Non- Banking Financial Institutions.

Table 3.11 indicates the refinance disbursement for Scheduled Commercial Banks (SCBs) having the highest disbursement amongst all the agencies from ₹8433.75 crore

in 2011-12 to ₹57095 crore in 2020-21. The refinance positions of Scheduled Commercial banks indicate a constant gradual increase in all the years except a slight decline in the year 2019-20.

The RRBs also indicate a positive growth trend from ₹3086.19 crore in 2011-12 to ₹15157 crore in 2020-21.

The refinance facility availed by the State Co-operative Banks (StCBs) was ₹1192.29 crore in 2011-12 and it witnessed an increasing growth trend over the years ahead. The StCBs refinance position witnessed the highest with ₹8069 crore during the year 2019-20.

The refinance facility availed by the State Cooperative Agriculture and Rural Development Banks (SCARDBs) was ₹2444.93 crores in 2011-12. The highest growth is at ₹3398.34 in 2016-17 and thereafter the amount stands at ₹2976 crore in the year 2020-21.

The NABARD subsidiaries also witnessed a steady and gradual increase from ₹264.54 crore in 2011-12 to ₹1121 in 2020-21.

The NBFCs also indicate a significant increase from ₹300 crore in 2014-15 registering the highest growth of ₹12764 crore in the year 2018-19. The NBFCs participation in NABARD refinance started only in the year 2014-15 but its share has surpassed some of the other agencies as it stands at ₹10237 crore at the end of March 2021.

It can be seen overall that NABARD's refinance disbursement amounts have been rising over the years. By 2020-21, the disbursement has reached ₹92786 crores which is a significant jump from ₹15421 crores in the year 2011-12.

Figure 3.9 Agency wise (%) disbursement of Refinance- All India level (Crore INR)

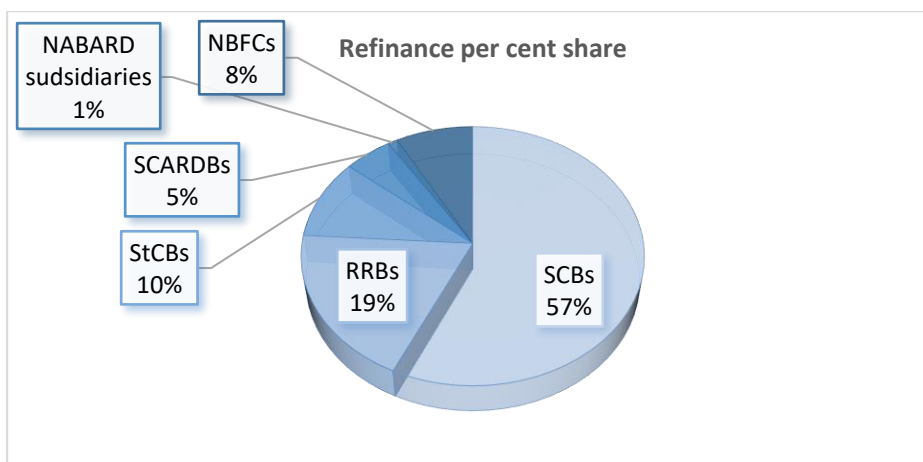


Figure 3.9 shows the extent to which NABARD refinance has been disbursed among the various agencies. It can be seen that Scheduled Commercial Banks (SCBs) have a major percentage share in refinance disbursement (57%) followed by RRBs (19%), StCBs (10%) NBFCs (8%) SCARDB (5%), and NABARD subsidiaries (1%). The SCBs and RRBs for account for more than half (76%) of the total refinance disbursed during the ten-year period from 2011-12 to 2020-21.

Table 3.12 Region wise refinance disbursement- All India level (Crore INR)

Year	Northern	NER	Eastern	Central	Western	Southern	Total
2011-12	2426.37	232.86	1783.53	1867.05	1671.16	7440.73	15421.7
2012-13	3172.83	190.75	1663.47	1254.81	2385.48	9006.95	17674.29
2013-14	4411.74	171.72	1833.15	1804.04	3058.84	10206.68	21486.17
2014-15	5260.99	385.45	3711.66	3131.63	4951.66	13985.92	31427.3
2015-16	7106.08	481.37	5500.73	4498.64	6812.78	23664.12	48063.72

2016-17	10501.94	445.18	4385.48	5165.43	9037.25	23970.23	53505.51
2017-18	10107	757	5513	6776	14720	27367	65240
2018-19	14360	1250	6375	7489	20395	40385	90254
2019-20	12098	2274	10679	6116	15237	31776	78180
2020-21	20320	943	6843	8216	19324	37140	92786
Total	89764	7131	48288	46318	97593	224942	514038.7

Source: NABARD Annual Reports compiled

Figure 3.10 Region wise refinance disbursement (All India level)

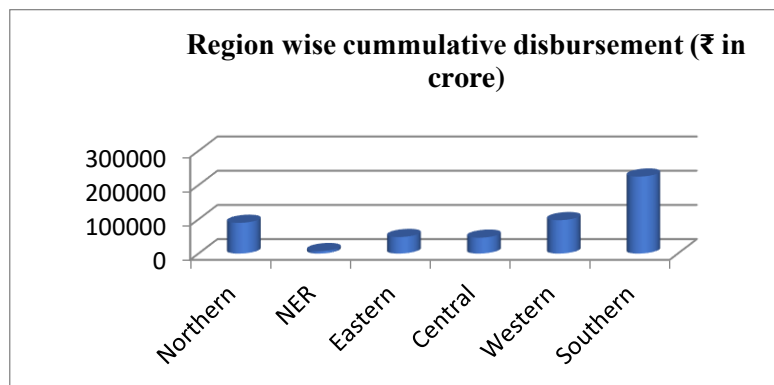


Figure 3.10 shows the cumulative disbursement region wise which indicates the spatial disbursement with the southern region having the maximum amount of refinance disbursement from NABARD with a total of ₹224942 crore over the ten-year study period. The NER accounted for the least share with just over ₹7131 crore.

Table 3.13 Purpose wise disbursement at all India level (Crore INR)

Purpose (Activity)	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17
Agri clinics & Agri business	-	-	-	-	-	-
Contract farming	-	-	-	-	-	-
Dairy development	889.88	872.87	931.89	1770.63	2833.98	2118
Farm mechanization	2134.51	2282.79	3062.40	2383.6	5672.29	11076
Fisheries	91.88	37.85	21.81	64.15	370.52	211
Forestry	15.97	7.80	6.39	8.29	5.90	.83
Land development	504.07	817.69	834.05	1300.16	1554.5	5752
Minor irrigation	660.51	739.27	517.87	1147.17	1174.30	1145
Bio-gas (NCES)	-	-	-	-	-	.59
Non-Farm Sector (OFD/MSME)	3574.21	5150.88	7806.46	11117.8	14055.8	18505
SGSY	211.98	111.72	54.96	.81	.49	-
SC/ST-AP	4.26	19.35	14.70	2.47	36.14	-
Plantation & horticulture	1547.50	1361.92	690.59	2033.45	1983.37	2631

PF/SGP/AH/other	680.20	411.29	620.59	672.52	1237.16	1088
Rural housing	-	-	-	-	-	-
SHGs	3072.59	3916.64	3745.83	4493.67	6906.02	5660
Storage/market yard	157.47	295.30	379.32	294.21	413.37	109
Others	1876.67	1648.92	2799.32	6138.34	11819.8	5210
Total	15421.7	17674.29	21486.18	31427.27	48063.64	53506.4
Year/Purpose	2017-18	2018-19	2019-20	2020-21	Total	Share %
Agri clinics & Agri business	-	134	129	256.4	519	0.1
Contract farming	-	240	101	14.8	355.8	0.07
Dairy development	3724	7204	3423	2490	26258.3	5
Farm mechanization	6862	5908	2869	6886.2	49135.7	9.6
Fisheries	95	125	99	111.1	1227.3	0.24
Forestry	.15	17	6	2	70.33	0.01
Land development	3561	6438	2712	1373.7	24847.17	4.8
Minor irrigation	1513	1036	853	680	9466.12	1.8

Bio-gas (NCES)	.65	263	2256	35.8	2556.04	0.5
Non-Farm Sector (OFD/MSME)	27696	47843	18609	45929.5	200287.6	39
SGSY	-	-	-	-	379.96	0.07
SC/ST-AP	-	-	-	-	76.92	0.01
Plantation & horticulture	906	1877	1093	1416.3	15540.13	3
PF/SGP/AH/other	2033	2983	3496	4415.1	117636.8	3.4
Rural housing	-	1809	6163	2285.6	10257.6	2
SHG	6981	12963	25256	24031	97025.75	19
Storage/market yard	234	139	90	443.7	2555.39	0.5
Others	11634	1275	11025	2414.5	56423.19	10.9
Total	65239.8	89880	77950	92514.5	513163.8	100

Source: NABARD Annual Reports compiled

Table 3.13 shows the refinance disbursement activity wise. As depicted the total refinance amount disbursed during the ten-year study stands at ₹513163.8 crore.

Note:

NCES = Non-Conventional Energy Source; OFD = Off-Farm Development; MSME = Micro, Small, and Medium Enterprises; SGSY=Swarnajayanti Gram Swarogar Yojana; SC/ST-AP; PF = Poultry Farming; SGP = Sheep, Goat, and Pig; SHG = Self-Help Group

3.8 NABARD's REFINANCE PROFILE IN THE STATE

NABARD's refinance facilities are provided both in the farm and non-farm sector. In the state, NABARD's refinance facility is availed by Nagaland State Cooperative Bank (NSCB) and Nagaland Rural Bank (NRB). The refinance is provided to meet the credit needs for production and investment purposes. Short term loans are provided to meet the production, marketing and procurement activities for seasonal agricultural operations. The medium and long-term loans are provided for investment purposes to promote capital formation.

3.8.1 Agency wise disbursement

In the state, refinance is availed by Nagaland State Cooperative bank and Nagaland Rural bank. Table 3.14 presents the agency wise refinance disbursement in the state.

Table 3.14 Agency wise refinance disbursement (Lakh INR)

Year	Agency		Total
	NSCB	NRB	
2011-12	393.10	43.24	436.34
2012-13	NA	NA	NA
2013-14	NA	NA	NA
2014-15	NA	18	NA
2015-16	2977.517	--	2977.517
2016-17	3499.61	--	3499.61
2017-18	3532.28	--	3532.28
2018-19	2300	--	2300
2019-20	3862.89	--	3862.89
2020-21	3244.78	--	3244.78

Source- Field Survey

Table 3.14 shows the NABARD refinance support for agriculture and allied activities in the state. Nagaland State cooperative Bank (NSCB) and Nagaland Rural Bank (NRB) are the two agencies availing the NABARD refinance. As observed from the table,

NRB availed refinance facility only in 2011-12 and 2014-15. It is evident that only Nagaland State Cooperative Bank is availing the refinance facility in the state.

3.8.1 Purpose wise disbursement

The purpose wise disbursement of refinance in the state is determined during the ten-year study period.

Table 3.15 Refinance purpose wise disbursement (Lakh INR)

Years	ST-SAO	ARF	LTRCF	SLF	Total	Growth %
2011-12	436.34	NA			436.34	-
2012-13	NA	NA			NA	-
2013-14	NA	NA			NA	-
2014-15	18.00	NA			NA	-
2015-16	480.00	1549.61	947.907	-	2977.517	-
2016-17	500.00	1000.00	1999.61	-	3499.61	17.53
2017-18	500.00	999.28	2033.204	-	3532.48	.93
2018-19	500.00	300	1500	-	2300	-34.88
2019-20	850.00	2012.89	1000	-	3862.89	67.95
2020-21	1000.00	725.00	1319.78	200	3244.78	-16
				Total	19853.417	

Source- Field Survey

Table 3.15 indicates the refinance amounts availed purpose wise. As on 31st March, 2021, a cumulative amount of ₹19853.417 lakhs has been disbursed in the state.

Note:

ST-SAO = Short Term Seasonal Agricultural Operations; ARF = Automatic Refinance Facility; LTRCF = Long Term Rural Credit Fund; SLF = Special Liquidity Fund.

Table 3.16 NABARD's refinance to Nagaland State Cooperative Bank (NSCB)

Sl. no	Year	Purpose	Rate of interest %	Amt received (Lakh INR)
1	2011-12	NA	NA	393.10
2	2012-13	NA	NA	NA
3	2013-14	NA	NA	NA
4	2014-15	NA	NA	NA
5	2015-16	LTRCF-FS	6.2	421.407
		LTRCF-FS/SHG	6.2	526.50
		ARF-FS	9	1114.88
		ARF/NFS		434.73
		ST-SAO	4.5	480
6	2016-17	LTRCF-FS	5.4	855.65
		LTRCF-SHG	5.4	420.3
		LTRCF-FS	5.4	223.46
		LTRCF-FS-SHG	5.15	251.8
		LTRCF-FS/JLG	5.15	248.4
		ST-SAO	4.5	500
		LT		1000
7	2017-18	ARF-FS	8.05	739.58
		ARF-FS/SHG	8.15	259.7
		LTRCF-FS/JLG	4.7	719.24
		LTRCF-FS/JLG	4.7	657.11
		LTRCF-FS/JLG	4.7	352.19
		LTRCF-FS-SHG	4.7	224.9
		LTRCF-FS/JLG	4.7	32.36

		LTRCF-FS-SHG	4.7	47.40
		ST(SAO)	4.5	500
8	2018-19	ST(SAO)	4.5	500
		LTRCF-FS	5	425.29
		ARF/FS	5	300
		LTRCF-FS	5	371.43
		LTRCF-FS/SHG	5	403.28
		LTRCF-HG/JLG	5	300
9	2019-20	LTRCF-SHG	4.4	427.38
		LTRCF- JLG	4.4	118.20
		ARF-SRTO	8.35	548.89
		LTRCF	4.15	454.42
		ST(SAO)	4.5	800
		ARF	8.35	1464
		Addl ST(SAO)	6.9	50
10	2020-21	STR-SLF	4.4	200
		ARF	6.65	725
		LTRCF	2.9	1319.78
		ST(SAO)	4.5	800
		Addl ST(SAO)	5.25	200

Source- Field Survey

Table 3.16 presents the refinance disbursement to Nagaland State Cooperative Bank in the state. The refinance type is determined in terms of duration ranging from short term, medium term to long term.

3.9 CREDIT FLOW (FARM SECTOR)

Credit plays an important role in the capital formation in agriculture. Timely access to credit can improve the agricultural production which can act as a catalyst to boost the rural economy. Easy and timely access not only facilitates agricultural productivity but also leads to asset formation, food security, increase in income level and other socio-economic benefits. The need to prioritize lending to the agricultural sector gained attention after various findings concluded that the agricultural credit was primarily channeled more through non-institutional sources rather than the formal lending institutions. This lack of substantial contribution from formal lenders caused concerns among policy makers. Based on the recommendations of different committees set up to improve the credit delivery system in the country, the role of formal institutions grew significantly. The institutional flow of credit to the agri and allied sector increased considerably after the nationalization of banks in 1969. Fast forward to the present, the supply of ground level credit flow in the farm sector has considerably improved over the years. The agricultural credit flow in India increased from ₹511029 crore in 2011-12 to ₹15,75,398 crore in 2020-21.

Considering the purpose and duration of agricultural credit required by farmers, agricultural credit is classified as short term, medium term and long-term credit.

Short/Crop loan

Short term or Crop loans are required to meet the production needs of farmers such as purchase of seeds, fertilizers, paying wages for hired labour etc.

Term loan

Loans are provided on medium and long-term basis for meeting the investment needs of the farmers such as purchase of machinery, pumping sets, purchase of cattle and other tools and implements required for agricultural purposes.

3.9.1 Credit disbursement

In the state, credit is disbursed by formal lending agencies such as Commercial Banks, Nagaland State Cooperative Bank, Nagaland Rural Bank.

Table 3.17 Flow of credit in the farm sector vis-à-vis institutional agencies (Lakh INR)

Sl no	Year	Commercial Banks	Nagaland State Cooperative Bank	Nagaland Rural bank	Total	Growth %
1	2011-12	NA	NA	NA	3666	-
2	2012-13	7352.12	766.48	250.05	8368.65	-
3	2013-14	6611	772	172	7555	-9.72
4	2014-15	7140.32	2300.18	83.99	9524.49	26
5	2015-16	8326.87	858.33	129.85	9315.05	-2.19
6	2016-17	13868.60	820.35	98.21	14787.16	58.74
7	2017-18	NA	NA	NA	15620.12	5.63
8	2018-19	13525.01	1776.67	101.55	15403.23	-1.38
9	2019-20	12153.76	12198.19	375.07	24727.02	60.53
10	2020-21	15974.20	3208.10	187.85	19370.15	-21.66
Total					128336.9	

Source- State Focus Paper (Nagaland), 2021-22

Table 3.17 show the disbursement of credit to the farm sector through the financing institutions in the state. The disbursement amount over the 10-year period indicates a fluctuating flow of funds. The total credit disbursement was highest in 2019-20 amounting ₹24727.02 lakh. The amount decreased in 2020-21 with a negative growth rate of -21.6%. The overall credit flow has increased significantly in the state from ₹3666 lakh in 2011-12 to ₹19370.15 in the year 2020-21. The cumulative amount of credit disbursed during the 10-year study period amounts to ₹128336.9 lakh.

3.10 NABARD's FARM SECTOR DEVELOPMENT DEPARTMENT (FSDD)

NABARD has set up a Farm Sector Development Department (FSDD) to formulate policies and implement various farm sector programs. The following programs are managed under NABARD's Farm Sector Development Department (FSDD):

- Farm Sector Promotion Fund (FSPF)
- Watershed Development Fund (WDF)
- Tribal Development Fund (TDF)
- Producers Organization Development Fund (PODF)
- Producers Organization Development and Upliftment Corpus (PRODUCE) Fund
- Central Sector Scheme for Promotion and Nurturing of Farmers Producer Organizations (FPOs)
- Climate Change Fund (CCF)

The programs are aimed at undertaking the following initiatives:

- Conserve and manage natural resources
- Accelerate ground-level credit flow by rural financial institution
- Generate rural employment
- Raise the living standard of rural poor
- Formulate policies relating to the agri and allied sector, natural resource management etc., within the overall policy framework of GoI.
- Climate change adaptation and mitigation

3.11 FARM SECTOR DEVELOPMENT DEPARTMENT (NAGALAND)

The present chapter details the NABARD-sponsored programs implemented under the Farm Sector Development Department (FSDD) in the state. The farm sector programs of NABARD in the state are implemented through partner organizations such as Government departments, various NGO's, church-based bodies and registered societies acting as Project Implementing Agencies (PIAs). The varied programs are covered in almost all the districts. NABARD works in close coordination with the implementing agencies to successfully implement the programs

The programs undertaken for the study are:

- Springshed-based Watershed Development Program
- Tribal Development Fund (TDF)
- Farmer Producers Organization (FPO)

3.11.1 Springshed-based Watershed Development Fund

Mountain springs are the primary source of water for the rural inhabitants constituting 71.14% of the total population out of which 60% is engaged in farming activities. The discharge from springs diminishes or becomes seasonal due to climate change and various developmental activities. Unplanned developmental activities, forest fires, deforestation, jhum cultivation, and climate change are some of the causes which reduce the spring discharge. The dying springs can be revived through the Springshed development approach. The need for intervention to address such issues has become a pertinent matter owing to acute water shortage, especially during the lean seasons.

In 2015, a consortium of the Government of Nagaland (GoN), Department of Land Resources (DoLR), Rural Development Department (RD), NEIDA, Tata Trusts, People's Science Institute (PSI) and Advanced Centre for Water Resource Development & Management (ACWADAM) Pune held a multi-stakeholder Project on Springshed Development for Water Security in 100 villages in Nagaland. The follow-up to the consortium resulted in setting up several Springshed projects on a pilot basis in 11 districts in 2016-17. The outcomes through the Springshed intervention have so far indicated an increased discharge of springs and enhanced availability of water for domestic and irrigation use (ACWADAM and PSI, 2018). Experimental studies conducted pre and post-implementation in districts of Mon, Tuensang, Mokokchung, Wokha, Peren, Dimapur and Zunheboto report an increase in the spring discharge even during the lean season, i.e., December to February (Bamola V et al., 2018)⁵

NABARD launched the Springshed-based Watershed Development Fund (WDF) in January 2017 in the North East Region (NER), including Sikkim, to tackle the problems of water shortage caused due to the effects of climate change and other man-made factors. Intermittent dry spells and monsoon delays adversely affect the farmer's livelihood and agricultural productivity. The program would address the scarcity of water leading to low crop productivity, poor crop quality and other related issues.

The objectives of the Springshed Development program include:

- Tackling the problems of drinking water scarcity
- Promoting off-season farming for sustainable livelihoods

In the state, 18 Springshed development projects have been undertaken with disbursal of ₹488.65 lakh as of 31st March, 2021.

Table 3.18 Springshed Development Program in Nagaland (lakh INR)

No of projects sanctioned	Area covered (ha)	Amount sanctioned (Lakh INR)	Amount released (Lakh INR)
18	5490	488.65	327

Source- Field Survey

Table 3.19 Profile of Springshed Development Program

Year	Districts	No of villages	Name of villages	No of households	Amount (Lakh INR)
2017-18	Wokha	1	Riphyim	74	35.80
	Zunheboto	1	Lukikhe	52	37.80
	Kohima	1	Thizama	96	37.80
	Phek	1	Chesezu	113	37.80
	Mokokchung	1	Aliba	32	37.80
	Mon	1	Lapa	68	37.80
	Dimapur	1	Seithekema	40	37.64
	Tuensang	1	Tuensang	95	38
	Peren	1	Jalukie	64	37.80
	Wokha	1	Chudi	82	37.62

2018-19	Longleng	1	Dungkhao	77	37.80
	Peren	1	Pelhang	59	37.73
	Kiphire	5	Vongva, Tikenvong, Luther, Tsutovong, Cedeyevong	275	37.26
	Total	17		1127	488.65

Source- Field Survey

Table 3.22 depicts the Springshed program implemented in the various districts. As depicted from the table, NABARD's Springshed Program is implemented in 11 districts across the state.

3.11.1.1 Project Implementing Agencies (PIAs)

NABARD's Springshed Program are undertaken by partner agencies who act as the Project Implementing Agencies. These PIAs play a crucial role in successful completion of the projects. The PIAs assist in monitoring and supervising of the projects from the implementation phase to the completion phase, ensuring timely completion of the ongoing activities. In the state, NABARD has 5 partner agencies which assist in the implementation of the Springshed projects. As of March 2022, an amount of ₹1.38 crore has been disbursed by NABARD for the implementation of new and existing Springshed based Watershed Development projects in the state.

Table 3.20 Name of intermediaries/agencies for Springshed Program

Sl no	Project Implementing Agencies (PIAs)
1	State Level Nodal Agency (SLNA)
2	Group for Environment Management and Services (GEMS)
3	Eleutheros Christian Society (ECS)
4	Rongmei Baptist Association Nagaland (RBAN)
5	North East Initiative Development Agency (NEIDA)

Source- Field Survey

3.11.1.2 Community Participation

Participation of the village community in implementing and managing the Springshed project is essential for its long-term sustainability. Attending meetings, adopting new technology, sharing local-based knowledge, and contributing labour and money are some ways through which they can participate. By actively participating, community members develop a sense of ownership and commitment to safeguarding the project's resources. The level of participation tended to be higher during the maintenance phase.

The community can assist the Project Implementing Agency (PIA) in identifying, planning, implementing and monitoring the projects. The willingness of the community to assume responsibility for managing the Springshed has a direct bearing on its successful implementation. Therefore, the involvement and participation of the community are the keys to ensuring the long-term sustainability of the projects.

The village-level institutions act as the local governing bodies for the Springshed projects. A Watershed Committee can be formed for effective implementation and better sensitization of the projects. The Springshed program under NABARD is of recent intervention. However, earlier studies conducted on other government-sponsored Springshed projects show far-reaching benefits to the rural community. The enhanced discharge of spring has improved the quality of drinking water and health and helped reduce the drudgery of women and children.

3.11.2 Tribal Development Fund (TDF)

The Tribal Development Fund was set up under NABARD in 2003-04 out of its profits with a corpus fund of ₹50 crore. The program was set up with the aim of providing sustainable livelihoods for tribal families through an orchard-based farming system. The orchard-based farming forms the core component of the project, popularly known as the 'Wadi' project. As of 2021, non-wadi projects are also included under the sphere of TDF to include more participation of landless tribals to increase their income-generating opportunities. The non-wadi projects include apiculture, animal husbandry, sericulture and other agri-allied activities. The projects under TDF are implemented by partnering with State Government, Non-Government Organizations (NGOs) and corporate. As of

31st March 2021, NABARD has sanctioned 835 TDF projects and released ₹1688 crore, benefiting 5.6 lakhs tribal families all over India.

3.11.2.1 Wadi approach

The ‘Wadi’ model is multidimensional in its approach. In addition to the economic upliftment, it also aims to improve quality of life, health and hygiene, participation of women in development and social empowerment. Its approach is family-centric towards enabling additional income and employment opportunities. The objective of TDF is to implement sustainable livelihood participatory programs for the tribal-dominated areas. The opportunities to earn additional income through *Wadi* participation can help to mitigate migration in large numbers to urban cities for want of employment. It would also help in breaking the vicious cycle of poverty. The wadi model has become a vital livelihood intervention for the tribal population.

As of 31st March 2022, 16 projects covering 5750 families have been undertaken under the NABARD’s TDF project, providing a sustainable means of livelihood for the tribals in the state.

NABARD's TDF footprint in the state began in 2009 with 3 projects under Peren, Tuensang and Dimapur districts covering 24 villages benefiting 1650 families. The tribal families are provided with grant support up to ₹60,000 for North Eastern and Hilly regions and upto ₹50,000 in other areas. The *Wadi* houses significant crops grown according to the suitability of the project area. Some of the major crops grown in the state are underlined below:

<i>Major crops grown under Wadi</i>	Mango, apple, areca nut, kiwi, large cardamom, pineapple, gooseberry, banana, khasi mandarin, papaya, orange, litchi, naga king chilly, assam lemon, tree bean, neem, tomato, ginger, coconut, persimmon, peach, plum, tomatillo
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3.11.2.2 Project Implementing Agencies (PIAs)

The TDF projects are implemented by various NGOs acting as the Project Implementing Agency (PIA) for project intervention.

Table 3.21 Name of intermediaries/agencies for TDF

Sl no	Project Implementing Agencies (PIAs)
1	Eleutheros Christian Society (ECS)
2	Rongmei Baptist Association Nagaland (RBAN)
3	Prodigals Home (PH)
4	Better Life Foundation (BLF)
5	Chakesang Women Welfare Society (CWWS)
6	Phom Baptist Christian Association (PBCA)

Source- Field Survey

Table 3.22 Profile of Tribal Development Fund (TDF)

Year	Districts	No of villages	Name of villages	No of families	Amount (lakh INR)
2009	Peren	8	Peletekie, Deukwaram, Dungki, Lamhai, Old Jalukie, Jalukieram, Jalukielo, Jalukiekam	500	157.12
	Tuensang	6	Hakchang, Sangsangyu, Maksha, Saoshou, Sangchen, Momching	550	145.9
	Dimapur	10	Tsuumma, Socunoma, Sirhi Angami, Jharnapani, Sirhima Kuki, Khaibung, Moava, Molvom, Bungsang, Razuphema	600	198.52
		24		1650	501.54
	Phek	8	Chesezu, K Basa, K Bawe, Losami, L Khomi, M Khomi, U Khomi, Thenyizu	500	222.27

2011	Longleng	7	Auching, Sakshi, Yongpang, Pongching, Nian, Yaongyimchen, Orangkong	500	223.22
	Tuensang	2	Litem, Noksen	325	113.51
		17		1325	559
2012	Peren	11	Khelma, B Nkio, Old Beisumpui, Beisumpuikam, Beisumpuiram, Ikiesingram, Nsenlo, Beisumlo, New Ngaulong, NewNkio, Beisumpuilo	350	157.196
	Dimapur	10	Amaluma, Dhansipari, Doyapur, Ganeshnagar, Hazadisa, Munglumukh, Disagaphu, Razaphe, Vidima, Urra	325	119.89
		21		675	277.09
2015	Tuensang	12	Angangba, Lirise, Chungtor, Chimonger, Sangsamong, New Sangsamong, Yangli, Holongba, Phirahi, Mangakhi, Alisopur, Chungliyangti	700	349.24
		12		700	349.24
2018	Tuensang	2	Chendang, Konya	200	118.09
	Kiphire	4	Zhimkiur, Mongtsuwong, Phuvkiu, Pungro	200	119.91
		6		400	238
2020	Kohima	3	Sedenyu, Thongsunyu, New Sendenyu	200	129.56
	Kiphire	1	Amahator	200	130
	Mon	1	Wanching	200	130
		5		600	389.56

2021	Wokha	4	Pongitong, Shaki, Snkiton, Meriyan	200	140.37
		4		200	140.37
2022	Phek	4	Porba, Sakraba, Gidemi, Pholami	200	143.35
		4		200	143.35
		93	Grand Total	5750	2598.159

Source- Field Survey

Out of a total of 16 TDF projects, 7 projects have been completed in the districts of Peren, Tuensang, Dimapur, Phek, and Longleng. A total of 3650 families have been covered under the 7 projects as on 31st March, 2021.

3.11.3 Farmers Producers Organizations (FPOs)

Maijers (2016)⁶ in his paper quotes Rondot's definition of Producer Organizations (PO) as formal rural organizations whose members are smallholder farmers who organise themselves with the objective of improving farm income through improved production, marketing, and local processing activities. The PO acts as a supply chain catalyst, helping farmers market their produce. The farmers can focus primarily on production while other activities relating to marketing operations are handled by the Producer Organizations (POs). The POs can engage in a range of other enhanced post-harvest operations, input supply, and other activities needed to ensure that the farmer is able to produce the market-desired products at the right quality, time and price.⁶

FPOs are a group of farmers mobilized to sell their agricultural produce to increase their income collectively. The farmers with small and marginal landholdings often need help to avail themselves of the benefits of economies of scale because of their low volume of agricultural produce. The FPOs provide advantages such as cost-effectiveness, eliminating the marketing intermediaries to get higher profit margins, strengthening the bargaining power, favorable market conditions, access to farm input and technology,

increased market linkage etc. FPOs can help strengthen the members in meeting the marketing challenges and coordinate the activities to get the maximum benefit.

The primary objective of mobilizing farmers into member-owned producer organizations, or FPOs, is to enhance the production, productivity and profitability of agriculturists, especially small farmers in the country (GoI, 2013)⁷. FPOs can help farmers realize higher incomes and profitability through established marketing links. The Ministry of Agriculture (GoI, 2013)⁷ lays down several services provided by FPOs covering almost all aspects of cultivation. It is presented below-

- Marketing services -

Direct marketing after procurement of agricultural produce

- Technical services -

Loans for crops, purchase of tractors, pump sets, construction of wells, laying of pipelines, best farming practices, marketing information system, diversifying and raising levels of knowledge and skills in agricultural production and post-harvest processing.

- Marketing aspects/Networking services –

Facilitating linkages with financial institutions and government programs, building linkages of producers, processors, traders and consumers.

- Financial related services-

Loans for crop, purchase of tractors, pump sets, construction of wells, laying of pipelines, Crop insurance, Electric motor insurance, Life insurance.

The Government has identified Farmer Producer Organization as the most appropriate institutional form to mobilise farmers and build their capacity to collectively leverage their production and marketing strength. The Department of Agriculture and Cooperation (DAC) under the Ministry of Agriculture, Government of India has been appointed as the nodal agency for the development and growth of FPOs. The GoI has also created a Producers' Organization Development and Upliftment Corpus Fund (PRODUCE Fund) with NABARD of ₹200 crore to be utilized for the formation of 2,000 FPOs. As of 31st March 2021, NABARD has promoted 2,154 FPOs under PRODUCE Fund at all India level.

NABARD has set up a Producers Organizations Development Fund (PODF) to provide grants to Farmer Producers Organizations (FPOs). It was started in April 2011 with an initial corpus fund of ₹50 crore. Since then, NABARD has supported the formation and promotion of Producers Organizations under its PODF. As of 31st March, 2021 NABARD has sanctioned 2,906 FPOs under its PODF program.

3.11.3.1 Producer Organization Promoting Institutions (POPIs)

In the state, as of 31st March 2021, 8 FPOs have been formed in Tuensang, Phek, Kohima and Mokokchung. The FPOs are assisted by Producer Organization Promoting Institutions (POPIs), namely Better Life Foundation (BLF), Eleutheros Christian Society (ECS), North East Initiative Development Agency (NEIDA), Agro Tea & Agro Management Services (ATMS). The POPIs provide handholding and capacity-building support. Products such as kiwi, orange, coffee, and eri silk are some of the aggregate products collected from the FPOs.

Table 3.23 Profile of Farmer Producers Organizations (FPOs)

Year	District(s)	Name of FPO	Block	No of farmers	Amount (lakh INR)
2018	Tuensang	Rhododendron Valley FPO	Longkhim	418	11.44
		Singsih-luh FPO	Chare	226	11.44
				644	22.88
2019	Tuensang	Sangmei FPO	Noksen	350	11.44
		Ajei-ai Watthat FPO	Noklak	250	11.44
		Chenya FPO	Sangsangyu	350	11.44
				950	34.32
2022	Phek	Kade Cooperative FPO Ltd	Pfutsero	NA	NA
	Kohima	Njon Neji Coperative FPO	Tseminyu	NA	NA

	Mokokchung	Salo Coffee Producer Org Ltd	Mangkolemba-Ongpangko ng	NA	NA

Source- Field Survey

The Government of India has also launched a Central Sector Scheme for the formation and promotion of 10,000 FPO's by the end of 2027-28 with a financial outlay of ₹6865 crore. The program was launched in 2020 by the Department of Agriculture, Co-operation & Farmers Welfare Ministry of Agriculture & Farmers' Welfare. The Government has appointed 9 Implementing Agencies for the formation and promotion of FPOs. NABARD is one of the implementing agencies to undertake the program to engage in Cluster-Based Business Organizations (CBBOs) to aggregate, register & provide professional handholding support to each FPO for a period of 5 years. The cluster-based approach aims at the formation of FPOs with a focus on 'one district, one product.'

3.12 Micro Finance Initiatives (Farm Sector)

Micro finance is providing financial services in small amounts to the vulnerable groups such as the lower income group and weaker sections of the society who do not have access to banking related services. It refers to universal access to a wide range of financial services at a reasonable cost. Micro Finance has been recognized worldwide as an efficient tool to combat poverty, generate income and employment opportunities. Micro finance program is the most effective instrument to eradicate poverty by helping the rural poor to undertake micro entrepreneurial activities on a small scale through which they can generate income for sustaining their livelihood.

NABARD's role as a micro finance facilitator has helped in providing financial access to the rural poor in order to meet their micro credit needs by providing credit facilities without any collateral. The Microfinance movement started in India with the introduction of the Self-Help Group (SHG) Bank Linkage program. National Bank for Agriculture and Rural Development (NABARD) has defined microfinance as the "provision of thrift, credit and other financial services and products of very small

amounts to the poor in rural, semi-urban or urban areas for enabling them to raise their income levels and improve living standards.”⁹

3.12.1 Self Help Groups (SHGs)

NABARD conceptualized the Self Help Group Bank Linkage Program in 1992, in an attempt to link the rural poor to the formal banking and provide access to formal financial services. Self Help Groups (SHGs) are small groups of rural poor consisting not more than 20 people. The group consist of people from small contiguous areas having similar socio-economic background coming together to work on the principle of self-help sharing mutual interests. The SHG members promote small savings by encouraging their members to pool their savings regularly. The pooled savings are then available for borrowing within the groups.

SHG Bank Linkage Program is now the most widely participated developmental program involving a large number of channel partners. The movement has gained more success in the country than any other worldwide. This could be attributed to the widespread adoption by Scheduled Commercial Banks, Regional Rural Banks and Cooperative Banks within the country. It continues to provide accessible finance to the rural people from the formal lending sectors without collateral security. The SHG-BLP movement has emerged as one of the most successful tools for eradication of poverty in the country. It has led to strengthening of rural livelihoods, woman empowerment, providing financial access to the rural mass and freeing the rural poor from the cycle of indebtedness from the money lenders. The SHG has emerged as a powerful intervention by organizing the unorganized poor communities through a holistic approach thereby bringing them under the folds of financial inclusion.

The SHG has become a mass movement of the rural poor particularly for the women in their journey towards economic and social upliftment. NABARD continues its role as a micro finance facilitator by providing access to a wide range of financial services through grant support and assistance, refinance support, capacity building and other initiatives to strengthen the SHG-BLP movement. By extending credit outreach to the poor households in the country, the program has helped to ensure greater financial inclusion.

3.12.1.1 NABARD Grant support for training and capacity building of SHG-BLP

To bring the rural poor under the formal financial services requires the support of the different stakeholders to make credit easily accessible. NABARD provides support for training and capacity building to various stakeholders such as Bankers, NGOs, Government Officials and SHG member trainers, SHG Federations. The key stakeholders are provided training on government and NABARD schemes, the changing economic scenario in banking and other related programs. The trainings aim at bringing awareness, exposure and knowledge for smooth efficiency and disbursal of credit in a timely manner. It also provides grant support for exposure visits, field visits and trainings and meetings such as Banker's meet, NGO's meet and other meets. During the year 2020-21, a total of 1,66,775 participants from various banks and stakeholders were part of the training programs supported by NABARD at all India level.

Table 3.24 NABARD support for training and capacity building of SHG-BLP

	During 2020-21	Cumulative as on 31 st March, 2021 (lakh INR)
All India level	1,66,775	4120065
North Eastern Region	23590	328305
Nagaland	804	9243

Source- Status of Micro Finance, 2020-21

3.12.1.2 Grant Support to SHPIs for promotion and nurturing of SHGs

NABARD provides grant support to partner agencies such as NGO's, Regional rural banks, commercial banks, cooperative banks, federation of SHGs, Farmers' Clubs etc for promotion, nurturing and credit linking of SHGs with the banks. The chain support has proved to be effective for the growth and expansion of the SHGs. The partner agencies such as NGOs, Federations of SHGs, NGO-MFIs, CCBs, PACS, Farmers' Clubs, CBs, RRBs and Individual Rural Volunteers (IRVs) are tagged as Self-Help Promoting Institutions (SHPIs).

As on 31st March 2021, a cumulative grant support of ₹42635.85 lakh has been sanctioned out of which ₹17123.45 has been released to partner agencies at all India level.

NABARD also supports various Village level Programs (VLPs) so as to provide a better linkage for the banks and other SHPIs at the grassroot level with the SHGs. The VLPs help in better dissemination of information regarding formation of SHGs, creating credit linkage and timely repayment of loans. A total of 20685 village level programs have been conducted by NABARD with grant support of ₹1701.41 lakh covering 10,83,617 beneficiaries all over the country.

Table 3.25 Grant support to SHPIs cumulative as on 31st March, 2021

	No of SHPIs	No. of SHGs to be promoted/ credit linked	Grant sanctioned (lakh INR)	Grant released (lakh INR)	No. of SHGs savings linked	No. of SHGs credit linked
All India level	6540	881572	42635.85	17123.45	681025	398372
North Eastern Region	332	56274	2386.79	1056.43	44655	28033
Nagaland	17	4445	213.50	129.52	3675	2911

Source- Status of Micro Finance, 2020-21

SHG Bank Linkage Program has immensely made a positive impact towards empowering the rural poor and bringing about rural prosperity. It has particularly uplifted the rural women and providing economic emancipation from poverty. What began as a pilot project to improve the credit outreach has now become a mainstreamed program with the Reserve Bank of India declaring the SHG-BLP as a priority sector lending activity in April, 1996.

3.12.1.3 Digitising SHGs E-Shakti

In an effort to address the existing issues in the SHG linkage, a project called E-Shakti was started in 2015 to help frame a suitable credit policy for SHG in the digital platform. The purpose was to create a digital eco system which would provide end-to-end solutions for SHG bank linkage. The online portal would ensure standardization of books of accounts and bring about transparency in maintenance of record. The portal (eshakti.nabard.org) would help to assist banks in providing credit linkage based on the online application received. It would also help banks to disburse credit based on the performance of the SHGs which are recorded on digital platform. The project E-shakti aims to bring all the SHGs into the digital fold so that data can be accessed on real time basis. As on 31st March, 2021, the project has been implemented in 281 districts across the country, bringing 12.3 lakh SHGs under the portal with 140.9 lakh members covering 1.7 lakh villages.

In the state, NABARD implemented the E-shakti project in Kiphire and Tuensang district bringing 320 SHGs under the digital fold.

3.12.2 Micro Enterprise Development Program (MEDP)

The Micro Enterprise Development Program was launched in 2006 to help SHGs promote their existing activity into a micro enterprise. The trainings are targeted at members of mature SHGs which had accessed one or two bank loans. The main objective of the program is to enhance the capabilities of the members through skill up-gradation of an existing or new line of activity. This would help create a sustainable activity for livelihood purposes. Under the MEDP, short term trainings are provided with duration ranging not more than 15 days. A maximum grant assistance of ₹1 lakh is provided for the training.

MEDPs have helped SHG members get sustainable income through the skills learned from the trainings conducted by NABARD. It has helped promote the spirit of entrepreneurship as members were found to be successfully running small enterprises over the years. The success of the program led to enhancement of the amount from ₹50,000 to ₹1 lakh. Various success studies have been documented which are testaments to the fruition of the program. Cumulatively, as on 31st March 2021, 18,434 MEDPs were conducted all over the country training, 5.22 lakh SHG members with a grant support of ₹3509.59 lakh.

In the state, the MEDPs have been conducted by NABARD providing varied trainings both in the farm and off farm sector. Some of the activities are mushroom cultivation, vermi composting, food processing, detergent making, poultry and piggery. The MEDPs have been conducted in the districts of Mokokchung, Dimapur and Phek.

3.12.3 Livelihood Enterprise Development Program (LEDP)

Livelihood and Enterprise Development Program (LEDP) is another skilling initiative program under NABARD in order to provide sustainable income opportunities for SHG members. The trainings are provided to SHG members in cluster mode from surrounding villages. 15-20 SHGs are selected from the villages nearby, of which 5-6 members are selected from each group. The trainings are then provided in small numbers with 25-30 members in a batch.

What began as a pilot project in 2015, NABARD mainstreamed the LEDP in order to make the maximum impact of skill up-gradation. LEDP envisions providing a holistic approach through backward and forward linkages in resources, marketing, credit and other linkages to offer the maximum assistance for their growth and success. As on 31st March 2021, 1284 LEDPs have been conducted benefiting 136098 SHG members with a grant sanction of ₹6332.82 lakh.

In the state, cumulatively, as on 31st March 2021, 5 LEDPs have been sanctioned with grant support of ₹26.77 lakh which have benefitted 690 SHG members till date. Training program on food processing, weaving, ornament making, tailoring, scientific piggery farming and floriculture are some LEDPs imparted to the SHG members. The LEDPs have been conducted in Wokha, Phek and Tuensang districts.

3.13 Central Sponsored Capital Subsidy Schemes implemented by NABARD

NABARD acts as the subsidy channelizing agency for various credit linked subsidy schemes of the GOI. NABARD channels subsidy to eligible banks for activities primarily related to agriculture and priority sector activities. The central subsidy schemes channeled by NABARD has helped to increase the ground level credit flow to agriculture and allied activities and subsequently improved agricultural production and productivity. Some of the schemes for which NABARD is channeling subsidy are briefly mentioned as under:

3.13.1 Dairy Entrepreneurship Development Scheme (DEDS)

The Department of Animal Husbandry, dairying and fisheries is implementing Dairy Entrepreneurship Development Scheme (DEDS) for covering activities such as enhancement of milk production, procurement, preservation, transportation, processing and marketing of milk by providing back ended capital subsidy for bankable projects. The scheme is aimed at generating self-employment opportunities in the dairy sector.

Subsidy under Dairy Entrepreneurship Development Scheme is provided only for those that are able to obtain bank loan sanction. The subsidy is provided at 25% for general and 33% for SC/ST. As on 31st March 2021, NABARD has released a cumulative amount of ₹1,892.3 crore as subsidy under the DEDS.

3.13.2 Agri Clinic Agri Business Centre (ACABC)

The Ministry of Agriculture and Farmer's Welfare launched the Agri Clinic and Business Center in 2002. The Agri Clinics aim to provide expert advice and services to farmers on areas such as soil health, cropping practices, plant protection, crop insurance, clinical services for animals, feed and fodder services and other services. The agri business centers would provide services such as hiring of farming equipments, market linkages, maintenance of farming implements and other related services. The extension services are provided free of cost or on payment basis as per the affordability of the farmers. The scheme aims at providing gainful self-employment particularly for the unemployed agricultural graduates. As on 31st March 2021, a cumulative amount of ₹106.9 crore has been released by NABARD as subsidy under the ACABC scheme.

3.13.3 Integrated Scheme for Agricultural Marketing (ISAM)

The Integrated Scheme for Agricultural Marketing (ISAM) implemented by The Ministry of Agriculture and Farmer's Welfare aims to provide farmers with access to competitive markets at affordable prices. Farmers can get access to market information, new technology, grading facilities and other related services which can help them to compete and realize better prices of their agricultural products. The ISAM has several sub schemes, all of which have been merged and brought under one. The schemes are:

- Marketing Research and Information Network (MRIN)
- Strengthening of Agmark Grading Facilities (SAGF),
- Agribusiness Development (ABD) through Venture Capital Assistance (VCA) and Project Development Facility (PDF) and
- Choudhary Charan Singh National Institute of Agriculture Marketing (NIAM)

As on 31st March 2021, NABARD released a cumulative amount of ₹4,454.9 crore as subsidy under the Integrated Scheme for Agricultural Marketing (ISAM)

3.13.4 National Livestock Mission- Entrepreneurship Development and Employment Generation (EDEG)

The Department of Animal Husbandry & Dairying, Government of India is implementing the scheme of National Livestock Mission since the financial year 2014-15.

NABARD is the subsidy channeling agency for the Entrepreneurship Development and Employment Generation (EDEG), a component of the National Livestock Mission which covers the following schemes-

- Poultry Venture Capital Fund Scheme (PVCF)
- Effective Animal Waste Management
- Salvaging and Rearing of Male Buffalo Calves (SRMBC)
- Integrated Development of Small Ruminants and Rabbits (IDSRR)
- Pig Development (PD)
- Construction of Storage Facility for Feed and Fodder

As on 31st March 2021, a cumulative amount of ₹901.4 crore has been released as subsidy by NABARD under the umbrella scheme EDEG.

3.14 CONCLUSION

The importance of the farm sector in developing the rural economy is a thrust area for the Government to prioritize. Significant policies and programs have been framed and implemented to reform the farm sector over the years. NABARD continues to play a developmental role in the farm sector through its varied promotional and developmental initiatives. NABARD's initiatives in the farm sector relate to Watershed development, Tribal Development Program (TDF) and Farmer's Producer Organizations (FPOs). The programs aim to improve agri-livelihood opportunities and provide sustainable solutions for the farming community.

The World Bank opines that agricultural development is one of the most powerful tools to end extreme poverty, boost shared prosperity, and feed a projected 9.7 billion people by 2050.^{2,8} Growth in the agricultural sector is two to four times more effective in raising incomes among the poorest than in other sectors. India is one of the leading exporters in the agricultural sector. During the Financial Year 2021-22, agriculture and allied products exports stood at US\$ 50.21 billion.⁷ Considering the contribution of the agri and allied sectors to the country's economy, it is an integral part of economic development. Agriculture cannot be seen in isolation. It should be seen as an integral part of a larger ecosystem spanning the entire primary sector, including horticulture, animal husbandry, fisheries, dairy, poultry, and other allied activities (Ministry of Agriculture, GoI, 2021).⁷

With India as one of the major players in the agricultural market, more avenues can be explored to increase the role of agriculture in improving India's economy. More than half of the country's population is dependent on agriculture as a source of livelihood. It is also the major source of employment to the rural poor. The institutional support for agriculture has also been increasing over the years. With increased investments in the agricultural sector, the Government aims at fulfilling their goal of doubling farmers' income by 2022. The farmers of our country therefore play an instrumental role in making India one of the global players in the agricultural market.

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CHAPTER 4- ROLE OF NABARD IN THE NON-FARM SECTOR

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4.2 Contribution of Non-Farm income

4.3 Workforce Structure of the Indian Economy

4.4 Workforce Structure of Nagaland

4.5 Credit Flow - Non-Farm Sector

4.6 NABARD'S Off Farm Sector Department

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4.8 Conclusion

4.1 INTRODUCTION

The conventional perspective of viewing agriculture as the primary source of income and livelihood in rural areas is gaining a different trajectory. Recent data have indicated a notable shift towards recognizing the role of the rural non-farm sector in promoting economic growth, rural employment, poverty reduction, and a more spatially balanced distribution of population ¹. Studies have indicated that participation in non-farm activities has helped in the economic transformation of developing countries. Farm households in developing nations are earning an increasing share of their income from sources outside of farming ². Income derived from non-farm activities supplements those from agriculture for some families, while for others, rural non-farm activities are the primary source of income³.

The present chapter discusses NABARD's role in the non-farm sector. First, the chapter examines the non-farm activities and their increasing importance in changing the economic scenario drawing from literature studies on these activities. Next, it addresses the changing economic landscape in India highlighting findings from various studies that underscore the role of non-farm activities in enhancing livelihood opportunities. The chapter also analyzes the workforce pattern over the past three decades using census data, providing depth on the increasing and growing workforce engaged in the non-farm activities, at all India and state (Nagaland) level. Additionally, a section on the credit flow within the non-farm sector in Nagaland is also discussed. Finally, the chapter delves on the non-farm sector programs implemented by NABARD in the state over the ten-year study period i.e. 2011-2021.

The non-farm activities provide economic opportunities and improve rural living standards. Millions of rural people worldwide have been able to leapfrog from poverty through better incomes and employment in the rural non-farm enterprises, contributing to better livelihoods ⁴. Non-farm activities can help in developing the rural economy. The farm household's engagement in non-farm activities is a pathway out of poverty in rural areas of developing countries. ⁵Empirical studies from African countries indicate the contributing role of the farm sector in poverty reduction, employment creation and ensuring food security has declined over the past decades. The cause of the decline is due to decreasing agricultural productivity caused by severe droughts, soil erosion and many other factors. ⁶ In poor rural areas, some households

will make a positive choice to take advantage of opportunities in the rural non-farm economy. The vital contribution of the non-farm sector to the economic development and reconstruction is highlighted in the studies of.⁷

In contrast, other households are pushed into non-farm sector due to lack of opportunities on farm⁸. Undertaking non-farm activities would have far more economic benefits for areas prone to drought. Consequently, agriculture could transition into a secondary income source, while non-farm activities assume as a primary source of livelihood. Findings of past studies have also indicated that there exists a positive relationship between agricultural and non-agricultural activities. Growth in agricultural undertaking is known to positively influence the growth of non-agricultural undertakings.⁹

It has been found that poverty is the most common cause for people diversifying into non-farm activities. This diversification is sometimes involuntary but necessary.^{10,11} Diversification leads to non-farm activities to cope with poverty and ensure security of livelihoods. The opportunity to generate income through non-agricultural pursuits has played a key role in reducing rural-urban migration, primarily stemming from limited livelihood prospects in rural areas. Non-farm jobs offer livelihood avenues, particularly beneficial for small and marginal farmers who may find their agricultural earnings insufficient to sustain them. Participation in non-farm activities predominantly occurs in the tertiary sector. Research studies have observed a significant rise in the involvement of women in non-farm endeavors.¹²

4.2 CONTRIBUTION OF NON-FARM INCOME

Traditionally, rural households have depended heavily on agricultural earnings as their main income source. However, when agricultural income yields unsatisfactory returns due to risks like unfavourable agro-climatic conditions, rural households turn to non-agricultural pursuits to supplement their income. These limitations, coupled with a scarcity of job opportunities in agriculture-related fields, hinder the establishment of a stable income source for rural households. Research studies on non-agricultural incomes has shown that it has played a role in diminishing poverty rates in rural regions, as rural residents diversified into non-farm activities to augment their income streams.

The rural non-farm sector comprises economic activities such as manufacturing, construction, mining and quarrying, trading, transport and other services. Study by Lanjouw et al¹³ found that the non-farm income shares are highest in the states of Himachal Pradesh, the Northeast, West Bengal and Tamil Nadu. In these states, non-farm income sources account for more than 45 per cent of total income (more than 50 per cent in Himachal Pradesh and the Northeast). Findings in the state of Uttarakhand indicate that non-farm activities contributed 70.28% to the total income of the rural households in middle hill areas, marginally varying from the lowest 64.91% to the highest 73.87% in high and low hill areas respectively. Income from non-farm activities can help to strengthen and stabilize rural household income (Mehta, 2002)¹⁴. Studies done on Maharashtra indicate there is gender disparity with regards to employment in rural non-farm sector where males significantly outnumber females in terms of employment participation and additionally women are less likely to engage in rural non-farm activities¹⁵. An analysis of census data undertaken by Motkuri et al observes growth in the workforce in non-agricultural sector is higher than the agricultural sector¹⁶.

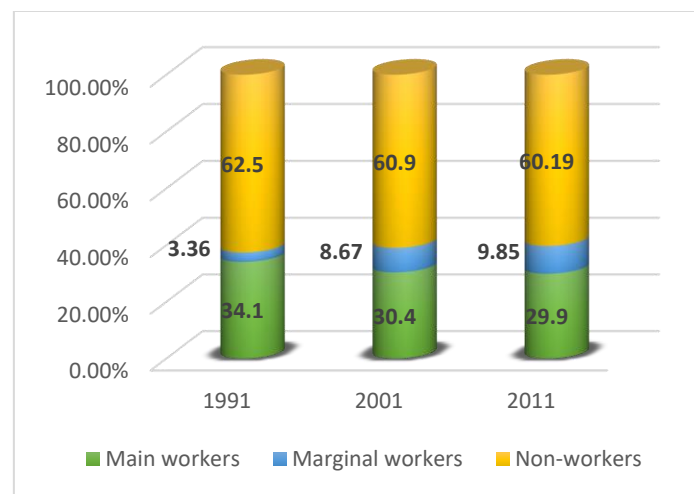
Rural farm households engaging in non-farm activities are more likely to enjoy higher food consumption levels and stable earnings of rural farm households can increase and smooth household food consumption and improve food security². Findings from various studies support the international trends that, on average, higher incomes are earned from non-farm activities than from agriculture, indicating the vital role of non-farm activities in raising rural household incomes¹⁷.

While the importance of agriculture to the rural economy cannot be undermined, the non-agricultural sector can contribute significantly to the growing needs of the rural populace. There is a need to reduce the dependence on agriculture as the only source of livelihood for the people in the rural areas. The Off-farm sector can provide alternate livelihood opportunities that absorb the increasing rural workforce. This can help mitigate the migration of rural populations to urban areas for employment and livelihood opportunities.

4.3 WORKFORCE STRUCTURE OF THE INDIAN ECONOMY

The Indian economy is witnessing a structural transformation from agriculture to non-agricultural (industry and service). Though the process is long and slow, the transition from agriculture to non-agriculture-based activity is gaining momentum. The rural economy has changed fundamentally and has grown to encompass both farm and non-farm sources. Over the past two decades, rural livelihoods have become increasingly non-farm-based. The workforce has been increasing both in the farm and off-farm sectors. However, the growth rate in the off-farm sector is faster than the farm sector. The pattern of change in the total workforce can be interpreted from the census data presented below for three years, i.e., 1991, 2001 and 2011. The Census data categorizes the total population into three groups- Main workers^[2], Marginal workers^[3] and Non-workers^[4]

Figure 4.1 Percentage share of total workers from 1991 to 2011- All India



Source- Census of India 1991, 2001 & 2011

^[2] Census classifies Main workers as those who have participated in any economically productive activity for more than six months in a year.

^[3] Census classifies Marginal workers as those who have participated in any economically productive activity for less than six months in a year.

^[4] Census classifies Non-workers as those who have not participated in any economically productive activity in a year

Figure 4.1 depicts the percentage distribution of main, marginal and non-workers among the total workers. The data reveals that the proportion of non-workers is the highest during the census periods from 1991 to 2011.

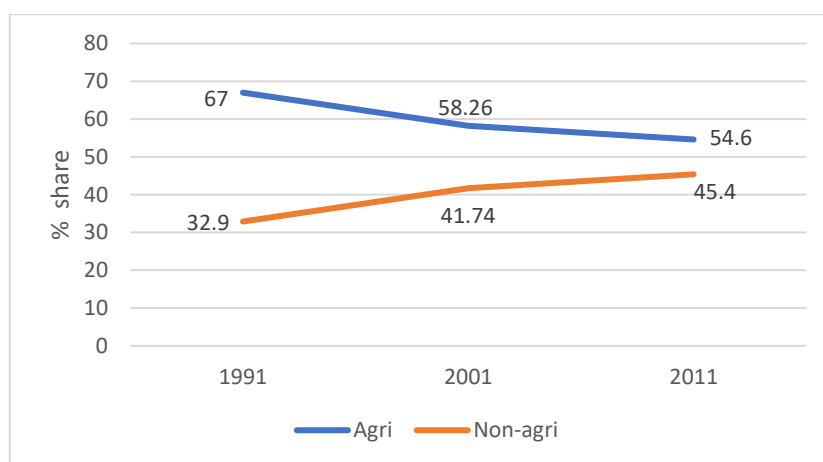
Table 4.1 Composition of workforce from 1991 to 2011- All India (persons in millions)

Year	Main		Total	Marginal		Total
	Agri	Non-agri		Agri	Non-agri	
1991	185.3	100.6	285.9	25.4	2.8	28.2
2001	167.1	145.5	312.6	66.96	22.26	89.22
2011	182.1	180.5	362.6	81.03	38.28	119.31

Source- Census of India 1991, 2001 & 2011

As depicted in Table 4.1, the total number of main workers increased from 285.9 million in 1991 to 362 million in 2011. The total marginal workers grew from 28 million in 1991 to 119.31 million in 2011.

Figure 4.2 Growth % share of agri and non-agri workforce



Source- Census of India 1991, 2001 & 2011

Figure 4.2 The percentage share of workers in the agri sector declined from 210.7 million (67%) in 1991 to 263.1 million (54.6 %) in 2011, whereas the non-agri sector

shows an upward trend from 32.9% in 1991 to 45.4% in 2011. The change in the structure of the workforce is slow, but there is considerable change during the three decades in both the agri and non-agri sector.

Table 4.2 Composition of workforce by occupation- All India (persons in millions)

Year	Main				Marginal				Total
	CL	AL	HHI	OT	CL	AL	HHI	OT	
1991	110.7	74.6	6.8	93.8	14	11.4	0.8	2	314.1
2001	103.62	63.49	12.16	133.3	23.68	43.27	4.76	17.51	401.8
2011	95.94	86.17	12.3	168.17	22.87	58.16	6	32.27	481.84

Source- Census of India 1991, 2001 & 2011

Note: CL= Cultivators AL=Agricultural Labour HHI= Household industry
OT= Others; as defined in Census 2011

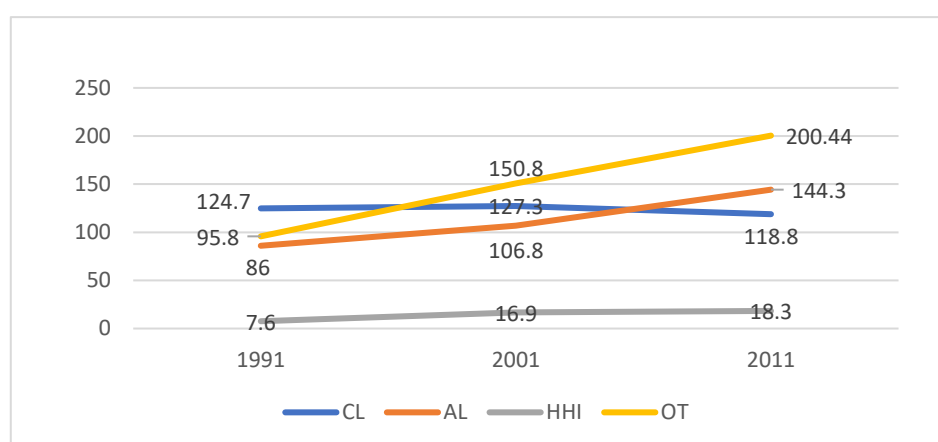


Figure 4.3 Distribution of total workers (All India)

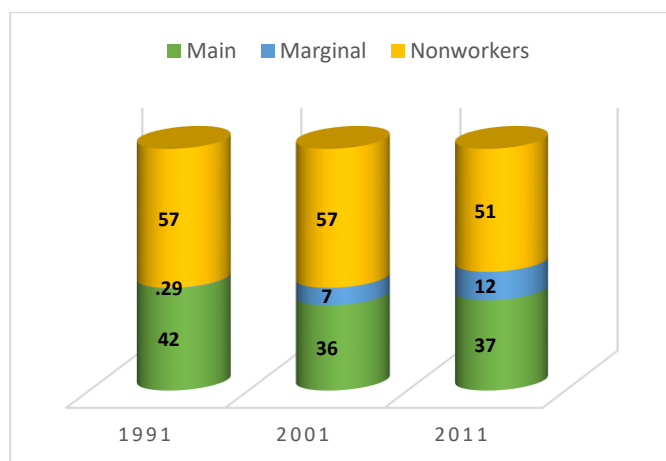
Source- Census of India 1991, 2001 & 2011

The total workforce composition as seen in Figure 4.3 indicates the shift of workers from primary to secondary and tertiary sectors. There is a surge in the growth of other workers, which surpassed the number of Cultivators 2001 onwards. The number of agricultural labours also outnumbered the cultivators in 2011 census data. It is evident that the workforce employment is witnessing a shift from farm to off-farm sector.

4.4 WORKFORCE STRUCTURE OF NAGALAND

The workforce composition in the state has been increasing both in the farm and off-farm sectors. The pattern of change in the total workforce can be interpreted from the census data presented below for 3 decades i.e., 1991, 2001 and 2011.

Figure 4.4 Percentage share of total workers from 1991 to 2011- Nagaland



Source- Census of India 1991, 2001 & 2011

Figure 4.4 depicts the percentage share of main, marginal and non-workers out of the total workers. The percentage share is the highest in non-workers for the census period from 1991 to 2011.

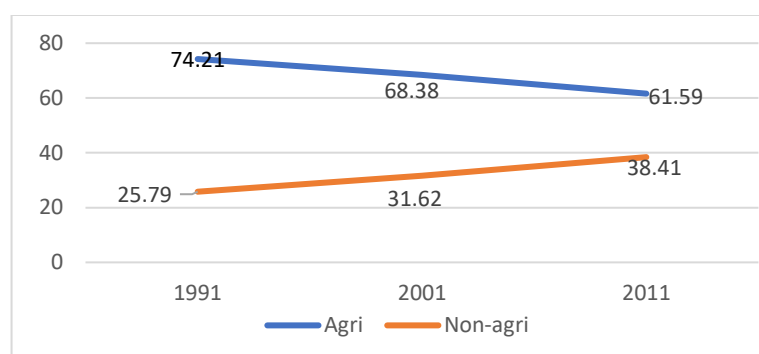
Table 4.3 Composition of workforce from 1991 to 2011- Nagaland

Year	Main workers		Total	Marginal workers		Total
	Agri	Non-agri		Agri	Non-agri	
1981- 1991	378830	132667	511497	3427	174	3601
1991- 2001	470736	233241	703977	109016	34803	143819
2001- 2011	442950	299071	742021	157714	75467	233181

Source- Census of India 1991, 2001 & 2011

As depicted in Table 4.3, the total number of main workers increased from 511497 in 1991 to 742021 in 2011. The total marginal workers grew from 3601 in 1991 to 233181 in 2011.

Figure 4.5 Growth % of Agri and non-agri workforce -Nagaland



Source- Census of India 1991, 2001 & 2011

The percentage share of workers as depicted in Fig 4.5 in the agri sector declined from 74% (382257) in 1991 to 61.6% (600664) in 2011, whereas the non-agri sector showed an upward trend from 25.8% (132841) in 1991 to 38.41% (374538) in 2011. The change in the workforce structure is slow but there has been considerable change during the three decades in both the agri and non-agri sector.

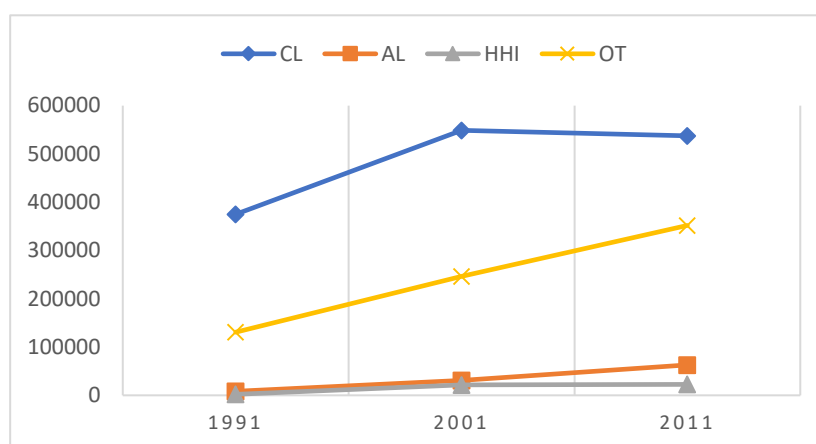
Table 4.4 Composition of workforce by occupation- Nagaland

Year	Main workers				Marginal workers			
	CL	AL	HHI	OT	CL	AL	HHI	OT
Male								
1991	1,78,974	5,109	896	1,14,458	841	215	7	15
2001	2,32,652	7,330	5,933	1,78,896	38,275	8,655	3,260	12,967
2011	2,08,221	12,899	4,841	2,17,055	51,233	18,958	4,547	31,962
Female								
1991	1,92,623	2,124	1,095	16,218	2,586	924	92	60
2001	2,26,025	4,729	5,627	42,785	51,893	10,193	7,053	11,523
2011	2,12,158	9,672	4,713	72,462	66,090	21,433	8,548	30,410

Source: Census of India 1991, 2001 & 2011

Note- CL= Cultivators; AL= Agricultural Labors ; HHI= Workers household industries; OT= Other workers

Figure 4.6 Distribution of total workers (Nagaland)



The total workforce composition, as seen in Figure 4.6, indicates the shift of workers from primary to secondary and tertiary sectors. Cultivators grew from 3,75,024 in 1991 to 5,48,845 in 2001 and thereafter witnessed a slow declining trend from 2001 onwards. There is a surge in the growth of other workers, which rose from 1,30,751 to 3,51,889 in 2011. The number of agricultural labors also grew from 8,372 in 1991 to 62,962 in 2011.

4.5 CREDIT FLOW (OFF-FARM SECTOR)

NABARD provides credit package for non-farm activities- handloom and handicrafts, livelihood skills training, capacity programs, marketing linkage support activities etc. The non-farm credit disbursal is aimed at providing opportunities for earning livelihood beyond the agri-sector.

Table 4.5 shows the flow of credit in the off-farm sector pertaining to the state. As can be seen, the credit flow has significantly increased over the 10year study period.

Table 4.5 Credit flow in the Off-farm sector (Lakh INR)

Sl no	Year	Commercial Banks	Nagaland State Cooperative Bank	Nagaland Rural bank	Total	% increase
1	2011-12	NA	NA	NA	NA	-
2	2012-13	6567	83.40	0.00	6650	-
3	2013-14	4303	115	171	4589	-30.99
4	2014-15	5814.12	101.89	69.04	5985.05	30.42
5	2015-16	8224.38	65.20	101.50	8391.08	40.20
6	2016-17	22796.90	155.25	192.88	23145.03	175.82
7	2017-18	16191.69	349.15	132.59	16673.43	-27.96
8	2018-19	22359.27	49.84	255.23	22664.34	35.93
9	2019-20	18254.20	239.30	1130.03	19623.53	-13.41
10	2020-21	38702.9	52.2	400.5	39155.60	99.53
	Total	143213.5	1211.23	2452.77	146877.1	

Source- Field Survey

The credit disbursed by the various financing institutions in the state is presented in Table 4.5. The Commercial banks registered the highest in the credit disbursal, amounting to ₹143213.5 lakhs. While Nagaland State Cooperative Bank (NStCB) disbursed a total credit of ₹1211.23 lakhs, Nagaland Rural Bank (NRB) disbursed ₹2452.7 lakhs. The credit disbursal by the financing institutions indicates fluctuating growth pattern in some years. However, the overall credit disbursed in the state has significantly increased from ₹6650 lakh in 2012-13 to ₹39155.60 lakh in 2020-21.

4.6 NABARD's OFF FARM SECTOR DEPARTMENT (OFDD)

NABARD has set up an Off-Farm Development Department (OFDD) to help meet the credit needs of the unreached and provide backward and forward linkages for the promotion of off-farm activities.

The core functions of the Off Farm Sector Department as highlighted by NABARD are:

- To promote sustainable livelihood activities, development and capacity building programs for the rural poor to improve their income status.
- To improve the credit flow and access to Off-farm activities.
- To support, promote and develop various Off-Farm activities through upscaling and capacity building of channel partners, organizing seminars and workshops for dissemination of information

Some of the programs and initiatives under NABARD's Off-Farm sector activities are:

4.6.1 Marketing Initiatives

4.6.1.1 Rural Haat

A Rural Haat is an open marketplace that supports the basic infrastructure of a marketing shed for the sale and distribution of products that are needed daily. Haats are traditional markets where products sold are usually low priced. The Rural haats provide a platform for the unorganised trade to flourish by selling diverse goods and services. The markets thereby create an opportunity for livelihood and income generation. Rural haats are usually spread over a few acres of land set near big town areas. Traders and vendors set up stalls to sell their varied wares to consumers from rural areas. The haats are ideally located in commercial points which can be accessible even for rural people from adjoining villages. The haats become a mini-business center for sellers and buyers and thereby promote trade.

NABARD has sanctioned ₹7.6 crores for setting up 58 rural haats for 2021. As of 31st March 2021, cumulative financial assistance of ₹54.2 crores has been sanctioned for 636 rural haats all over India.

4.6.1.2 Rural Mart

Rural Marts are retail marketing outlets set up to help producers, artisans and weavers to sell their locally made products. NABARD has set up Rural Marts to strengthen the local economy by creating a market linkage for SHGs and rural people to sell their products. It provides opportunities to display local household products, agricultural produce, handicrafts and other agro-based products to generate income. It aims at giving economic opportunities, especially for women. NABARD has sanctioned ₹7.6 crores for setting up 155 rural haats for 2021. As on 31st March 2021, a cumulative financial assistance of ₹23.2 crores has been sanctioned for 1085 rural haats around the country.

4.6.2 Skill Development Programs

To provide better opportunities for self-employment and generation of wage employment, NABARD supports Skill Development Programs (SDPs) under its Off-farm initiatives. Various training programs are conducted to skill the unemployed rural youth. During 2020- 2021, NABARD supported grant assistance of ₹20 crore for skilling 31,890 youths across the country.

4.6.3 Off-Farm Producer Organization (OFPO)

Similar to the Farmer Producers Organizations, the Off-Farm Producer Organisation (OFPO) was set up under NABARD's Off-Farm Sector Department. The Off-Farm Producer Organizations (OFPOs) are legal entities formed by artisans, weavers, craftsmen to generate sustainable livelihood and employment. As of 31st March 2021, 40 OFPOs have been formed to support 14,043 artisans and weavers across 20 States. Handicraft and handloom making has been a part of India's rich craft culture passed down from tradition. The handloom and textile sector has been a major source of employment next to agriculture. This trade which requires a unique set of skill has helped rural families earn modest incomes. The need for preserving this unique craftsmanship forming part of India's rich heritage is gaining importance. NABARD has been taking a lead role in preserving this rich culture of weaving textiles by providing support to rural artisans to help this trade flourish. However, this trade has lost its luster among the younger generations in their hopes for better opportunities beyond their villages. With the threat

of becoming a dying trade coupled with the challenges in sourcing good quality raw materials and their timely availability, NABARD has taken significant steps to offset this issue.

Studies conducted by NABARD have indicated that OFPO programs helped members come out of indebtedness and significantly increased their profit margins.¹⁹ It has also helped the artisans get timely and adequate access to good raw materials.

4.6.4 Exhibitions and Melas

With the objective of helping rural artisans with the marketing of their products, NABARD sanctions grant to organize exhibitions and melas at the regional and national levels. NABARD also supports rural artisans participating in exhibitions in different places in India.

4.6.5 Rural Business Incubation Centres (RBICs)

NABARD helps eligible institutions to set up Rural Business Incubation Centres (RBICs) in an effort to nurture enterprises and start-ups which have high growth potentials in agri, allied and off farm activities.

4.7 OFF FARM SECTOR DEPARTMENT (NAGALAND)

NABARD works with various partnering institutions in the state to implement the programs in the off-farm sector which aims at improving the livelihood of the rural people in the state.

A detailed study on the NABARD implemented programs in the off-farm sector is discussed in the present chapter.

Table 4.6 Profile of NABARD supported programs in the Off-Farm Sector

Sl no	Purpose/Activity	No of projects	Cumulative Amt sanctioned (Lakh INR)
1	Rural Haat	21	155
2	Rural Mart	5	11.65
3	Skill Development Programs (SDPs)	12	17.85
4	Off-Farm Producer Organization (OFPO)	1	45
5	Exhibitions and Melas	1	2.58
	Total	40	232.08

Source- Field Survey

Table 4.7 Profile of intermediaries through which projects are sanctioned

Sl no	Type	No of Project (s)	Implementing agencies	Districts covered
1.	Rural Haat	21	Watiyim Village Council, Lasumi Village Council, Dzuleke Village Council, Doyapur Village Council, NEIDA, Nihokhu Village Council, Angangba Village Council,	Mokokchung, Phek, Kohima, Dimapur,

			Mulongtong MPCS, Yanpha Village Council, Mongsenyimti Village Council, Lakpanhu Welfare Society	Wokha, Tuensang, Kiphire, Longleng
2.	Rural Mart	5	BADE FPO, Shemla Welfare SHG, Chakhesang Women Welfare Society, Ten Sisters SHG, Alongdi SHG, Ajei-Ai-Watthat FPO, Vekuhu SHG	Dimapur, Longleng, Phek, Noklak, Mokokchung
3.	Off-Farm Producer Organization (OFPO)	1	North East Network (NEN)	Phek
4.	Skill Development Programs (SDPs)	12	Mass Edu. Welfare Society, Youth Action for Social Service, Skills and Empowerment Foundation, MERIBA Society, Youth NET, Assisi Centre, Kudatech Skill Centre, Lakpanhu Welfare Society, Innovative Attribute Society, Hope Global Ministry	Wokha, Mon, Dimapur, Kohima
5.	Exhibitions and Melas	1	YouthNet	Kohima

Source- Field Survey

Table 4.9 showing the profile of the Project Implementing Agencies (PIAs) is an indication of the varied pool of partners of NABARD from village councils to church-based bodies to NGOs to skill training centers availing the financial assistance under NABARD to upskill the youths in the state across several districts.

Table 4.8 Rural Haat

Year	District	Name of project	Amt sanctioned (Lakh INR)
2017-18	Kohima	Dzuleke Rural Haat	10
2018-19	Dimapur	Doyapur Rural Haat	10
	Tuensang	Angangba Rural Haat	10
2019-20	Niuland	Nihokhu Rural Haat	10
	Kiphire	Sesuyea Rural Haat	10
2020-21	Chumoukedima	Seithekema 'C' Rural Haat	10
	Wokha	Yanpha Rural Haat	10
2021-22	Mokokchung	Mongsenyimti Rural Haat	15
	Longleng	Tamlu Rural Haat	15
		Total	100

Source- Field Survey

In the state, rural haats have been set up in several districts to facilitate rural artisans, weavers, vendors to sell their products. Each project has been earmarked a grant of ₹10 lakh to be utilized for construction of the haat.

As on March 2022, 23 rural haats have been set up across several districts catering to the needs of rural vendors to sell their products. These rural marts are run and managed by SHG's and FPOs, providing them the platform and opportunity to earn income.

Table 4.9 Rural Mart

Year	District	Name of project	Amt sanctioned (Lakh INR)
2018-19	Phek	Chakesang Women Welfare Society	2.58
2019-20	Dimapur	FPO Bade Rural Mart	3.25
	Longleng	Shemla SHG Rural Mart	2.34
2020-21	Mokokchung	Ten Sisters SHG Rural Mart	NA
2021-22	Dimapur	Alongdi SHG Rural Mart	NA
	Noklak	Ajei-Ai-Watthat FPO Rural Mart (Mobile Van)	NA

Source- Field Survey NA= Not Available

Table 4.10 NABARD supported Skill Development Programs

Year	District	Name of program	Amt sanctioned (Lakh INR)
2018-19	Dimapur	Skill Training Program on Tailoring	1.38
	Dimapur	Skill Training Program on Hospitality	1.42
	Wokha	Skill Training Program on Beekeeping	1.5

	Mon	Skill Training Program on Handloom Weaving	1.8
2019-20	Kohima	Skill Training Program on Front Office Associates	2.10
	Wokha	Skill Training Program on Cleaning Material	.45
	Dimapur	Skill Training Program on Tailoring	1.14
2020-21	Dimapur	Skill Training Program on Candle Making & Handicraft	NA
	Mon	Skill Training Program on Plumbing	NA
	Mon	Skill Training Program on Two-Wheeler Repairing	NA
	Dimapur	Skill Training Program on Bamboo & Cane Craft Making	NA
		Total	NA

Source- Field Survey

NA= Not available

In the state, NABARD has helped in training more than 350 unemployed youths with cumulative grant assistance of ₹17.85 lakhs as of 31st March 2021. The youths are trained in developing skills which can enhance their income opportunities to provide sustainable employment. As depicted above in Table 4.10, the skill training programs have been conducted in the districts of Dimapur, Kohima, Mon and Wokha.

Table 4.11 Off Farm Producer Organisation

Year	District	Name of project	No. of members	Amt sanctioned (Lakh INR)
2020-21	Phek	Intensive Major OFPO on Handloom products	300	45

Source- Field Survey

In the state, under NABARD's OFPO initiative, an intensive project to provide a means of livelihood for the inhabitants of Phek district was undertaken covering 300 members. This recent intervention has provided an opportunity for the rural weavers to find markets for their handiwork. Traditionally, handloom weaving is done by the women folk with intricate detailing designs.

Table 4.12 Exhibitions and Melas

Sl no	Melas/Fairs	Place	No of stalls	Amt sanctioned (Lakh INR)
1	Mahalakshmi SARAS Mela	Mumbai	1	NA
2	NABARD Grameen Mela	Guwahati	2	NA
3	National Level Exhibition cum sale for rural Artisans/ SHGs/ FPOs	Bhopal	1	NA
4	2nd Mon International Trade Fair & Expo	Mon	1	NA
5	Exhibition of local products	Kohima	1	2.58

Source- Field Survey

NA= Not available

In the state, NABARD has supported the participation of rural artisans to display their handicrafts and handlooms at national and regional exhibitions.

4.8 CONCLUSION

Nagaland holds one of the highest unemployment rates in the nation at 21.4%, significantly surpassing the all-India average of 6%. (PLFS,2020-21).¹⁸ This underscores the urgent necessity for generating additional livelihood and employment prospects within the state. NABARD has made significant steps in providing suitable trainings and programs in the state to mitigate the unemployment challenges particularly in the rural areas. Its emphasis on providing opportunities for sustainable livelihood particularly through the non-farm activities is visible through their various interventions and collaboration with local stakeholders and community organizations, NABARD has implemented targeted interventions aimed at fostering entrepreneurship and skill development in Nagaland. These initiatives not only aim to reduce unemployment but also to empower individuals and communities to become self-reliant. NABARD is thus playing a significant role in transforming the rural landscape in the state.

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CHAPTER 5- DATA ANALYSIS, AND INTERPRETATION

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5.1 INTRODUCTION

The data analysis chapter plays a pivotal role in any research study as it encompasses the process of examining and interpreting the collected data to address the research questions linked with the objectives of the study. In this chapter, different tables and charts are prepared on the basis of data collected from different beneficiaries. The data collected was analyzed through various statistical techniques. Both descriptive and inferential statistical analysis were applied as per the objectives of the study. In descriptive statistics, frequency, percent, means and standard deviation were applied. For inferential statistics, regression analysis, factor analysis, structural equation modelling (SEM) etc. was applied to draw meaningful conclusion. Further, Cronbach's Alpha was applied on each developed scale to test the reliability of data.

The present chapter provides details on selection of beneficiaries and their demographic characteristics program wise. The subsections dwell on the specific programs on the basis of data collected and analyzed accordingly using appropriate statistical tools. The latter part of the chapter deals with the hypothesis testing.

Primary data was collected through the response generated from the beneficiaries who were availing NABARD programs in the state. The programs pertain to Farmer Producer Organizations (FPO), Tribal Development Fund (Wadi) beneficiaries, members of SHG and rural people (Springshed beneficiaries) and beneficiaries of NABARD's non-farm sector program.

By examining the data through rigorous analysis, we aim to contribute to a deeper understanding of the factors that NABARD plays a crucial role for rural development of Nagaland and provide actionable recommendations for enhancing the role of NABARD.

The aim of this chapter is to conduct a comprehensive data analysis of the role of NABARD in rural development of Nagaland. Through a systematic examination of the collected data, the research was carried out to identify the following specific objectives:

- To study the role of NABARD in facilitating the rural livelihood in Nagaland
- To study the impact of refinancing schemes of Nagaland

- To study the loan recovery performance of selected credit agencies/ financial institutions availing the NABARD refinance.
- To analyze the implementation of Government schemes and their impact on rural development.
- To study the role of NABARD in rural infrastructure development.

Considering the specific objectives mentioned above, this chapter primarily relies on primary data sources. To meet the study requirements, questionnaire(s) were developed and included as Appendices. The survey was conducted in four (4) selected districts namely Kohima, Dimapur, Mokokchung and Phek of Nagaland. The sample frame was purposively selected, and respondents were randomly chosen comprising of different areas of finance belonging to both farm and non-farm sector. To ensure the respondent's openness and honesty, the researcher emphasized both verbally and in writing that their responses would remain anonymous.

5.2 SELECTION OF BENEFICIARIES

A total of 300 completed questionnaires were collected from the beneficiaries availing NABARD assisted programs. The questionnaires were fully filled out, meeting the necessary criteria for analysis. During the collection of primary data from NABARD's rural beneficiaries, it was found that participants in one program were also receiving assistance from other NABARD programs. The researcher has attempted to get a uniform sample size for each program. However, the number of respondents varied depending on the specific program and the size of its beneficiary pool. Consequently, multiple responses from the same beneficiaries were recorded, presented and analyzed accordingly.

5.3 DEMOGRAPHIC PROFILE

The Demographic characteristics of the respondents who are members of various Farmer Producer Organization, Tribal development Fund, Springshed Program, Self-Help Group and Non-farm beneficiaries from the four (4) different districts namely Kohima, Dimapur, Mokokchung and Phek of Nagaland are compiled and tabulated under Table 5.1. The table outlines details on distribution and percentage concerning gender, age brackets, marital status, household size, and occupation pattern.

Table 5.1 Demographic Profile

	Farm sector				Non- farm sector
	FPO	TDF	Springshed	SHG	
Gender					
Male	14 (7)	196 (82.4)	182 (81.2)	23 (11.33)	12(8.9)
Female	186(93)	43(17.6)	42 (18.8)	180 (88.7)	122(91)
Age group	200(100)	238(100)	(224)100)	203(100)	134(100)
Less than 25	12(6)	0(0)	0(0)	0(0)	6(4.5)
25 – 35	24(12)	14(5.9)	0(0)	22(10.8)	42(31.3)
35 – 45	90(45)	154(64.7)	70(31)	84(41.4)	56(41.8)
45 – 55	48(24)	56(23.5)	84(38)	79(38.9)	28(20.9)
55 & above	26(13)	14(5.9)	70(31)	18(8.9)	2(1.5)
Marital status	200(100)	238(100)	(224)100)	203(100)	134(100)
Married	149(74.5)	210(88.2)	210(93.8)	203(100)	94(70.1)
Unmarried	51(25.5)	28 (11.8)	14(6.2)	(0)	40(29.9)
Family size	200(100)	238(100)	(224)100)	203(100)	134(100)
Less than 3	12(6.0)	56 (23.5)	28(12.5)	0(0)	24(17.9)
3 – 5	65(32.5)	56 (45.4)	42(18.8)	51(25.1)	60(44.8)
5-7	123(61.5)	46 (19.3)	126(56.3)	96(47.3)	50(37.3)
7 & above	0(0.0)	28(11.8)	28(12.5)	56(27.6)	0(0)
Educational Qualification	200(100)	238(100)	(224)100)	203(100)	134(100)
Under matriculate	47(23.5)	0(0)	98(43.7)	84(41.4)	16(11.9)

Matriculate	67(33.5)	56(23.5)	42(18.75)	101(49.8)	50(37.3)
10+2	39(19.5)	154(64.7)	70(31.3)	18(8.8)	32(23.9)
Graduate & above	47(23.5)	28(11.8)	14(6.2)	0(0)	36(26.9)
Occupation	200(100)	238(100)	(224)100)	203(100)	134(100)
Agriculture	200(100)	56(23.5)	112(50.0)	151(74.4)	21(15.6)
Business/trader	0(0)	112(47.1)	28(12.5)	30(15)	80(59.7)
Service/Retired	0(0)	42(17.6)	56(25.0)	12(6.0)	22(16.4)
Others	0(0)	28(11.8)	28(12.5)	10(5.0)	11(8.2)
Total	200(100)	238(100)	(224)100)	203(100)	134(100)

Source- Developed from Field survey

Note: Figures in parenthesis indicate percentage

5.3.1 Demographic profile of Farmer Producer Organizations (FPO)

Gender characteristics of members of Farmers Producer Organizations show majority of the respondents are female (93 per cent) and few of the respondents are male (7 per cent). This indicates majority of the farmer producer organization members are female. The age distribution of the respondents reveals that the majority fall within the 35 to 45 age bracket comprising 45 percent of the total, with the next significant group being aged between 45 and 55 years, constituting 24 percent. A smaller portion of respondents, 12 percent, are in the 25 to 35 age range, while 13 percent are aged 55 and above. Overall, the age of the respondents is evenly distributed relatively across the different age groups.

Marital status shows majority of the respondents are married (74.5 per cent) and few belong to unmarried group (25.5 per cent). The family size of the respondents as depicted above show majority of the respondents having a family size of 5 to 7 members (61.5 per cent) followed by 3 to 5 members (32.7 per cent). Few of the respondents (6 per cent) have family sizes of less than 3.

The educational qualifications of FPO respondents are varied, with the majority being matriculate, accounting for 33.5 percent, followed by under matriculate at 23.5 percent. Similarly, 23.5 percent of respondents have attained a graduate degree or higher qualification. A smaller portion, 19.5 percent, hold a 10+2 qualification. All the FPO respondents have agriculture (100 percent) as their primary occupation.

5.3.2 Demographic Profile of Springshed Development Program beneficiaries

The gender distribution among rural villagers shows that the majority of respondents are male, accounting for 81.20 percent, while female respondents constitute a smaller portion at 18.80 percent.

The age distribution of rural respondents indicates that the majority, comprising 38 percent, belong to the age group of 45 to 55 years. Additionally, both the 35 to 45 age group and the 55 and above age group each account for 31 percent. No respondents accounted for less than 25 years and 25 to 35 group.

In marital status of the respondents, majority of the respondents are married (93.8 per cent) and few are unmarried (6.3 per cent). In family size, majority of the rural peoples have a family size of 5 to 7 (56.25 per cent) followed by 3 to 5 members (18.75 per cent). Further, few of the respondents have a family size of less than 3 (12.50 per cent) and 7 & above (12.50 per cent).

The educational qualifications of the respondents show that the majority, accounting for 43.75 percent, are under matriculates. Following this, matriculates account for 18.75 and those with graduate and above qualifications represent 6.2 percent. The 10+2 qualification account for 31.3 percent.

In terms of occupation, the majority of rural respondents, comprising 50 percent, are engaged in agriculture. Additionally, 25 percent fall under the category of service and/or retired individuals. Furthermore, 12.5 percent of respondents are involved in business/trade.

5.3.3 Demographic Profile of Tribal Development Fund beneficiaries

In gender characteristics of the wadi beneficiaries as reflected above shows majority of the respondents are male (82.40 per cent) and few are female (17.60 per cent).

In age characteristics of wadi beneficiaries, majority of the respondents belong to the age group 35 to 45 (64.70 per cent) and followed by 45 to 55 years of age (23.50 per cent). Few of the respondents belong to the age group 55 and more (5.90 per cent) and 25 to 35 years (5.90 per cent). In marital characteristics, majority of the wadi respondents are married (88.20 per cent) and unmarried account for (11.80 per cent).

With regard to the family size of the wadi beneficiaries, majority of the beneficiaries have 3 to 5 family size (45.4 per cent) followed by less than 3 (23.50 per cent). Few of the respondents have 5 to 7 members in family (19.3 per cent) and 7 and above members (11.8 per cent).

The educational characteristics of the wadi beneficiaries indicate majority of the beneficiaries are having 10+2 (64.70 per cent) qualification followed by matriculate (23.50 per cent). Few of the respondents are graduate and above (11.80 per cent).

In occupation characteristics, majority of the wadi beneficiaries are business/trader (47.1per cent) followed by agriculture (23.50 per cent), service and/or retired (17.6 per cent) and others (11.8 per cent).

5.3.4 Demographic Profile of Self-Help Group beneficiaries

The gender distribution of the SHGs indicate majority of the members are females with 88.7 percent followed by 11.33 per cent male members.

The age distribution of the SHGs respondents shows majority of the respondents fall under the age group of 35 to 45 (41.40 per cent) followed by 45 to 55 years of age (38.90 per cent). Few of the respondents are under 55 and more age group (8.90 per cent).

The SHGs respondents are 100 per cent married. Unmarried responses are zero in number.

Majority of the SHG members have a family size of 5 to 7 members (47.30 per cent) followed by 7 & above members (27.60 per cent). Few of the respondents have

3 to 5 members family size (25.10 per cent). None of the SHG members have family size less than 3 members (0 per cent).

Regarding educational qualification of the SHG respondents, majority of the respondents have matriculate as the qualification (49.80 per cent) followed by under matriculate (41.40 per cent). Few of the respondents have 10+2 qualification (8.8 per cent). Zero per cent response was recorded for graduate and above qualification.

The occupation details of SHGs are divided into four different categories such as agriculture, business/ trader, service/retired and others. Among the different occupations, majority of the response belong to agriculture (74 per cent) followed by business/trader (15 per cent). The service/retired category (6 per cent) followed by others (5 percent)

5.3.5 Demographic Profile of Non-farm sector beneficiaries

In gender of the respondents, females account 91 per cent and male respondents 8.9 per cent.

In age of the respondents, majority of the respondents belong to age group 35 to 45 (41.80 per cent) followed by 25 to 35 years (31.30 per cent). Further, 20.90 per cent of the respondents belong to 45 to 55 years of age group and 4.5 per cent of the respondents are less than 25 years of age. Less number of respondents (1.5 per cent) is in the 55 and above age group.

In demographic characteristics of marital status, majority of the respondents are married (70.10 per cent) while 29.90 per cent are unmarried.

In family size, majority of the respondents (44.80 per cent) have 3 to 5 members followed by 5 to 7 members (37.3 per cent) and less than 3 members (17.90 per cent). The 7 & above category accounted for 0 per cent.

In educational qualification characteristics, majority of the respondents (37.30 per cent) have matriculate qualification followed by Graduate and above (26.90 per cent). 23.90 per cent of the respondents have a 10+2 qualification and 11.90 per cent are under matriculate. These shows the respondent's qualifications are well distributed.

In occupation characteristics, majority of the beneficiaries are business/trader (60 per cent) followed by service and/or retired (16.4 per cent), agriculture (15.6 per cent), and others (8 per cent).

5.4 FARMER PRODUCER ORGANIZATIONS (FPO)

This section of the data analysis chapter deals with Farmer Producer Organization beneficiaries. Total of 200 beneficiaries of four different districts namely Kohima, Dimapur, Mokokchung and Phek of Nagaland were collected. The results of data analysis are discussed as follows:

5.4.1 Benefits of joining FPO

Following table shows the summary table regarding benefits gained by members of FPOs (by joining FPOs). Frequency and percent figures reflect eleven (11) benefits.

TABLE 5.2 Benefits of joining FPO

Sl.	Benefits	Frequency	Percent (%)
1	Access to finance	80	40
2	Access to farm inputs	143	71.5
3	Market linkage	165	82.5
4	Technology adoption	41	20.5
5	Bargaining power	21	10.5
6	Disseminating market information	102	51
7	Increase in profit margin	174	87
8	Additional income	153	76.5
9	Better farming practice	145	72.5
10	Technical advice	139	69.5
11	Women participation	183	91.5

Source- Developed from Field survey

The table provided depict the frequency and percentage results concerning the benefits of joining FPOs. Responses from the FPO members were categorized into eleven benefits. The results indicate that the majority of members had benefits related to increased women participation, accounting for 91.5 percent, followed by an increase in profit margin at 87 percent. This suggests a positive outcome resulting from joining FPOs.

5.4.2 Intervention Impact Comparison

TABLE 5.3

Paired Sample t-Test analysis on intervention impact before and after (FPO)

Particulars	Intervention	
	<i>Before</i>	<i>After</i>
Mean	3.100	4.548
Variance	0.069	0.032
Pearson Correlation	0.525	
Df	12	
t Stat	2.266	
P(T<=t) one-tail	0.000**	
t Critical one-tail	1.620	
P(T<=t) two-tail	0.000**	
t Critical two-tail	2.119	

Source: Developed from Field Survey

***significant at 1 per cent level*

The table displays the results of t-test comparing the intervention impact before and after related to total crops grown, creation of assets, participation in decision making, and savings habits. The mean values for both categories (before and after) interventions are 3.100 (before) and 4.548 (after). These findings suggest that due to the intervention, there is an improvement in all areas, including crops grown, participation in decision making, and saving habits. This improvement likely contributes to the economic and social well-being of the FPO members. Therefore, NABARD plays a significant role in fostering improvement through their FPO program.

5.4.3 Status of Annual Income

TABLE 5.4 Status of Annual income (before and after FPO intervention)

Sl.	Particulars	Before		After		t value (2.13) P(T<=t) one-tail: 0.035 Correlation (0.914)
		Frequency	Percent	Frequency	Percent	
1	Below ₹50,000	0	0	0	0	
2	₹50,000 - ₹1,00,000	68	34	30	15	
3	₹1,00,000 - ₹1,50,000	121	60.5	137	68.5	
4	₹1,50,000 - ₹2,00,000	11	5.5	33	16.5	
5	Above ₹2,00,000	0	0.0	0	0.0	
Total		200	100.0	200	100.0	

Source: Developed from Field Survey

Table 5.4 shows the annual income status of the FPO members before and after intervention. Result reveals the annual income status of beneficiaries has improved since the income slab of beneficiaries has increased. The t-test value of pre and post improvement of annual income is statistically significant (p-value 0.035), indicating a notable change. Additionally, there is a strong positive correlation (0.914) between the conditions before and after intervention. These findings suggest that members experienced improvements the annual income yield.

5.4.4 Input supplies provided by FPO

Regarding input supplies (seeds, fertilizer, sprayers etc.) provided by FPOs, majority response are related to the provision of seeds for peas, cabbage and potatoes.

5.4.5 Suggestions for Improvement

Suggestions were shared by the FPO members regarding improvement of FPOs. The major response was more FPO support from government, followed by improvement in transportation and marketing.

5.5 SPRINGSHED DEVELOPMENT PROGRAM

This section of the data analysis focuses upon rural people in the four districts (namely Kohima, Dimapur, Mokokchung and Phek) of Nagaland. The total number of responses (rural people) used for analysis is 224.

5.5.1 Benefits of the project (rural people)

Following table shows the summary table of benefits received from the projects by the rural villagers. Frequency and percent figure of the eleven (11) benefits are shown as below.

TABLE 5.5 Benefits of the project (rural people)

Sl.	Benefits of the project	Frequency	Percent %
1	Additional employment	80	36
2	Increase in income	143	64
3	Increase in fodder	189	84
4	Increase in livestock	41	18
5	Improve in living standards	21	9
6	Improve in sanitation habits	102	45
7	Reduction in workload	174	78
8	Reduce in debt position	153	68
9	Soil conservation	145	65
10	Availability of drinking water throughout the year	139	62
11	Reduced migration	189	84

Source: Developed from Field Survey

The implementation of the NABARD Springshed project in Nagaland has resulted in various benefits for the respondents. The majority reported increased fodder production (84 percent), which indirectly contributed to reducing migration rates (84 percent). Additionally, there was a notable reduction in workload (78 percent). These findings suggest that the project has had a significant positive impact, not only on economic aspects but also on social factors. Here, NABARD plays a major role not only in economic improvement but also social improvement.

5.5.2 Intervention Impact Comparison

TABLE 5.6 Paired Sample t-Test analysis on intervention impact before and after (Springshed)

Particulars	Intervention	
	<i>Before</i>	<i>After</i>
Mean	3.118	4.628
Variance	0.079	0.040
Pearson Correlation	0.517	
df	12	
t Stat	2.214	
P(T<=t) one-tail	0.001	
t Critical one-tail	1.782	
P(T<=t) two-tail	0.001	
t Critical two-tail	2.179	

Source: Developed from Field Survey

Table 5.6 presents the results of a t-test analyzing the intervention impact before and after across various aspects, including total cropped area, livestock production, crop production, access to medical facilities, participation in community decision-making, sanitary habits/toilet facilities, and perception/knowledge on understanding and conservation of Springshed. The mean values for both categories (before and after) intervention are 3.118 (before) and 4.628 (after). These results indicate a significant improvement in all areas of social and economic conditions due to the intervention. This leads to sustainability. Hence, NABARD plays a prominent role in all areas of life i.e. decision making and knowledge of understanding conservation, crop production and medical facility.

5.5.3 Reliability Analysis (Performance)

Table 5.7 Reliability analysis (Performance of NABARD project)

Sl.	Statements	Mean	Std. Deviation	Cronbach's Alpha (item wise)	Cronbach's Alpha (combined)	N of Items
1	It helped improve literacy status of family (ST1)	4.28	0.23	0.908	0.911	8
2	I regularly participate in watershed planning meeting (ST2)	4.42	0.11	0.910		
3	There is need for a watershed committee in the village (ST3)	4.30	0.33	0.913		
4	Household fee should be collected (ST4)	4.28	0.29	0.903		
5	There is need for a water user group (ST5)	4.19	0.12	0.934		
6	There is increase in water discharge after intervention (ST6)	4.20	0.21	0.902		
7	Follow up program by PIA is satisfactory (ST7)	4.17	0.13	0.910		
8	My involvement is necessary in planning and implementation (ST8)	4.13	0.10	0.907		

Source: Developed from Field Survey

Results show the Cronbach's Alpha value of each and combined of all the eight statements are coming to more than 0.9 which reveals that the items used in the questionnaire are internally homogenous and consistent. Therefore, the variables used in the questionnaire for the measurement of NABARD performance in implementing project are significantly contributing the study. Further, the mean value of each item is higher than 4 revealing that the respondents agree upon the items.

Out of the eight statements, 2nd statements: *regularly participate in watershed planning meeting* (4.42) and *there is need for a watershed committee in the village* (4.30) have the highest mean value. This shows, water shed project is properly implemented in the areas for livelihood improvement of the people.

TABLE 5.8 ANOVA (Performance)

Particulars		Sum of Squares	df	Mean Square	F	Sig
Between People		348.785	207	1.685	11.530	0.000
Within People	Between Items	5.698	4	1.425		
	Residual	102.302	828	0.124		
	Total	108.000	832	0.130		
Total		456.785	1039	0.440		

Grand Mean = 4.296

Source: Developed from Field Survey

The significant value of ANOVA for the parameter (performance) is 0.000 (<0.05) which reveals a significant relationship exist between eight independent variables that determines performance of NABARD in project implementation in Nagaland. Thus, it is contributing to the study of the role of NABARD in the state.

5.5.4 Analysis of Internal Homogeneity of the Items by Factor Analysis (NABARD performance)

The factor analysis was applied to 8 statements/ variables related to views of major changes as perceived by rural beneficiaries in Nagaland. The KMO value of factor analysis is 0.835, which indicates that factor analysis is reliable to be done for these 8 statements which is also cross validated by significant value of Bartlett's test of sphericity i.e. 0.000.

TABLE 5.9 KMO and Bartlett's Test (rural people)

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		0.835
Bartlett's Test of Sphericity	Approx. Chi-Square	1768.130
	df	28
	Sig.	0.000

Source: Developed from Field Survey

As authored by Kaiser (1974), if KMO value lies between 0.8 and 0.9 are great for factor analysis. For these data, the value is 0.835 which falls into range being great. This indicates we should be confident that factor analysis is appropriate for these data.

TABLE 5.10 Total Variance Explained (rural people)

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	3.560	44.502	44.502	3.560	44.502	44.502	3.553	44.414	44.414
2	1.936	24.200	68.702	1.936	24.200	68.702	1.642	20.531	64.945
3	1.105	13.812	82.514	1.105	13.812	82.514	1.406	17.569	82.514
4	0.561	7.009	89.522						
5	0.319	3.988	93.511						
6	0.279	3.488	96.999						
7	0.209	2.613	99.612						
8	0.031	.388	100.000						

Extraction Method: Principal Component Analysis.

Source: Developed from Field Survey

All the 8 statements/ variables of major changes perceived by the rural people are reduced to three (3) different factors which explained around 82.514 percent of the total

variance. Out of the 3 reduced factors, 1st factor with their loading pattern indicates that a general factor is running throughout all the items explaining about 44.414 per cent of the variance. The 2nd factor explains about 20.531 percent and 3rd factor 17.569 percent of the total variance. Combined, the entire 3 factors explain about 82.514 per cent of the total Variance.

TABLE 5.11 Rotated Component Matrix (rural people)

Particulars	Component		
	1	2	3
ST.1	0.595		
ST.2	0.961		
ST.3	0.877		
ST.4			0.513
ST.5			0.653
ST.6		0.910	
ST.7		0.743	
ST.8			0.922

Extraction Method: Principal Component Analysis.

Rotation Method: Varimax with Kaiser Normalization.

a. Rotation converged in 5 iterations.

Source: Developed from Field Survey

All the statements/variables related to perception of beneficiaries that major changes happened due to NABARD projects 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.

Statement 1, 2 and 3 constitute factor 1 with new name as ‘*social improvement*’. Similarly, statement 6 and 7 is defined as factor 2 with new name as ‘*sustainability*’. Further, statements 4, 5 and 8 constitute factor 3 named as ‘*economic improvement*’.

TABLE 5.12 New Factors named (Performance)

Factors	Variables	New Name
Factor 1	1, 2 & 3	Social improvement
Factor 2	6 & 7	Sustainability
Factor 3	4, 5 & 8	Economic improvement

Source: Developed from Field Survey

5.5.5 Suggestions for Improvement

Further suggestions were collected from the rural villagers regarding effective management of spring water. Majority of the response is related to active community participation in the management of spring water and timely maintenance.

5.6 TRIBAL DEVELOPMENT FUND (TDF)

This section of the data analysis chapter deals with Wadi program beneficiaries. Total of 238 beneficiaries of four different districts namely Kohima, Dimapur, Mokokchung and Phek of Nagaland were collected. The results of data analysis are discussed as follows.

5.6.1 Benefits of joining TDF

TABLE 5.13 Benefits from TDF program

Sl.	Particulars	Frequency	Percent%
1	Additional income	238	100
2	Increased purchasing power	56	23
3	Savings habit	84	35
4	Improve in living standard	154	65
5	Access to healthcare	84	35
6	Reduce in migration	14	6
7	Respect and recognition	14	6
8	Improved family relations	210	88
9	Availability and sufficiency of food	42	17

Source: Developed from Field Survey

Table 5.13 shows benefit derived from the Wadi program. Out of nine (9) different categories, all the respondents got benefit of additional income (100 per cent). It signifies wadi programs create financial improvement for the beneficiaries. Further, it improves family relations (88 per cent) and living standard (65 per cent) of the people. Similarly, it improved access to healthcare (35 per cent). This reveals wadi programs improved the social and economic status of the respondents.

5.6.2 Intervention Impact Comparison

TABLE 5.14 t-Test: Paired Two Sample for Means on intervention impact (before and after)

Particulars	Intervention	
	<i>Before</i>	<i>After</i>
Mean	3.412	4.728
Variance	0.059	0.042
Pearson Correlation	0.539	
df	12	
t Stat	2.321	
P(T<=t) one-tail	0.000	
t Critical one-tail	1.685	
P(T<=t) two-tail	0.000	
t Critical two-tail	2.273	

Source: Developed from Field Survey

The above table shows the t-test of intervention impact before and after related to total crops grown, creation of assets, literacy status of the family, participation in decision making and saving habit. The mean value of both category (before and after) interventions is 3.412 (before) and 4.728 (after). This reveals due to intervention there is an improvement in all areas of crops grown, creation of assets and literacy status of the family. Further, due to intervention the participation in decision making and saving habits also improved. This reveals there is an improvement in socio-economic status of beneficiaries.

5.6.3 Status of Annual Income

TABLE 5.15 Status of Annual income (before and after TDF intervention)

Sl.	Particulars	Before		After		t value (2.19) P(T<=t) one-tail : 0.029 Correlation (0.623)
		Frequen cy	Percent	Frequen cy	Percent	
1	Below ₹50,000	10	4.2	0	0	
2	₹50,000 - ₹1,00,000	192	80.7	145	60.9	
3	₹1,00,000 - ₹1,50,000	27	11.3	75	31.5	
4	₹1,50,000 - ₹2,00,000	9	3.8	18	7.6	
5	Above ₹2,00,000	0	0.0	0	0.0	
Total		238	100.0	238	100.0	

Source: Developed from Field Survey

Above table shows the annual income status of wadi beneficiaries before and after intervention. Result reveals the annual income status of beneficiaries improved since the income slab of beneficiaries improved. The t-test value of pre and post improvement of annual income is significant (p value 0.029) and there is a positive correlation (0.623) in the annual income before and after.

5.7 SELF-HELP GROUPs (SHGs)

The following section deals with 203 Self-Help Group members in four different districts namely Kohima, Dimapur, Mokokchung and Phek of Nagaland. The results of data analysis are discussed as follows:

5.7.1 Source of Borrowing

TABLE 5.16 Source of borrowing

Sl.	Sources	Frequency	Percent
1	Commercial bank	18	9
2	Cooperatives	12	6
3	SHG pool fund	6	3
4	NGOs	151	74
5	Others	16	8
Total		203	100

Source: Developed from Field Survey

Table 5.16 show the sources of borrowings and financial help availed by SHGs. Results shows majority of the SHGs have borrowed money from NGOs (74 per cent) followed by commercial bank (9 per cent) and others (8 percent). Few respondents accessed funds from cooperatives (6 per cent) and SHG pool fund (3 per cent).

5.7.2 Name and Purpose of Loan

TABLE 5.17 Name and Purpose of loan availed

Sl.	Particulars	Frequency	Percent
1	KCC	79	38.9
2	Piggery loan	18	8.9
3	Poultry	6	3
4	Others	100	49.2
Total		203	100

Source: Developed from Field Survey

Above table indicates the name and of type of loan availed by SHGs. Result shows majority of the SHGs availed their loan for KCC (54.10 percent) followed by piggery loan (8.90 percent) and Poultry (3 percent). Further 49.20 per cent of the SHGs have not stated any reason for taking loan.

5.7.3 Loan Duration

TABLE 5.18 Duration of loan availed by the SHGs

Sl.	Particulars	Frequency	Percent
1	1 year	18	8.9
2	3 years	18	8.9
3	5 years	85	41.8
3	No response	82	40.4
Total		203	100.0

Source: Developed from Field Survey

Regarding duration of loan, 41.8 per cent accounted for 5 years, followed by 1 year and 3 years (8.9 per cent). 40.4 percent chose not to respond.

5.7.4 Adequacy of Loan

TABLE 5.19 Adequacy of loan availed by SHGs

Sl.	Particulars	Frequency	Percent
1	Adequate	115	56.7
2	Inadequate	88	43.3
Total		203	100.0

Source: Developed from Field Survey

Regarding adequacy of the loan availed by SHG members, majority of the respondents said it was adequate (56.70 per cent) and 43.30 per cent of the responses replied as 'inadequate.'

5.7.5 Delay in Disbursement

Table 5.20 Delay in disbursement of loan to SHGs

Sl.	Particulars	Frequency	Percent
1	Yes	59	29.1
2	No	144	71.0
Total		203	100.0

Source: Developed from Field Survey

In disbursement of the loan, majority (71 per cent) responded no delay in disbursement while few respondents replied 'yes' (29 per cent).

5.7.6 Difficulty in Availing Loan

TABLE 5.21 Difficulty in availing loan

Sl.	Particulars	Frequency	Percent
1	Yes	6	3.0
2	No	197	97.0
Total		203	100.0

Source: Developed from Field Survey

Regarding difficulty of availing loan, majority of the SHG members responded 'no' (97 per cent) while very few of the respondents replied 'yes' (3 per cent).

5.7.7 Savings Per Month

TABLE 5.22 Savings per month (before and after loan)

Sl.	Savings per month	Before		After	
		Frequency	%	Frequency	%
1	< ₹500	67	33	0	0
2	₹ 501- ₹1000	112	55.2	69.0	34
3	₹ 1001- ₹1500	18	8.9	116.0	57.1
4	₹ 1501 & above	6	3	18.0	8.9
Total		203	100	203	100

Source: Developed from Field Survey

In savings per month before and after, the potential of savings increased after availing loan. Further, the saving slabs also increased to more than Rs.500 (34 per cent) and more than Rs.1000 (57.10 per cent). Few of the respondents have savings of more than Rs.1500 (8.90 per cent).

5.7.8 Regularity of Payment

TABLE 5.23 Regularity of payment

Sl.	Particulars	Frequency	Percent
1	Irregular payment	82	40.4
2	Regular payment	121	59.6

Source: Developed from Field Survey

In repayment, 40.40 per cent of the respondents are paying regularly and 40.40 per cent of the respondents are making irregular payment.

5.7.9 Reasons for Non-Payment

TABLE 5.24 Different reasons for non-payment of loan

Sl.	Reasons for nonpayment	Frequency	Percent (%)
1	Crop fail	38	18.7
2	Livestock fail	20	9.8
3	Crop fail, Low earnings	6	3
4	Low earnings	25	12
6	Natural calamities	5	2.5
7	Diverted money for other purpose	0	0
8	Repayment of other dues	0	0
9	Expect bank to write off	0	0
10	Others	109	54
Total		203	100

Source: Developed from Field Survey

There are various reasons cited by SHG members regarding their reasons for non-payment. Among ten (10 points), majority of the respondents (54 per cent) specified no reasons. Out of the cited reasons, majority cited non-payment due to crop fail (18.7 per cent) followed by low earnings (12 per cent) and livestock fail (9.8 percent).

5.8 NON-FARM BENEFICIARIES

A total of 134 responses are taken from beneficiaries of 4 districts namely Kohima, Dimapur, Mokokchung and Phek for the study. The results of analysis are depicted as follows:

5.8.1 Reliability Analysis (Opinion of non-farm beneficiaries)

Following table shows the results of reliability analysis (Cronbach's alpha) of eight (8) statements/ items used for the measurement of different perceptions of the respondents regarding benefits of training, marketing linkage, financial benefits provided by govt. schemes and banks etc.

TABLE 5.25 Reliability Analysis

Items	Statements	Mean	Std. Deviation	Cronbach's Alpha (item wise)	Cronbach's Alpha (combined)	N of Items
1	The training provided was helpful	4.85	0.36	0.770	0.738	8
2	Timely marketing linkage was provided	4.27	0.44	0.705		
3	Supply of power was adequate	3.66	0.64	0.798		
4	The amount sanctioned was adequate	4.09	0.38	0.796		
5	The amount was timely disbursed	4.21	0.44	0.704		
6	It helped develop better/additional skills	4.33	0.47	0.719		
7	The Govt schemes/finances are implemented on time	4.28	0.51	0.798		
8	I am satisfied with the financial assistance provided by Banks and other agencies	4.49	0.53	0.725		

Source- Developed from Field survey

Table as depicted above shows the Cronbach's Alpha value of individual and combined of all the eight (8) statements. These statements are used to measure the socio-

economic benefits perceived by the non-farm sector respondents. The value of individual as well as combine Cronbach's alpha value of all eight statements is more than 0.7 which reveals that the items used in the questionnaire are internally homogenous and consistent. Further, as the mean value of each item is coming close to 4 and more than 4 (agree), it reveals respondents highly agree upon the statements used for the measurement of socio-economic benefits.

Out of the eight (8) statements, the statement (first) '*The training provided was helpful*' (4.85) and '*I am satisfied with the financial assistance provided by Banks and other agencies*' (4.49) have highest mean value. This reveals there is an improvement of the non-farm sector in terms of training and also they are satisfied with the financial assistance provided by NABARD.

5.8.2 Analysis of Internal Homogeneity of the Items by Factor Analysis

(Opinion of non-farm sector beneficiaries)

The factor analysis was applied to eight (8) statements/ variables related to views of major changes as perceived by non-farm sector respondents in Nagaland. The KMO value of factor analysis is 0.722, which indicates that factor analysis is reliable on these 8 statements which is also cross validated by significant value of Bartlett's test of sphericity i.e. 0.000.

TABLE 5.26 KMO and Bartlett's Test (Opinion)

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		0.722
Bartlett's Test of Sphericity	Approx. Chi-Square	71.616
	df	28
	Sig.	0.000

Source- Developed from Field survey

Since KMO value of explorative factor analysis (EFA) is 0.722 as authored by Kaiser (1974), all the statements are adequate to run the factor analysis. This shows factor analysis is appropriate for this data.

TABLE 5.27 Total Variance Explained (Opinion)

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	1.653	20.659	20.659	1.653	20.659	20.659	1.544	19.305	19.305
2	1.428	17.845	38.504	1.428	17.845	38.504	1.386	17.320	36.624
3	1.216	15.196	53.700	1.216	15.196	53.700	1.366	17.076	53.700
4	0.952	11.899	65.599						
5	0.875	10.935	76.534						
6	0.701	8.768	85.302						
7	0.636	7.952	93.254						
8	0.540	6.746	100.000						

Source- Developed from Field survey

Eleven (11) statements/ variables are reduced to three (3) different factors which explained around 53.70 percent of the total variance. Out of the 3 reduced factors, 1st factor with their loading pattern indicates that a general factor is running throughout all the items explaining about 19.305 per cent of the variance. The 2nd factor explains about 17.320 percent and 3rd factor 17.076 percent of the total variance. In combine, the entire 3 factors explain about 53.70 per cent of the total Variance.

TABLE 5.28 Rotated Component Matrix (opinion of non-farm sector beneficiaries)

Statements	Component		
	1	2	3
The training provided was helpful (1)	0.651		
Timely marketing linkage was provided (2)		0.741	
Supply of power was adequate (3)		0.798	
The amount sanctioned was adequate (4)			0.631
The amount was timely disbursed (5)			0.805
It helped develop better/additional skills (6)	0.561		
The Govt schemes/finances are implemented on time (7)	0.727		
I am satisfied with the financial assistance provided by Banks and other agencies (8)	0.699		

Extraction Method: Principal Component Analysis.

Rotation Method: Varimax with Kaiser Normalization.

a. Rotation converged in 5 iterations.

Source- Developed from Field survey

All the statements/ variables related to perception of NGO and SHGs non-farm sector members 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. Statement 1, 6, 7 and 8 constitute factor 1 with new name as '*Skill development*'. Similarly, statement 2 and 3 constitute factor 2 named '*Marketing*'. Further, statement 4 and 5 constitute factor 3 named as '*Financial Benefit*'.

TABLE 5.29
New Factors named (opinion of non-farm sector beneficiaries)

Factors	Statements	New Name
Factor 1	1, 6, 7 & 8	Skill development
Factor 2	2 & 3	Marketing
Factor 3	4, & 5	Financial benefit

Source- Developed from Field survey

5.8.3 Regression Analysis (opinion of non-farm sector beneficiaries)

Following table shows regression analysis regarding opinion of non-farm sector members. Through Explorative Factor Analysis of eight (8) different statement, we got 3 (three) factors and thereafter regression analysis is applied to these factors to identify the significance.

TABLE 5.30
Model Summary (opinion of non-farm sector beneficiaries)

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0.659	0.631	0.659	0.211

Source- Developed from Field survey

The R-square value of the regression analysis is 0.631 which reveals all these three factors (independent) influence the opinion (dependent) by 63.10 per cent. This is a good indicator.

TABLE 5.31
ANOVA (opinion of non-farm sector beneficiaries)

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	23.014	3	7.671	9.457	0.000
	Residual	85.986	106	0.811		
	Total	109.000	109			

Source- Developed from Field survey

The significant value of ANOVA (F-test) is 0.000 (< 0.05) which reveals there is a significant relationship existing between dependent and independent variable.

TABLE 5.32**Coefficient ANOVA** (opinion of non-farm sector beneficiaries)

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	0.055	0.087		0.631	0.529
	Skill development (Factor 1)	0.127	0.082	0.134	1.546	0.125
	Marketing (Factor 2)	0.416	0.083	0.434	5.013	0.000
	Financial benefit (Factor 3)	0.039	0.083	0.040	0.468	0.641

Source- Developed from Field survey

Among the three reduced factors (skill development, marketing and financial benefit), the factor ‘marketing’ significant value of t-test is 0.000 showing marketing as the most important factor which influence the opinion of the non-farm sector respondents. The factor ‘skill development and ‘financial benefit’ is not significant since the significant value of t-test is more than 0.05 (5 per cent level of significance).

5.8.4 Reliability analysis (NABARD assistance has made impact)

Following table shows the results of reliability analysis (Cronbach’s alpha) of 11 statements/ items used for the measurement of different perceptions of the non-farm respondents pertaining to income, asset creation, training benefits, employment opportunities, literacy, and self-confidence etc.

TABLE 5.33**Reliability analysis (NABARD assistance has made impact)**

Items	Items	Mean	Std. Deviation	Cronbach's Alpha (item wise)	Cronbach's Alpha (combined)	N of Items
1	It has helped to raise additional income	4.76	0.43	0.735	0.746	11
2	It has helped in asset creation (land, tools, livestock etc)	4.64	0.48	0.726		
3	It has helped to reduce indebtedness	4.67	0.51	0.745		
4	It has helped to inculcate savings habit	4.51	0.54	0.726		
5	It has helped to raise standard of living	4.62	0.49	0.739		
6	It has helped in generating employment opportunities	4.56	0.50	0.748		
7	It has helped improve sanitation & hygiene	4.58	0.50	0.722		
8	It has helped improve literacy status of family	4.58	0.53	0.707		
9	It has helped better access to healthcare	4.62	0.52	0.698		
10	It has helped promote self confidence	4.65	0.48	0.723		
11	It has helped earn status in society	4.80	0.40	0.733		

Source- Developed from Field survey

The above table shows the Cronbach's Alpha value results of each and combined of all the eleven statements. These statements are used to measure the socio-economic impact of NABARD assistance among non-farm sector members. The value of individual as well as combine Cronbach's alpha value is more than 0.7 which reveals that the items used in the questionnaire are internally homogenous and consistent. Further, as the mean value of each item is higher than 4 and close to 5. This reveals respondents highly agree upon the items.

Out of the eleven statements, 11 statements: *It has helped earn status in society* (4.80) and *It has helped to raise additional income* (4.76) is earning a high mean value. This shows there is an improvement in the social and economic status of the respondents.

5.8.5 Factor Analysis (NABARD assistance made Impact)

Explorative factor analysis (EFA) has been applied to measure the NABARD assistance and its impact on Non-farm sectors beneficiaries. All together eleven (11) statements were used to measure the impact. The results of EFA are as follows:

TABLE 5.34

KMO and Bartlett's Test (NABARD assistance has made impact)

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		0.692
Bartlett's Test of Sphericity	Approx. Chi-Square	350.908
	df	55
	Sig.	0.000

Source- Developed from Field survey

The KMO (Kaiser-Meyer-Olkin Measure of Sampling Adequacy) value of EFA is coming 0.692 reveals that factor analysis is adequate to analyze the impact of NABARD assistance upon non-farm sector members.

TABLE 5.35**Total Variance Explained (NABARD assistance has made impact)**

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	3.247	29.518	29.518	3.247	29.518	29.518	2.602	23.654	23.654
2	1.659	15.079	44.598	1.659	15.079	44.598	1.964	17.856	41.510
3	1.474	13.400	57.998	1.474	13.400	57.998	1.814	16.488	57.998
4	0.949	8.626	66.624						
5	0.894	8.127	74.751						
6	0.725	6.595	81.347						
7	0.653	5.932	87.279						
8	0.592	5.383	92.661						
9	0.330	3.001	95.662						
10	0.271	2.465	98.127						
11	0.206	1.873	100.000						

Extraction Method: Principal Component Analysis.

Source- Developed from Field survey

Eleven (11) statements/ variables are reduced to three (3) different factors which explained around 57.998 percent of the total variance. Out of the 3 reduced factors, 1st factor with their loading pattern indicates that a general factor is running throughout all the items explaining about 23.654 per cent of the variance. The 2nd factor explains about 17.856 percent and 3rd factor 16.488 percent of the total variance. In combination, the entire 3 factors explain about 57.998 per cent of the total Variance.

TABLE 5.36**Rotated Component Matrix (NABARD assistance has made impact)**

Statements	Component		
	1	2	3
It has helped to raise additional income (1)			0.783
It has helped in asset creation (land, tools, livestock etc.) (2)			0.659
It has helped to reduce indebtedness (3)		0.577	
It has helped to inculcate savings habit (4)		0.843	
It has helped to raise standard of living (5)		0.686	
It has helped in generating employment opportunities (6)			0.584
It has helped improve sanitation & hygiene (7)			0.711
It has helped improve literacy status of family (8)	0.683		
It has helped better access to healthcare (9)	0.833		
It has helped promote self-confidence (10)	0.649		
It has helped earn status in society (11)	0.809		

Extraction Method: Principal Component Analysis.

Rotation Method: Varimax with Kaiser Normalization.

a. Rotation converged in 6 iterations.

Source- Developed from Field survey

TABLE 5.37**New Factors named (NABARD assistance has made impact)**

Factors	Statements	New Name
Factor 1	8, 9, 10 & 11	Social benefit
Factor 2	3, 4 & 5	Standard of living
Factor 3	1, 2, 6 & 7	Economic benefit

Source- Developed from Field survey

All the statements/ variables related to perception of non-farm sector respondents 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. Statement 1, 6, 7 and 8 constitute factor 1 with new name as '*Social Benefit*'. Similarly,

statement 2 and 3 defined as factor 2 with new name as ‘*Standard of Living.*’ Further, statement 4, 5 & 8 constitute factor 3 named as ‘*Economic Benefit.*’

5.8.6 Intervention Impact Comparison

TABLE 5.38

Paired Sample t-Test analysis on intervention impact before and after (Non-Farm)

Particulars	Intervention	
	<i>Before</i>	<i>After</i>
Mean	3.610	4.768
Variance	0.052	0.022
Pearson Correlation	0.675	
df	9	
t Stat	2.167	
P(T<=t) one-tail	0.000**	

***significant at 1 per cent level*

Source- Developed from Field survey

The above table shows the t-test of asset(s) creation before and after due to impact. The impact was measured in terms of asset creation which was asset creation, agricultural implements, livestock production, savings and others. The mean value of both category (before and after) interventions is 3.610 (before) and 4.768 (after). This reveals due to intervention there is an improvement in all areas of asset creation. This leads to improvement in economic and social wellbeing of the rural people. Hence, NABARD plays a major role for improvement of the socio-economic well-being of the non-farm sector members.

5.9 CREDIT FLOW IN THE STATE

Credit is disbursed for agriculture and allied sector through the formal institutions. In the state, the credit is disbursed through the Commercial banks, Nagaland State Cooperative Bank (NSCB) and Nagaland Rural Bank (NRB). It can be seen from the table that the target projected and the targets achieved have huge variations, while it is also observed that the credit flow in the state has seen a steady growth over the years.

TABLE 5.39 Ground-level credit flow

Year		Commercial Banks	NSCB	Nagaland Rural Bank	Total
2011-12	Target	NA	NA	NA	NA
	Target achieved	NA	NA	NA	NA
	%	NA	NA	NA	NA
2012-13	Target	38950.00	3085	1315	43350
	Target achieved	21955.35	1801.99	542.89	24300.23
	%	56.37	58.41	41.28	56.06
2013-14	Target	50774	3392	1820	55986
	Target achieved	22659	2549	968	26176
	%	44.63	75.15	53.19	46.75
2014-15	Target	53575.97	4211	1635.52	59422.49
	Target achieved	27603.47	3825.40	413.19	31842.06
	%	51.52	90.8	25.26	53.59
	Target	71113.97	4853.90	1833.7	77801.57

2015-16					
	Target achieved	25323.31	2869.65	654.74	28847.70
	%	35.61	59.12	35.71	37.08
2016-17	Target	74472	8613	3101	86186
	Target achieved	42094.62	3171.06	433.8	45699.52
	%	56.52	36.82	13.99	53.02
2017-18	Target	78195	9285	3030	90510
	Target achieved	39264.67	3049.99	539.38	42854.04
	%	50.21	32.85	17.80	47.35
2018-19	Target	110300	4000	1100	115400
	Target achieved	50764.42	4365.37	356.78	55486.57
	%	46.02	109.13	32.43	48.08
2019-20	Target	89158	18392.00	4381	111931.00
	Target achieved	34328.70	12437.49	1506.06	48272.25
	%	38.50	67.62	34.38	43.13
2020-21	Target	59442.97	12270.78	2859.85	74573.60
	Target achieved	56484.00	4658.31	588.35	61730.66
	%	95.02	37.96	20.57	82.78

Source- State Focus Paper, Nagaland

The lending targets under annual credit plans indicate that Commercial Banks achieved 95.02 % as on 31st March 2021 of their targets which witnessed a significant growth from 38.50% in 2019-20. Nagaland State Cooperative Bank recorded a lending target of 37.96% in 2020-21 which is a decline from 67.62% of the previous year.

Nagaland Rural Bank shows a decline from 34.38% in 2019-20 to 20.57% as on 31st March, 2021.

Figure 5.1 Ground Level Credit flow

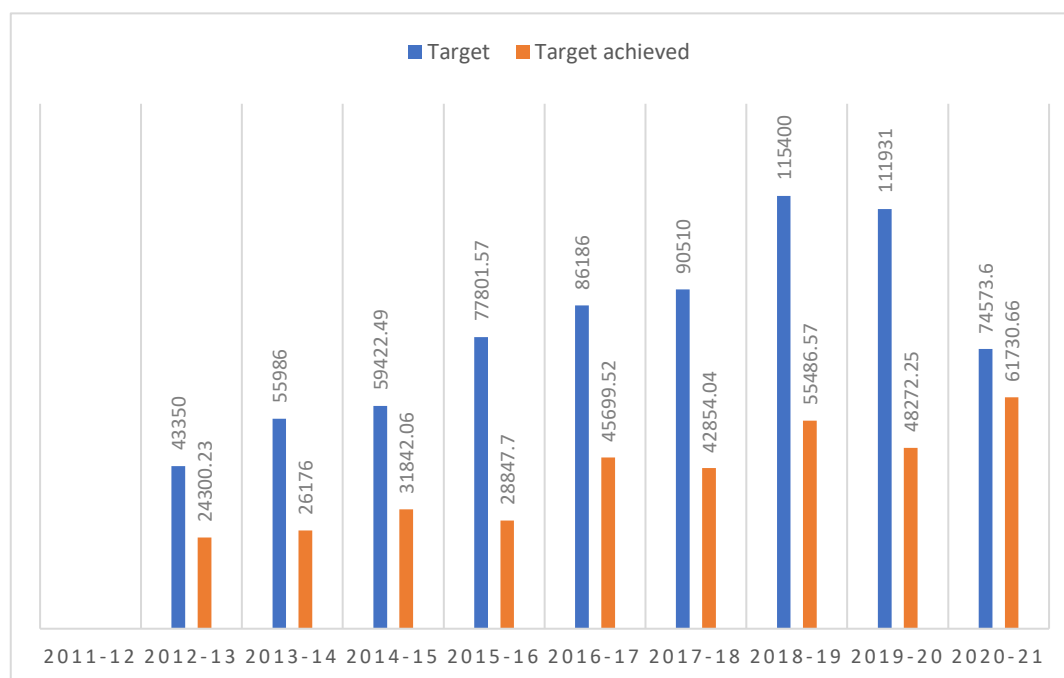


Table 5.40 Descriptive Statistics

Year	Commercial Banks	NSCB	Nagaland Rural Bank	Total
2011-12	NA	NA	NA	NA
2012-13	56.37	58.41	41.28	56.06
2013-14	44.63	75.15	53.19	46.75
2014-15	51.52	90.8	25.26	53.59
2015-16	35.61	59.12	35.71	37.08
2016-17	56.52	36.82	13.99	53.02
2017-18	50.21	32.85	17.8	47.35
2018-19	46.02	109.13	32.43	48.08
2019-20	38.5	67.62	34.38	43.13
2020-21	95.02	37.96	20.57	82.78

Source- Developed from Field survey

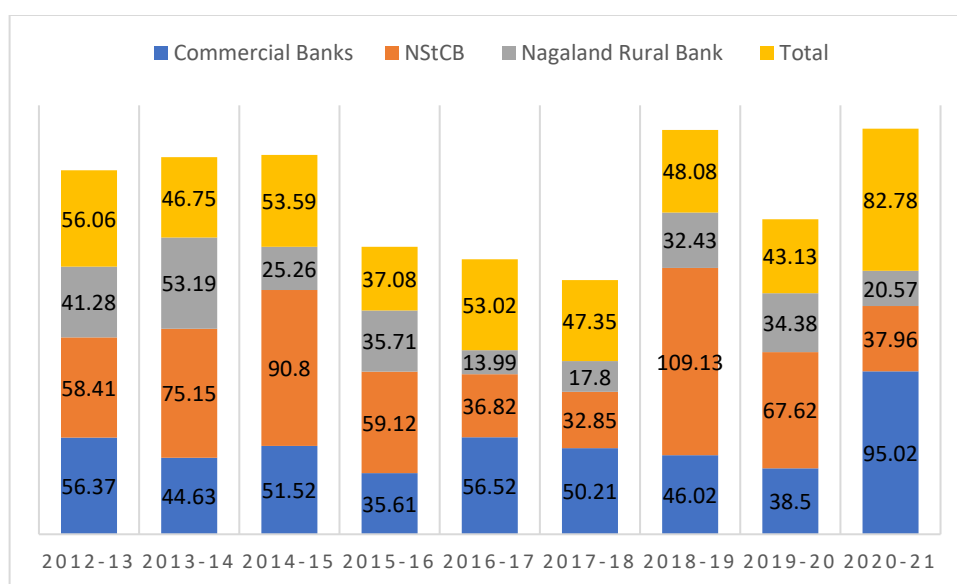


Figure 5.2 Percentage of Target achieved

Table 5.40 and Figure 5.2 depicts the percentage of target achieved over the 10-year study period. The trend in the 10 years shows that the credit target achieved was highest in the year 2020-21. It is also noteworthy to mention that Commercial Banks in the state had the highest percentage of target achieved at 95.02 per cent during the year 2020-21.

5.10 HYPOTHESES TESTING

Three hypotheses have been framed for the purpose of the study-

- The refinance schemes of NABARD have accelerated the rural development process in Nagaland during the last decade.
- NABARD has played a significant role in regulating the functioning of Co-operatives and Regional Rural Banks in the state by providing an efficient credit delivery system in Nagaland.
- NABARD has made a significant impact in generating rural employment opportunities in the state.

Several sub hypotheses have been formulated under three primary hypotheses to meet the objectives of the research study.

a) **First Prime Hypothesis H₀₁**: The refinance schemes of NABARD have accelerated the rural development process in Nagaland during the last decade. The sub hypothesis developed -

H_{01.1} There is no significant contribution to rural development by NABARD

The contribution to rural development by NABARD is determined in terms of performance and impact of the programs on the beneficiaries of NABARD. The variables for measuring the performance have been determined through factor analysis. Structural Equation Modelling (SEM) is then used to assess the performance of NABARD. Additionally, regression analysis is employed to examine the relationship between the variables and the overall impact of the program.

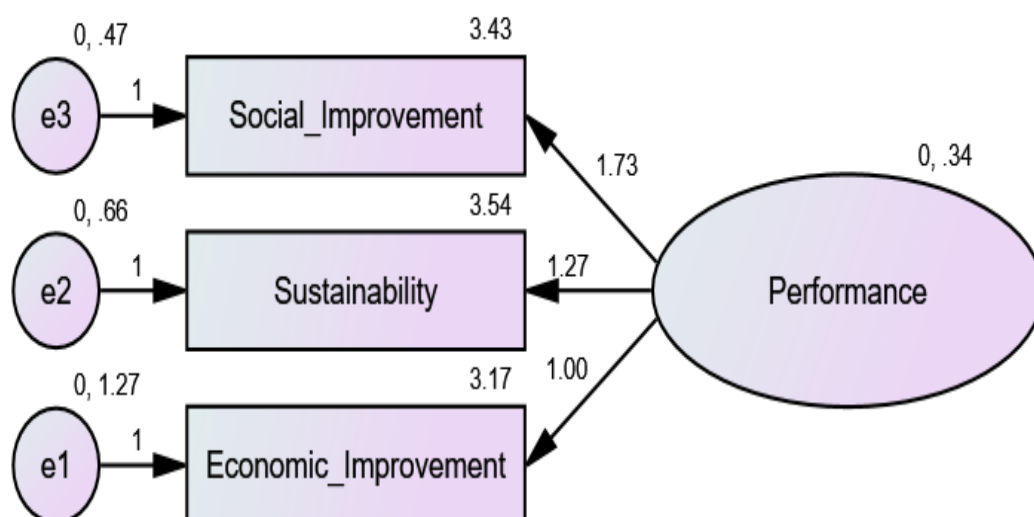


Figure 5.3 SEM (Performance of NABARD project)

TABLE 5.41
SEM results of Performance of NABARD

Particulars	CFI	RMSEA	GFI	NFI
Chi-square = 9.946	0.968	0.0897	0.955	0.959
Degrees of freedom = 2		RFI		
Probability level = 0.000		0.958		

Source: Developed from Field Survey

For the test of construct adequacy and discriminate validity of performance of the NABARD project implementation and its impact, SEM 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 = 9.946, df = 2, $p < 0.001$, CFI=0.968, GFI=0.955, NFI= 0.959, RFI = 0.958, RMSEA= 0.0897, provided a good fit to the data (Browne and Cudek, 1993; Hu and Bentler, 1999). Each item loaded significantly with its intended construct performances of project implementation as the significant value of $p < .01$ (0.000).

TABLE 5.42
Performance improvement of NABARD

Particulars			Estimate	S.E.	C.R.	P Label
Economic Improvement	<-	Performance	1.000	0.193	5.181	***
Sustainability	<-	Performance	1.269	0.192	6.609	***
Social Improvement	<-	Performance	1.733	0.298	5.823	***

Source: Developed from Field Survey

All the p value/ label of the variables of management efficiency through path analysis was significant at 1 per cent level. The assessment of the model fit is revealed by the goodness of fit index (GFI) and other statistics such as *CFI*: Comparative fit index, *RMSEA*: Root Mean Square Error of Approximation, *NFI*: Normed fit index, *RFI*: Relative fit index. It is generally recognized that the GFI, NFI and RFI close or above 0.90 indicate as a good fit model. The root mean square error of approximation (RMSEA) residual is a measure of the average explained variances and covariance in the model.

In the table above, regression coefficient (estimate) is derived by SEM through maximum likelihood estimates. The path analysis reveals that regression weights of the above model is structurally fitted well. All the contributing reduced factors are statistically significant and contributing to the SEM. Out of the three (3) reduced factors, the factor ‘*social improvement*’ (1.733), contribute maximum towards performance of project implementation practices of NABARD followed by ‘*sustainability*’. All the p value of regression weights was acceptable at a significant level of 0.05.

Regression Analysis (Impact)

TABLE 5.43 Model Summary (Impact)

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0.711	0.695	0.691	0.2108

Source- Developed from Field survey

The output Table 5.43 Regression analysis shows the model summary of impact of the programs regarding R, R squared, adjusted R squared, and the standard error. Here the R value represents the Coefficient of correlation of 0.711 that indicates a high degree of correlation among the variables.

The R^2 (coefficient of determination) is the proportion of variation in the dependent variable explained by the regression model. The R^2 shows 0.695 which indicates that 69.50% of total variation in the dependent variable (impact) is influenced by social benefit, standard of living and economic benefit (independent variables).

TABLE 5.44 ANOVA (Impact)

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	12.562	3	4.187	36.052	0.000
	Residual	12.311	106	0.116		
	Total	24.873	109			

Source- Developed from Field survey

The significant value of ANOVA (F-test) is 0.000 (less than 0.05) indicates that the independent variables statistically and significantly predict the outcome or dependent variable as it is less than 0.05 (p-value).

TABLE 5.45 Regression Coefficients (Impact)

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	4.655	0.032		143.244	0.000
	Social benefit	0.310	0.033	0.649	9.498	0.000
	Standard of living	0.203	0.033	0.025	1.078	0.038
	Economic benefit	0.238	0.013	0.289	4.236	0.000

Source- Developed from Field survey

Table 5.45 shows the regression coefficients of the impact of the program, where all three are independent variables. The significant values of each factor are less than 0.05 signifying all the independent factors are quite significant and highly influencing the socio-economic benefits of non-farm sector beneficiaries. Out of three independent factors, the factor social benefit is found more influencing the dependent factor since its coefficient (0.310) is highest among all followed by economic benefit (0.238).

The Performances and Impact parameters to determine the rural development show it is statistically significant where p-values are less than 0.05. Hence, the null hypothesis is rejected and alternate hypothesis is accepted.

b) Second Prime Hypothesis, “H₀₂: NABARD has played a significant role in regulating the functioning of Co-operatives and Regional Rural Banks in the state by providing an efficient credit delivery system in Nagaland.” A sub hypothesis has been developed-

H_{02.1} Nagaland State Cooperative Bank and Nagaland Rural Bank is not contributing significantly to the credit flow in the state.

TABLE 5.46 Regression Analysis (Summary)

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0.996	0.992	0.987	0.121

a. Predictors: (Constant), Commercial banks, NStCB, Nagaland Rural Bank

Source- Developed from Field Survey

Table 5.46 shows regression analysis of credit flow and the role of NABARD. The R square value of regression analysis is 0.992, which reveals all these three independent variables influence credit flow by 99.20 per cent.

TABLE 5.47

Regression analysis (ANOVA)

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	1322.555	3	440.852	205.297	0.000
	Residual	10.737	5	2.147		
	Total	1333.292	8			

a. Dependent Variable: Credit flow

b. Predictors: (Constant), Commercial banks, NStCB, Nagaland Rural Bank

Source- Developed from Field Survey

TABLE 5.48 Regression coefficients (Credit flow)

Model	Unstandardized Coefficients	Standardized Coefficients	t	Sig.
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		B	Std. Error	Beta		
1	(Constant)	6.271	3.079		2.037	0.097
	Commercial Banks	0.779	0.034	1.052	22.719	0.000
	NStCB	0.055	0.024	0.110	2.317	0.068
	Nagaland Rural Bank	0.038	0.050	0.036	0.761	0.481

a. Dependent Variable: Credit flow

Source- Developed from Field Survey

The Commercial Banks, NSCB and Nagaland Rural Bank are contributing towards the credit flow in the state, but the NSCB and Nagaland Rural Bank is not playing significant contribution towards the credit flow as P-value of t-test is 0.068 (>0.05) for NSCB and 0.481 (>0.05) for Nagaland Rural Bank. This signifies ‘NABARD has not played a significant role in regulating the functioning of Co-operatives and Regional Rural Banks in the state by providing an efficient credit delivery system in Nagaland’ is true. Hence, null hypothesis is accepted.

c) Third Prime Hypotheses “H₀₃: NABARD has made a significant impact in generating rural employment opportunities in the state.” The following sub hypotheses have been developed-

Ho_{3.1}: There is no significant difference between pre and post intervention of the FPOs’

Ho_{3.2}: There is no significant difference between pre and post intervention of the Springshed project

Ho_{3.3}: There is no significant difference between pre and post intervention of the TDF program

Ho_{3.4}: There is no significant difference between pre and post intervention of the non-farm projects

Presented under Table 5.49 is the combined results of intervention impact (before and after)

TABLE 5.49

Compiled Paired Sample t-Test analysis on intervention impact (before and after)

Particulars	FPO		Springshed		TDF		Non-farm	
	<i>Before</i>	<i>After</i>	<i>Before</i>	<i>After</i>	<i>Before</i>	<i>After</i>	<i>Before</i>	<i>After</i>
Mean	3.100	4.548	3.118	4.628	3.412	4.728	3.610	4.768
Variance	0.069	0.032	0.079	0.040	0.059	0.042	0.052	0.022
Pearson Correlation	0.525		0.517		0.539		0.675	
df	12		12		12		9	
t Stat	2.266		2.214		2.321		2.167	
P(T<=t) one-tail	0.000**		0.001**		0.000**		0.000**	
t Critical one-tail	1.620		1.782		1.685			
P(T<=t) two-tail	0.000**		0.001**		0.000**			
t Critical two-tail	2.119		2.179		2.273			

Source- Developed from Field Survey

****Significant at 1 per cent level**

Farmers Producer Organization (FPO)-

The P-value of t test is less than 1 percent which shows there is significant difference in the intervention impact before and after project implementation. Since P-value of t-test is 0.001 (< 0.05), null hypothesis is rejected and alternative hypothesis is accepted i.e. there is a significant difference of intervention impact before and after.

Springshed Development Program-

The P-value of t test is less than 1 percent which shows there is significant difference of intervention impact before and after project implementation. Since P-value of t-test is 0.001 (< 0.05), null hypothesis is rejected and alternative hypothesis is accepted i.e. there is a significant difference of intervention impact before and after.

Tribal Development Fund (TDF)-

The P-value of t test is less than 1 percent which shows there is significant difference of intervention impact before and after. Since P-value between two is 0.000 (< 0.05), null hypothesis is rejected and alternative hypothesis is accepted i.e. there is a significant difference of intervention impact of TDF program.

Non-Farm sector-

The P-value of t test less than 1 percent which shows there is significant difference of intervention impact before and after project implementation. Since P-value of t-test is 0.000 (< 0.05), null hypothesis is rejected and alternative hypothesis is accepted i.e. there is a significant difference of intervention impact before and after.

CHAPTER 6- SUMMARY OF FINDINGS AND CONCLUSION

6.1 Introduction

6.2 Major Findings

6.3 Recommendation

6.4 Limitations of the Study

6.5 Scope for Future Study

6.6 Conclusion

6.1 INTRODUCTION

Since the inception of NABARD in 1982, it has been playing a pivotal role in the rural development of the country through its various initiatives and programs. Over the years, NABARD has been instrumental in introducing a number of innovative programs to bring the rural population under the aegis of development particularly focusing on the agricultural scenario in the country. ‘Taking Rural India Forward’ as its core theme, NABARD transpires to change the rural scenario and improve the socio and economic conditions of the rural poor. In pace with the modern advancements, assimilating science and technology to improve the agricultural productivity and in alignment with the UN’s Sustainable Development Goals has been one of NABARDs overall achievements. It continues in its role as the apex bank for rural development with a holistic integrated approach.

Considering the schemes operated by NABARD and its role in rural development, the present study focuses on the role of NABARD in the state of Nagaland and its successful implementation of various schemes so as to enhance the living standard of the rural people. The study has helped in fulfilling the objectives undertaken for the study-

1. To study the role of NABARD in facilitating the rural livelihood in Nagaland
2. To study the impact of refinancing schemes of Nagaland.
3. To study the loan recovery performance of selected credit agencies/ financial institutions availing the NABARD refinance.
4. To analyze the implementation of Government schemes and their impact on rural development.
5. To study the role of NABARD in rural infrastructure development.

Three primary hypotheses were constructed with several sub-hypotheses formulated as per the objectives of the study. For the first hypothesis “The refinance schemes of NABARD have accelerated the rural development process in Nagaland during the last decade.” A sub- hypothesis “There is no significant contribution to rural development by NABARD” was formulated. To test the first hypothesis, factor analysis was utilized to identify the key variables for measuring performance and

impact. These variables were then analyzed using Structural equation Modelling (SEM) to evaluate the performance metrics of NABARD project. Additionally, Regression analysis was conducted to examine the relationship between the key variables identified through factor analysis and the impact of the program. The test highlights the significant value of p is less than .001 in all the variables. The null hypothesis is rejected and accordingly the alternate hypothesis is accepted. Hence, it is concluded that NABARD has made a significant contribution to rural development in the state.

The second hypothesis “NABARD has played a significant role in regulating the functioning of Co-operatives and Regional Rural Banks in the state by providing an efficient credit delivery system in Nagaland.” A sub hypothesis was developed “Nagaland State Cooperative Bank and Nagaland Rural Bank is not contributing significantly to the credit flow in the state.” In order to verify the hypothesis, regression analysis was determined. The results reveal the significance t-test is more than 0.05 (p -value). Hence, the null hypothesis is accepted.

The third hypothesis “NABARD has made a significant impact in generating rural employment opportunities in the state.” The following sub hypotheses were formulated:

“There is no significant difference between pre and post intervention of the FPOs.”

“There is no significant difference between pre and post intervention of the Springshed project.”

“There is no significant difference between pre and post intervention of the TDF program.”

“There is no significant difference between pre and post intervention of the non-farm projects.”

To test the third hypothesis, a comparative analysis of the intervention effectiveness was determined using a paired sample t-Test for pre and post intervention outcome. Since the p -values derived for the t-test is less than 0.05 which is statistically significant, the null hypothesis stands rejected and the alternate hypothesis is accepted. Hence, NABARDs intervention schemes have made significant difference in improving the employment opportunities in the state.

6.2 MAJOR FINDINGS

The findings of the study are presented in the chapter.

- a) The refinance disbursement in the state during the ten-year study period is mostly availed by Nagaland State Cooperative Bank (NSStCB). The refinance is provided to meet agriculture and other allied activities in the state. A cumulative amount of ₹19853.417 lakhs has been disbursed in the state as refinance by NABARD as on 31st March, 2021.
- b) In the flow of ground level credit flow, regional disparities persist in the distribution and circulation, with the North Eastern Region (NER) lagging behind other parts of India primarily because of limited access to formal credit among farmers. This can partly be contributed to the hesitancy from the banks to give credit. As per the observation from the NABARD Regional Office, this constraint can be attributed from the nature of land tenure and the absence of land laws. Land ownership and individual rights are determined by customary laws within the community, resulting in disputes being resolved by the Village Council, which complicates the interpretation of rights. Bankers in the State encounter practical challenges when using land as collateral for loans.
- c) The distribution of credit in the farm sector over the span of 10 years shows a variable pattern. The largest sum of credit disbursed occurred in the fiscal year 2019-20, totaling ₹24727.02 lakh. However, it saw a decline in 2020-21, experiencing a negative growth rate of -21.6%. Nevertheless, despite this decrease, the overall credit flow has witnessed a substantial rise within the state, from ₹3666 lakh in 2011-12 to ₹19370.15 lakh by 2020-21. Over the entire 10-year period under examination, the total credit disbursed amounts to ₹128336.9 lakh.
- d) The credit disbursement in the farm sector indicates that Commercial Banks registered the highest credit disbursal in the state followed by Nagaland State Cooperative Bank. Nagaland Rural Bank exhibited comparatively low disbursement activity compared to other institutions within the state.
- e) NABARD has been instrumental in fostering the development of the agricultural sector through a range of programs. Its initiatives in the state have been executed in collaboration with partner organizations including government departments, NGOs, church-affiliated bodies, and registered societies. These

partner organizations act as Project Implementing Agencies (PIA). The PIA's become the conduit for successful implementation of the programs.

- f) In the state, 18 Springshed development projects have been initiated, with a disbursement totaling ₹488.65 lakh as of March 31, 2021. These projects are implemented in collaboration with the State Level Nodal Agency (SLNA), a registered society under the Government of Nagaland. The t-test intervention impact shows there is significant difference post intervention of the Springshed program with p-value less than 1 percent. The gender distribution among rural villagers indicates that the majority of respondents are male, comprising 81.20 percent, while female respondents make up a smaller portion at 18.80 percent.
- g) The Tribal Development Fund which was set up specifically for the tribal dominated areas has also made significant contribution in terms of economic upliftment and sustainable livelihood practices. Seven out of the total 16 TDF projects in the state have reached completion in the districts of Peren, Tuensang, Dimapur, Phek, and Longleng. As of March 31, 2021, these completed projects have provided coverage to a total of 3650 families. The p-value of the t-test being less than 1 percent indicates a significant difference in the intervention's impact before and after the implementation. The gender characteristics reveal that the majority of respondents are male, constituting 82.40 percent, while females account for a smaller portion at 17.60 percent.
- h) NABARD has established a Producers Organizations Development Fund (PODF) aimed at offering grants to Farmer Producer Organizations (FPOs). The p-value of the t-test being less than 1 percent indicates a significant difference in the impact of the intervention before and after the project implementation. As of March 31, 2021, a total of 8 Farmer Producer Organizations (FPOs) have been established in the districts of Tuensang, Phek, Kohima, and Mokokchung in the state. These FPOs receive support from Producer Organization Promoting Institutions (POPIs) such as Better Life Foundation (BLF), Eleutheros Christian Society (ECS), North East Initiative Development Agency (NEIDA), and Agro Tea & Agro Management Services (ATMS). The findings reveal that the majority of the respondents are female, comprising 93 percent, while male respondents constitute only 7 percent. This suggests that a significant proportion of the members of the farmer producer organizations are female.

- i) NABARD offers credit packages for various non-farm activities such as handloom and handicrafts, livelihood skills training, capacity-building programs, and marketing linkage support activities. The disbursement of non-farm credit is designed to create opportunities for earning livelihoods beyond the agricultural sector. The p-value of the t-test intervention impact also shows a significant difference post NABARDs supported programs in the non-farm activities.

The study finds increased participation from women in almost all the programs. The participation of women particularly in the SHG has led to setting up of small micro enterprises run and managed by the women groups. This is an encouraging step towards promoting women entrepreneurship in the state. It has led to strengthening of rural livelihoods, woman empowerment, providing financial access to the rural mass and freeing the rural poor from the cycle of indebtedness from the money lenders. NABARD and other partnering agencies have played an instrumental role in pivoting the economic status of women and empowering them. Increasing their literacy level and building up their confidence would go a long way in women overcoming the societal barriers.

- j) The study also finds that NABARD's non-farm sector programs are availed more by beneficiaries of younger age group with higher educational qualifications. This is an indication of the interests of the youth to explore and seek employment opportunities in the rural non-farm economy. This suggests growth in the non-farm economy can bring employment prospects with positive income earning outcomes. At a policy level, NABARD can formulate more intensive programs that can provide a conducive environment to venture into agri and allied startups by providing credit, trainings and other assistance for growth of the non-farm sector.

6.3 RECOMMENDATIONS

Based on the major findings, the following recommendations have been made-

- a. Based on the results of the study, the role of NABARD in the state is visible through their various intervention programs aimed at uplifting the economic and social conditions of the rural people. Their interventions are aimed at improving the credit linkages to help increase agricultural production and productivity, enhancing livelihood opportunities and strengthening the rural economy. These interventions are undertaken directly or with partnering agencies such as banks, NGO's, Self Help Groups, Government departments and other stakeholders. Lack of timely support, delay in implementation, not meeting the technical criteria and other aspects lead to the slow progress of the program(s). Such shortcomings result in the program being ineffective or become a constraint to determine the progress of the program within the projected timeline. A robust action from the partnering agencies/institutions would ensure that the NABARD programs are implemented with prompt timely assistance and support from the channel partners.
- b. The Springshed program needs more attention in the state-level policy deliberations for long-term funding. The execution of Springshed Development projects requires a convergence of various departments/partners to pool their resources- technical and human for its effective implementation. The lack of coordination and timely intervention from different stakeholders can result in delay in implementation and completion of the projects. A prompt redressal with timely rigorous monitoring and evaluation will help in ensuring the delays do not affect the farmer's livelihood and agricultural productivity.
- c. NGOs play a significant role in creating awareness about various trainings and programs. They can assist the beneficiaries to avail the finances, conduct proper training, sensitize them on the economic and social implications that can benefit them in the long run. The NGOs serving as intermediaries become instrumental in the success and implementation of the programs. Therefore, the involvement and participation of NGOs is as equally important as the participation of the rural beneficiaries in the programs. In this regard, the role of few NGO's notably Eleutheros Christian Society (Tuensang) and Chakesang Women Welfare Society

(Phek) have made significant contributions as Project Implementing Agencies in the state.

- d. The SHG has become a mass movement of the rural poor particularly for the women in their journey towards economic and social upliftment. NABARD should continue to collaborate with banks and partnering agencies as a micro finance facilitator by providing access to a wide range of financial services through grant support and assistance, refinance support, capacity building and other initiatives to strengthen the SHG-BLP movement. By extending credit outreach to the poor households, the program can ensure greater financial inclusion.
- e. Nagaland has favorable agro-climatic conditions that provide scope for commercial opportunities in the agriculture sector. With increased investments in the agricultural sector by the state government, the prospect for agripreneurship or any other enterprising undertaking is huge. The rural people interested in undertaking such enterprising activity can be identified and proper handholding support provided. With more than 60% of the population dependent on agriculture, the need for investment to increase agricultural productivity can be enhanced through credit intervention.
- f. The banking sector can play a significant role by providing institutional credit to the agri and allied sector. The role of Nagaland State Cooperative Bank and Nagaland Rural Bank in providing credit can be enhanced by conducting more financial literacy camps and workshops and encouraging the rural people to avail timely and easy access to credit. The increase in the flow of credit would also help to improve the target achievement rate and thereby improving the overall credit flow in the state.
- g. There is a need to open more bank branches in the districts which have minimal bank presence. Since banks have now become the primary source for providing agricultural credit, considerable efforts have to be made by banking agencies to set up branches in the least banked district areas of the state. While feasibility factors underline the setting up of bank branches, more bank outreach will help increase rural credit flow to districts with minimal bank presence.

- h. The use of digital technology in the agricultural sector is gaining importance. While the use of digital platforms such as E-shakti has been active, the use by the beneficiaries is at a minimal. NABARD can incorporate the use of digital platforms to help build rural market and presence. With the agri-processing industry booming in the state, marketing and distribution channels in the online platforms can be intensified to find market for the rural products and produces beyond the domestic markets. Technology is reshaping the agricultural scenario leading to increased income and sustainable growth opportunities for farmers living in rural areas. NABARD can tap to this prospect by mobilising Farmers Producer Organisations to adopt technology to increase their agricultural productivity.

6.4 LIMITATIONS OF THE STUDY

The research study has been taken for 10-year period i.e., from 2010-11 to 2020-21. The secondary data assessment in terms of the resource mobilisation is not uniform for all the NABARD supported programs for reasons such as non-availability of data, non-functioning in the selected districts or due to non-existence of the program(s) at the initial time of the study period. The study focuses on the socio, economic and physical dimensions of rural development. Other dimensions relating to environmental, institutional dimensions were not considered.

The study pertains only to the 4 districts selected (Kohima, Dimapur, Mokokchung and Phek). The newly created districts Chumoukedima and Niuland (bifurcated out of Dimapur district) were presumed under Dimapur district and likewise Tseminyu under Kohima district at the time of data collection.

6.5 SCOPE FOR FUTURE STUDY

A comparative study for other districts in the state can be undertaken. The study also opens scope with regard to study of different dimensions of Rural development particularly the institutional dimensions of rural development in the state. The social dimensions such as health, education can also be undertaken for future study.

6.6 CONCLUSION

The study has demonstrated theoretically and empirically that NABARD has substantially contributed to the rural development in the state of Nagaland. The intervention impact of the programs indicate it has enhanced income, livelihood opportunities and income generating opportunities and subsequently improving the quality of life of the rural people in the state.

NABARD has been playing a central role in providing financial assistance, facilitating institutional development and encouraging promotional efforts in the area of rural credit. The National Bank for Agriculture and Rural Development (NABARD) is the apex organization handling all matters relating to policy, planning and operational aspects in the field of credit for the promotion of agriculture and allied activities in rural areas. NABARD continues to play a pivotal role in the farm and non-farm sector through its varied promotional and developmental initiatives.

The World Bank reports agricultural development as one of the most powerful tools to end extreme poverty, boost shared prosperity, and feed a projected [9.7 billion people by 2050](#). Growth in the agricultural sector is [two to four times more effective](#) in raising incomes among the poorest than in other sectors. India is one of the leading exporters in the agricultural sector. During the Financial Year 2021-22, agriculture and allied products exports stood at US\$ 50.21 billion. Considering the contribution of the agri and allied sectors to the country's economy, it is an integral part of economic development. Agriculture cannot be seen in isolation. It should be seen as an integral part of a larger ecosystem spanning the entire primary sector, including horticulture, animal husbandry, fisheries, dairy, poultry, and other allied activities (The Ministry of Agriculture, GoI, 2021). With India as one of the major players in the agricultural market, more avenues can be explored to increase the role of agriculture in improving India's economy.

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APPENDIX A

Questionnaire for Farmer Producer Organisation (FPO)

<i>Respondents- FPO members</i>		
1. Name		
2. Village		
3. Age		
4. Name of FPO		
5. Name of POPI		
6. Marital status	Married <input type="checkbox"/> Unmarried <input type="checkbox"/>	
7. Size of family	<3 <input type="checkbox"/> 3-5 <input type="checkbox"/> 5-7 <input type="checkbox"/> 7 & above <input type="checkbox"/>	
8. Educational Qualification	Undermatriculate <input type="checkbox"/> Matriculate <input type="checkbox"/> 10+2 <input type="checkbox"/> Graduate & above <input type="checkbox"/>	
9. Sex	Male <input type="checkbox"/> Female <input type="checkbox"/>	
10. Occupation	<div style="display: flex; justify-content: space-between;"> <div style="width: 45%;"> Agriculture <input type="checkbox"/> Service/Retired <input type="checkbox"/> Others <input type="checkbox"/> </div> <div style="width: 45%;"> Business/trader <input type="checkbox"/> Rural artisan <input type="checkbox"/> </div> </div>	
11. Type of produce(s) <i>(agricultural/ horticulture/ livestock)</i>		
12. Benefits of joining FPO <i>(Can select multiple items)</i>	<div style="display: flex; justify-content: space-between;"> <div style="width: 45%;"> Access to finance <input type="checkbox"/> Access to farm inputs <input type="checkbox"/> Market linkage <input type="checkbox"/> Technology adoption <input type="checkbox"/> Bargaining power <input type="checkbox"/> Disseminating market information <input type="checkbox"/> </div> <div style="width: 45%;"> Increase in profit margin <input type="checkbox"/> Additional income <input type="checkbox"/> Better farming practices <input type="checkbox"/> Technical advice <input type="checkbox"/> Women participation <input type="checkbox"/> </div> </div>	
13. Interventions	<i>Before</i>	<i>After</i>
Crop(s) grown		
Creation of assets		

Participation in decision making		
Savings habit		
Annual income	Below ₹50,000 <input type="checkbox"/> ₹50,000- ₹1,00,000 <input type="checkbox"/> ₹1,00,000- ₹1,50,000 <input type="checkbox"/> ₹1,50,000- ₹2,00,000 <input type="checkbox"/> Above ₹2,00,000 <input type="checkbox"/>	₹50000- ₹1,00,000 <input type="checkbox"/> ₹100000- ₹1,50,000 <input type="checkbox"/> ₹150000- ₹2,00,000 <input type="checkbox"/> Above ₹2,00,000 <input type="checkbox"/> No change <input type="checkbox"/>
14. Input supplies provided by FPO (seeds, fertilizer, sprayers etc)		
15. POPI provided any training	Yes <input type="checkbox"/>	No <input type="checkbox"/>
16. Marketing service		
17. Insurance service (crop, electric motor, life)		
18. Technical service (best practices of farming, maintain marketing information system)		
19. Banking service (savings, loan)		
20. Any suggestions for improvement of FPO?		

APPENDIX B

Questionnaire for Springshed based Watershed Development Programme

Sl no	<i>Respondents- Rural People</i>		
1.	Name		
2.	Village		
3.	Age		
4.	Name of PIA		
5.	Educational Qualification	Under matriculate <input type="checkbox"/> Matriculate <input type="checkbox"/> 10+2 <input type="checkbox"/> Graduate & above <input type="checkbox"/>	
6.	Occupation	Agriculture <input type="checkbox"/> Business/trader <input type="checkbox"/> Service/Retired <input type="checkbox"/> Others <input type="checkbox"/>	
7.	Sex	Male <input type="checkbox"/> Female <input type="checkbox"/>	
8.	Marital status	Married <input type="checkbox"/> Unmarried <input type="checkbox"/>	
9.	Size of family	<3 <input type="checkbox"/> 3-5 <input type="checkbox"/> 5-7 <input type="checkbox"/> 7 & above <input type="checkbox"/>	
10.	Land ownership pattern	Owned <input type="checkbox"/> Leased <input type="checkbox"/> Rental <input type="checkbox"/>	
	Benefits of the project <i>(Can select multiple items)</i>	<div style="display: flex; justify-content: space-between;"> <div> Additional employment Improve in sanitation habits Increase in income Reduction in workload Increase in fodder Reduce in debt position Increase in livestock Soil conservation Improve in living standards Reduced migration Availability of drinking water throughout the year </div> <div style="display: flex; flex-direction: column; align-items: flex-end;"> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> </div> </div>	
11.	Intervention impact	<i>Before</i>	<i>After</i>
	Total cropped area		
	Livestock production		
	Crop production		

	Access to medical facility																																																		
	Participation in community decision making																																																		
	Sanitary habit/toilet facility																																																		
	Perception/ Knowledge on understanding and conservation of Springshed																																																		
	Annual income	Below ₹50,000 <input type="checkbox"/> ₹50,000- ₹1,00,000 <input type="checkbox"/> ₹1,00,000-₹1,50,000 <input type="checkbox"/> ₹1,50,000- ₹2,00,000 <input type="checkbox"/> Above ₹2,00,000 <input type="checkbox"/>	₹50,000- ₹1,00,000 <input type="checkbox"/> ₹1,00,000- ₹1,50,000 <input type="checkbox"/> ₹1,50,000- ₹2,00,000 <input type="checkbox"/> Above ₹ 2,00,000 <input type="checkbox"/> No change <input type="checkbox"/>																																																
12.	Indicate your level of agreement or disagreement in regard to the following statements mentioned below: <i>(5= Strongly Agree, 4= Agree, 3= Partly agree, 2= Disagree, 1= Strongly Disagree)</i>																																																		
	a. It helped improve literacy status of family b. I participate in watershed planning meeting regularly c. There is need for a watershed committee in the village d. Household fee should be collected e. There is need for a water user group f. There is increase in water discharge after intervention g. Follow up programme by PIA is satisfactory h. My involvement is necessary in the planning and implementation	<table border="0"> <tr> <td></td> <td>5</td> <td>4</td> <td>3</td> <td>2</td> <td>1</td> </tr> <tr> <td></td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> </tr> <tr> <td></td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> </tr> <tr> <td></td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> </tr> <tr> <td></td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> </tr> <tr> <td></td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> </tr> <tr> <td></td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> </tr> <tr> <td></td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> </tr> </table>			5	4	3	2	1		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>																																														
13.	Any suggestions for effective management of spring water?																																																		

APPENDIX C

Questionnaire for Tribal Development Fund (TDF)

<i>Respondents – TDF members</i>		
1. Name		
2. Village		
3. Age		
4. Name of PIA		
5. Sex	Male <input type="checkbox"/> Female <input type="checkbox"/>	
6. Educational qualification	Under matriculate <input type="checkbox"/> Matriculate <input type="checkbox"/> 10+2 <input type="checkbox"/> Graduate & above <input type="checkbox"/>	
7. Size of family	<3 <input type="checkbox"/> 3-5 <input type="checkbox"/> 5-7 <input type="checkbox"/> 7 & above <input type="checkbox"/>	
8. Marital status	Married <input type="checkbox"/> Unmarried <input type="checkbox"/>	
9. Occupation	Agriculture <input type="checkbox"/> Business/trader <input type="checkbox"/> Service/Retired <input type="checkbox"/> Others <input type="checkbox"/>	
10. Year of assistance		
11. Land ownership pattern	Owned <input type="checkbox"/> Leased <input type="checkbox"/> Rental <input type="checkbox"/>	
12. Landholding area (<i>ha</i>)		
13. Marketing link	Direct market <input type="checkbox"/> Agents/Brokers <input type="checkbox"/> FPOs <input type="checkbox"/> Others (specify) <input type="checkbox"/>	
14. How have you benefited from the Wadi programs? <i>(Can select multiple items)</i>	Additional income <input type="checkbox"/> Increased purchasing power <input type="checkbox"/> Savings habit <input type="checkbox"/> Improve in living standard <input type="checkbox"/>	Access to healthcare <input type="checkbox"/> Reduce in migration <input type="checkbox"/> Respect and recognition <input type="checkbox"/> Improved family relations <input type="checkbox"/> Availability and sufficiency of food <input type="checkbox"/>
15. Interventions	<i>Before</i>	<i>After</i>
Crop(s) grown		
Creation of assets		
Literacy status in family		

Participation in decision making		
Savings habit		
Annual income	Below ₹50,000 <input type="checkbox"/> ₹50,000- ₹1,00,000 <input type="checkbox"/> ₹1,00,000- ₹150000 <input type="checkbox"/> ₹1,50,000- ₹2,00,000 <input type="checkbox"/> Above ₹2,00,000 <input type="checkbox"/>	₹50,000- ₹1,00,000 <input type="checkbox"/> ₹1,00,000- ₹1,50,000 <input type="checkbox"/> ₹1,50,000- ₹2,00,000 <input type="checkbox"/> Above ₹2,00,000 <input type="checkbox"/> No change <input type="checkbox"/>
16. Have you joined any organisation (FPOs, cooperatives etc) for collective farming and marketing?	Yes <input type="checkbox"/> No <input type="checkbox"/> If Yes, name of Organisation-	
17. If no to the above, would you be interested?	Yes <input type="checkbox"/> No <input type="checkbox"/> Maybe <input type="checkbox"/> Don't know <input type="checkbox"/>	
18. Are you satisfied with the PIA's management of the wadis?	Very satisfied <input type="checkbox"/> Satisfied <input type="checkbox"/> Neither <input type="checkbox"/> Dissatisfied <input type="checkbox"/> Very dissatisfied <input type="checkbox"/>	
19. Suggestions to improve the Wadi programme		

APPENDIX D

Questionnaire for Self Help Group (SHG)

<i>Respondents- Members of SHG</i>	
1. Name of Respondent	
2. Village	
3. Age	
4. Educational Qualification	Under matriculate <input type="checkbox"/> Matriculate <input type="checkbox"/> 10+2 <input type="checkbox"/> Graduate & above <input type="checkbox"/>
5. Occupation	Agriculture <input type="checkbox"/> Business/Trader <input type="checkbox"/> Service/Retired <input type="checkbox"/> Rural artisan <input type="checkbox"/> Others <input type="checkbox"/>
6. Sex	Male <input type="checkbox"/> Female <input type="checkbox"/>
7. Marital status	Married <input type="checkbox"/> Unmarried <input type="checkbox"/>
8. Size of family	<3 <input type="checkbox"/> 3-5 <input type="checkbox"/> 5-7 <input type="checkbox"/> 7 & above <input type="checkbox"/>
9. Land ownership pattern	Owned <input type="checkbox"/> Lease <input type="checkbox"/> Rental <input type="checkbox"/>
10. Source of borrowing	<div style="display: flex; justify-content: space-between;"> <div> Commercial bank <input type="checkbox"/> Cooperatives <input type="checkbox"/> Regional Rural bank <input type="checkbox"/> NGO <input type="checkbox"/> </div> <div> SHG pool fund <input type="checkbox"/> Govt assistance <input type="checkbox"/> Other (Specify) <input type="checkbox"/> </div> </div>
11. Source of information about loan	<div style="display: flex; justify-content: space-between;"> <div> Bank officials <input type="checkbox"/> SHG <input type="checkbox"/> NABARD <input type="checkbox"/> </div> <div> NGO <input type="checkbox"/> Govt. Officials <input type="checkbox"/> Others (Specify) <input type="checkbox"/> </div> </div>
12. Group particulars	
Name of group	
Size of group	
Membership fee	
13. Loan details	
Name/ Type of loan	
Duration of loan	

Adequacy of loan	Adequate <input type="checkbox"/> Inadequate <input type="checkbox"/>			
Delay in disbursement	Yes <input type="checkbox"/> No <input type="checkbox"/>			
Did u face difficulty availing loan? If yes, state reason(s)	Yes <input type="checkbox"/> No <input type="checkbox"/>			
14. Purpose of loan	Buying farming inputs <input type="checkbox"/> Social purposes <input type="checkbox"/> Buying food <input type="checkbox"/> Child education <input type="checkbox"/>	Medical expenditure <input type="checkbox"/> Consumption <input type="checkbox"/> Settle previous debt <input type="checkbox"/> Others (Specify) <input type="checkbox"/>		
15. Savings per month	<i>Before joining</i> Less than ₹500 <input type="checkbox"/> ₹501- ₹1000 <input type="checkbox"/> ₹1001-₹1500 <input type="checkbox"/> ₹1501 & above <input type="checkbox"/>	<i>After joining</i> Less than ₹500 <input type="checkbox"/> ₹501-₹1000 <input type="checkbox"/> 1001-₹1500 <input type="checkbox"/> ₹1501 & above <input type="checkbox"/>		
16. Repayment schedule	Monthly <input type="checkbox"/> Quarterly <input type="checkbox"/> Half-yearly <input type="checkbox"/> Annually			
17. Regularity of payment	Regular <input type="checkbox"/> Irregular <input type="checkbox"/>			
18.Recovery and overdue				
Amt applied (₹)	Amt sanctioned (₹)	Amt utilized (₹)	Amt repaid (₹)	Amt overdue (₹)
19. Reasons for non-repayment	Crop fails <input type="checkbox"/> Diverted money for other purpose <input type="checkbox"/> Livestock fail <input type="checkbox"/> Repayment of other dues <input type="checkbox"/> Low earnings <input type="checkbox"/> Expect bank to write off <input type="checkbox"/> Natural calamities <input type="checkbox"/> Others <input type="checkbox"/>			

APPENDIX E

Questionnaire for non-farm sector beneficiaries

Sl no	<i>Respondents – Non-farm sector beneficiaries</i>					
1	Name of Respondent					
2	Village					
3	Age					
4	Educational Qualification	Under matriculate <input type="checkbox"/> Matriculate <input type="checkbox"/> 10+2 <input type="checkbox"/> Graduate & above <input type="checkbox"/>				
5	Occupation	Agriculture <input type="checkbox"/> Business/trader <input type="checkbox"/> Service/Retired <input type="checkbox"/> Others <input type="checkbox"/>				
6	Sex	Male <input type="checkbox"/> Female <input type="checkbox"/>				
7	Marital status	Married <input type="checkbox"/> Unmarried <input type="checkbox"/>				
8	Size of family	< 3 <input type="checkbox"/> 3-5 <input type="checkbox"/> 5-7 <input type="checkbox"/> 7 & above <input type="checkbox"/>				
9	Intervention impact	<i>Before</i>	<i>After</i>			
	Creation of Assets					
	Agricultural implements					
	Livestock production					
	Savings					
	Others					
10	Indicate your level of agreement or disagreement in regard to the following statements mentioned below: (5= Strongly Agree, 4= Agree, 3= Partly agree, 2= Disagree, 1= Strongly Disagree)					
		1	2	3	4	5
	a) The training provided was helpful	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
	b) Timely marketing linkage was provided	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
	c) Supply of power was adequate	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
	d) The amount sanctioned was adequate	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
	e) The amount was timely disbursed	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
	f) It helped develop better/additional skills	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>

	g) The Govt schemes/finances are implemented on time	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
	h) I am satisfied with the financial assistance provided by Banks and other agencies	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
11	Whether NABARD assistance has made impact in regard to the following statements mentioned below: ((5=Strongly Agree, 4= Agree, 3= Partly Agree, 2= Disagree, 1= Strongly Disagree)					
		1	2	3	4	5
	a) It has helped to raise additional income	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
	b) It has helped in asset creation (land, tools, livestock etc.)	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
	c) It has helped to reduce indebtedness	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
	d) It has helped to inculcate savings habit	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
	e) It has helped to raise standard of living	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
	f) It has helped in generating employment opportunities	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
	g) It has helped improve sanitation & hygiene	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
	h) It has helped improve literacy status of family	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
	i) It has helped better access to healthcare	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
	j) It has helped promote self confidence	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
	k) It has helped earn status in society	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>