

**Village Level Cooperative Credit Societies of Assam: A Case
Study of GPSS-PACS in Kamrup and Kamrup Metropolitan
Districts**

A thesis submitted to Indian Institute of Technology Guwahati in partial
fulfillment of requirements for the degree of Doctor of Philosophy



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Declaration

I hereby declare that this thesis entitled “**Village Level Cooperative Credit Societies of Assam: A Case Study of GPSS-PACS in Kamrup and Kamrup Metropolitan Districts**”, is the outcome of my own research carried out in the Department of Humanities and Social Sciences, Indian Institute of Technology Guwahati, Assam, under the supervision of Rajshree Bedamatta, Professor of Economics, in the Department of Humanities and Social Sciences, Indian Institute of Technology Guwahati.

In keeping with general practice of reporting observation, due acknowledgement has been made wherever work described is based on the findings of other investigations.



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Certificate

This is to certify that the thesis entitled “**Village Level Cooperative Credit Societies of Assam: A Case Study of GPSS-PACS in Kamrup and Kamrup Metropolitan Districts**”, submitted by Smriti Rekha Singha for the degree of Doctor of Philosophy in Development Studies at Department of Humanities and Social Sciences, Indian Institute of Technology Guwahati, India embodies bona fide record of research work carried out under my supervision. The collection of materials from primary and secondary sources has also been done by Smriti Rekha Singha herself. All assistance received has been duly acknowledged.

The present thesis or any part thereof has not been submitted to any other university for any degree or diploma.

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List of Abbreviations Used in Thesis

AAV	Antyodaya Anna Yojana
ADWDRS	Agricultural Debt Waiver and Debt Relief Scheme
AIDIS	All India Debt Investment Survey
APBEC	Assam Provincial Banking Enquiry Committee
APL	Above Poverty Line
BPL	Below Poverty Line
CIP	Central Issue Price
DAY NRLM	Deen Dayal Antyodaya Yojana- National Rural Livelihood Mission
FCI	Food Corporation of India
FPS	Fair Price Shop
FSS	Farmer Services Societies
GDP	Gross Development Product
GPSS	Gaon Panchayat Samabay Samiti
GPSS-PACS	Gaon Panchayat Samabay Samiti-Primary Agricultural Credit Society
JLG	Joint Liability Group
KCC	Kishan Credit Card
NABARD	National Bank for Agriculture and Rural Development
NAFSCOB	National Federation of State Cooperative Banks
NCA	National Commission on Agriculture
NCDC	National Cooperation Development Council
NCDC	National Cooperative and Development Corporation
NER	Northeastern Region
NFSA	National Food Security Act (2013)
NRLM	National Rural Livelihood Mission
NSSO	National Sample Survey Organisation
PACS	Primary Agricultural Credit Society
PDS	Public Distribution System
PH	Priority Household
PMGKAY	Pradhan Mantri Garib Kalyan Anna Yojana
RBI	Reserve Bank of India
RRB	Regional Rural Bank

SGSY	Swarnajayanti Grameen Swarojgar Yojana
SHG	Self Help Group
SIP	State Issued Price
SLCB	State Level Cooperative Bank
TPDS	Targeted Public Distribution System



Abstract

This thesis studies village-level cooperative credit societies of Assam in particular reference to Kamrup and Kamrup Metropolitan districts. The village cooperative credit societies are old institutions engaged in credit activities at the village level. In many states, including Assam, rural cooperatives predate the year of Indian Independence. Post-independence, the village-level credit societies started functioning as Primary Agricultural Credit Societies (PACS). The PACS are multipurpose cooperative societies at the village level formed under the Cooperative Credit Societies Act 1904 and strengthened under the Banking Regulation Act 1949. PACS perform various credit-related activities such as the deposition of savings, credit supply, providing support for businesses, as well as supply of consumer durables to its members.

Although cooperative credit societies as an institution took root in Assam at the beginning of the 1900s, they expanded in scope and numbers only after India's independence. However, between the 1950s and early 1970s, PACS as agricultural credit institutions did not take off in Assam, primarily due to meagre repayment rates. The National Commission on Agriculture, in 1970, directed States with dormant PACS to initiate Farmer Service Societies to provide credit assistance to farmers. Consequently, the Government of Assam initiated the Gaon Panchayat Samabai Samiti (GPSS) in 1972-73. Over time, various changes have occurred in the composition and structure of GPSS in Assam. New GPSS were formed, and old Primary Agriculture Credit societies were restructured into new GPSS from 1972-73. The GPSS of Assam are unique institutions because their primary activities were not just limited to credit disbursement and deposits mobilisation but also non-credit activities such as supply management of public distribution system (PDS).

Presently, GPSS in Assam perform credit and non-credit business activities at the village level. Credit activities are primarily the disbursement of short-term and medium-term crop loans for

agriculture and the mobilization of savings. Non-credit activities include the supply of farm inputs, marketing and processing of agricultural products, agri-allied activities, and supply management of PDS.

Significant changes have occurred in the functioning of GPSS in Assam in the post-reform period of the 1990s and the 2000s. Due to the historically low repayment rates of PACS loans in Assam and the post-Narasimhan committee reforms (in the 1990s) in the rural credit sector, focusing on the profitability of banks, funding of GPSS-PACS from cooperative banks, such as the Apex Cooperative Bank of Assam dried up. The rural cooperative societies' source of borrowing started shifting to commercial banks. However, direct and indirect loans for agriculture could now be accessed by the 'priority sector' directly from the commercial banks post-rural credit reforms. It is widely documented that one of the characteristic features of rural credit reforms in India was the change in the definition of 'priority sector' lending. The small and marginal farmers, who earlier constituted priority borrowers and accessed loans mainly from the GPSS-PACS, now stood disconnected from the rural banking system due to a reduced supply of rural credit to the GPSS-PACS from cooperative banks. Such policy changes dealt a blow to the viability of rural credit cooperatives or GPSS-PACS in Assam.

There is scant research informing us about the evolution of GPSS in Assam and their changing credit and non-credit activities at the village level. This thesis aims to bridge this gap in the literature. We have conducted a census enumeration of all the registered GPSS-PACS in the Kamrup and Kamrup Metropolitan districts. We examine the role, spread, and impact of GPSS-PACS in Assam through a case study of the Kamrup and Kamrup metropolitan districts.

The thesis finds how the GPSS-PACS in Assam are currently limited in its functioning due to its exclusive role in the supply management of PDS items and to the total neglect of credit activities at the village level. The Public Distribution System in Assam has undergone various

policy changes like the rest of India. However, unlike many other Indian states, Assam never institutionalized a Food and Civil Supplies Corporation that can take responsibility for public food distribution. The GPSS are the crucial hand that coordinates between the Food Corporation of India (FCI) godowns and fair price shops at the village level. Therefore, the GPSS function as a state depot of PDS items, thus bearing the economic cost of food distribution.

Our study shows that credit activities by the GPSS at the village level are currently waning. Similarly, the diversification of non-credit activities is also shrinking. GPSS are mostly striving towards the supply of PDS items at the village level. This results in additional administrative costs of transportation, distribution, and management of PDS items, which are very high. Such constraints and challenges have dampened the spirit of cooperation, ultimately hampering rural credit activities in the village economy of Assam.

Chapter 1 Introduction and Review of Literature

1.1 Background and Introduction

Village-level cooperatives, also known as Cooperative Panchayats¹, are India's smallest unit of credit societies and are central to government policies on rural credit. The network of village-level cooperatives is spread throughout India, with their highest number being in the Western region² and the lowest in the Northeastern region³ (National Federation of State Cooperative Banks, 2021). These village-level cooperatives form the backbone of rural and agricultural credit disbursement and are an essential link between the banking system and rural households. The main objective of cooperative societies is to fulfil people's daily needs and mutual socio-economic needs at a community level. Cooperative societies are democratically formed, and rules are laid down under the principles of cooperative movement⁴ and registered under a State's own Cooperative Act.

Assam features different types of cooperative societies, of which village-level cooperative credit societies, popularly known as Gaon Panchayat Samabai Samiti (GPSS), are crucial credit institutions. Some of these GPSS also function as Primary Agricultural Cooperative Societies or PACS.

According to The Banking Regulation Act 1949, PACS are cooperative societies whose primary objective is to provide financial services to its members for agricultural purposes or allied agricultural activities. The PACS dispense credit at the village level through its vast

¹ Here, a Panchayat cooperative refers to the cooperative within the territory of a Panchayat (village council).

² The Western region includes Goa, Gujarat, and Maharashtra in India.

³ The northeastern region includes India's Arunachal Pradesh, Assam, Mizoram, Meghalaya, Manipur, Nagaland, Sikkim, and Tripura.

⁴ A Cooperative is an economic organization with the idea of self-help, mutual aid, and defence of the vulnerabilities (Madan, 2007). Cooperative societies have their objectives. The objective through which it can provide everyday needs by economic means. In this context, the cooperative movement can be traced back to enacting the first Cooperative Act in 1904. Furthermore, the cooperative movement in India, its philosophy, and its significance in the socio-economic landscape of India were further enlightened in the Cooperative Planning Committee's report of 1946. The report defines a cooperative "as a form of organization in which person voluntarily associate together based on equality to promote their economic interests."

network to ensure equity and growth in agriculture (Gadgil, 1986). In 2021, there were 102,559 PACS in India. The total number of memberships in India is approximately 13,71,68,094. Around 60 percent of the members are small, and marginal farmers, and rural artisans⁵. Thus, PACS are the only village credit institutions with significant reach among the masses.

PACS do not come under the purview of the Banking Regulation Act of 1949; thus, PACS are not directly regulated by RBI. However, state and district-level cooperative banks come under RBI regulation, and the National Bank for Agriculture and Rural Development (NABARD) provides adequate supervision and monitoring of state and district-level cooperative banks. PACS fall under the jurisdiction and regulation of the State Cooperative Department.

Despite the State Cooperative Department regulating and monitoring PACS, PACS are crucial in rural credit supply, for which they receive funds from the banking system to implement its credit activities. They also receive additional funds from the National Cooperative and Development Corporation (NCDC)⁶ for agricultural marketing, inputs, processing, storage, and cold chains. NCDC provides funds through the state government or directly to cooperative societies. Figure 1.1 depicts the rural credit flow hierarchy to PACS in India and Assam.

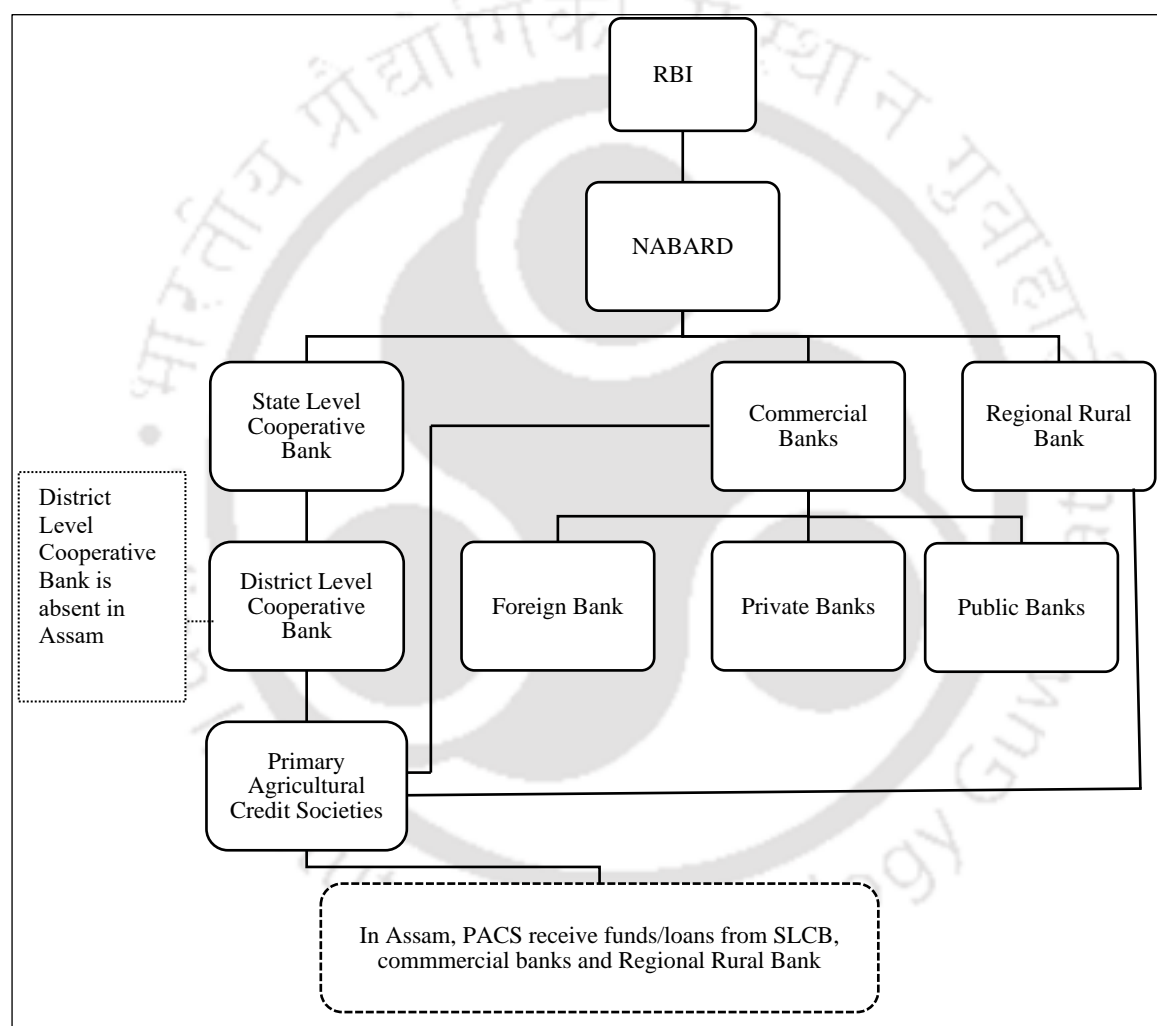
In Assam, agriculture has remained underfinanced (Borbora & Sarma, 2005). Assam witnessed a much lower flow of credit to agriculture compared to other parts of the country during the pre-liberalization years (Giri & Dasgupta, 1988; Dantwala, 1966) as well as post-liberalization (Chatterjee, 2006; Borbora & Sarma, 2005). The PACS in Assam do not supply an appreciable volume of agriculture credit compared to the rest of India. Although the volume of agriculture credit in India has increased post-2000s (Misra et al., 2016), agriculture credit in rural Assam

⁵ The data has been taken and calculated from the *Performance of Primary Agricultural Credit Societies report 2020-2021* published by the NAFSCOB 2021.

⁶ The NCDC was established by the Ministry of Agriculture and Farmers' Welfare, Government of India, under the NCDC Act of 1962 to provide funding and support to cooperatives.

has decreased. Scholars have shown that PACS are not functioning well in Assam (Purkayastha, 2001). However, as credit institutions, PACS have the most extensive coverage among the rural population in Assam. The public distribution system (PDS) supply management is also almost exclusively handled by PACSs. However, the contemporary literature on PACS's functioning in Assam is limited. This thesis attempts to bridge this gap in the literature.

Figure 1.1 Rural Credit Flow Hierarchy to PACS in India and Assam



Source: Author's adaptation based on literature review

It is noteworthy that the percentage share of institutional credit (disbursal) to agriculture from cooperatives institutes has been on a decline in India. But the share from commercial banks is on a rise.

Table 1.1 Percentage Share of Cooperatives, Scheduled Commercial Banks and Regional Rural Banks in Distribution of Institutional Credit (Disbursal) to Agriculture and Allied Activities in India, 2002-03 to 2021-22

<i>Year</i>	<i>Cooperatives</i>	<i>Scheduled Commercial Bank</i>	<i>Regional Rural Bank</i>
2002-03	52.22	38.75	9.02
2003-04	48.00	43.39	8.6
2004-05	42.74	45.93	11.32
2005-06	33.41	55.96	10.62
2006-07	28.50	60.82	10.67
2007-08	29.56	58.20	12.22
2008-09	23.89	65.32	10.77
2009-10	22.17	65.73	12.09
2010-11	22.65	54.60	12.74
2011-12	19.32	68.72	11.95
2012-13	16.86	73.47	9.65
2013-14	16.43	72.24	11.32
2014-15	16.38	71.49	12.12
2015-16	16.74	70.22	13.02
2016-17	13.39	75.04	11.56
2017-18	12.92	74.92	12.14
2018-19	12.12	75.97	11.90
2019-20	11.29	76.83	11.87
2020-21	12.10	75.83	12.06
2021-22	13.05	75.98	10.95

Source: Annual reports on *Handbook of statistics on the Indian economy*, RBI (various issues, 2009-2022).

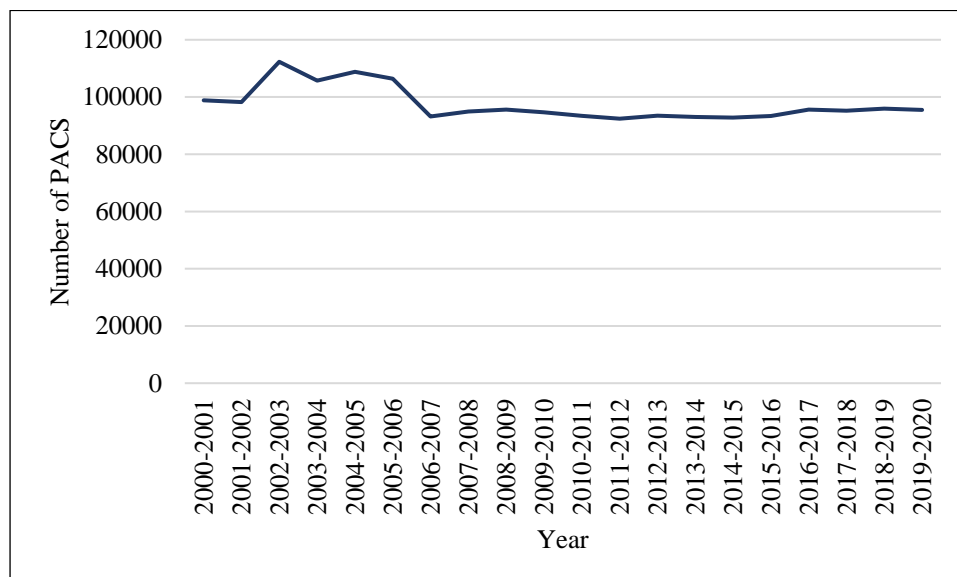
Note: Institutional credit for agriculture and allied activities are the credit disbursed directly to the beneficiaries by concerned institutions.

Over the last two decades, 2000-01 to 2019-20, the total number of PACS in India has been within the range of 90,000 to more than 100,000. Apart from a slight upward surge from 2002-03 to 2005-06, India's average number of PACS has hovered around 95,000. The regional distribution shows that PACS are highest in the Western zone, followed by the Eastern zone

and Southern zone. The lowest presence of PACS is in the Northeastern zone of India. See Table 1.2.

1.2 National and Regional Spread of PACS in India – The Present Scenario

Figure 1.2 Number of PACS in India, 2000-01 to 2019-20



Source: Annual Reports on Performance of Primary Agricultural Credit Societies, NAFSCOB (various issues, 2000-01 to 2019-20)

Table 1.2 Regional Distribution of PACS in India, In percent, 2012 to 2021

Year/ Region	2012- 2013	2013- 2014	2014- 2015	2015- 2016	2016- 2017	2017- 2018	2018- 2019	2019- 2020	2020- 2021
Central Zone	14.32	14.39	14.43	14.34	14.00	14.06	13.94	14.02	13.05
Eastern Zone	19.86	19.95	20.01	19.18	19.42	19.5	19.34	19.44	18.11
Northeastern Zone	3.73	3.75	3.77	3.75	3.96	3.75	3.72	3.72	9.2
Northern zone	13.72	13.86	13.79	14.54	16.26	16.3	16.53	17.17	16.02
Southern Zone	15.96	16.16	15	15.39	15.47	15.3	15.35	15.24	15.07
Western zone	32.41	31.86	32.21	32.11	31.15	31.29	31.09	30.42	28.54
All zones	100	100	100	100	100	100	100	100	100

Source: Annual reports on Performance of Primary Agricultural Credit Societies, NAFSCOB (various issues, 2012-2020).

Regarding the percentage share in loans issued, the Southern zone has the highest number of transactions during the period under consideration, followed by the Northern and Western

zones. The Northeastern zone's share in total loans issued through PACS in India is less than 1 percent.

Table 1.3 Regional Distribution of Loans through PACS in India, in percent, 2012 to 2021

<i>Year/ Region</i>	<i>2012- 2013</i>	<i>2013- 2014</i>	<i>2014- 2015</i>	<i>2015- 2016</i>	<i>2016- 2017</i>	<i>2017- 2018</i>	<i>2018- 2019</i>	<i>2019- 2020</i>	<i>2020- 2021</i>
Central Zone	3.96	4.23	3.75	3.48	2.76	2.67	2.69	2.58	2.41
Eastern Zone	3.54	3.79	3.35	4.6	4.13	4.09	4.21	4.04	3.9
Northeastern Zone	0.04	0.05	0.04	0.04	0.02	0.03	0.01	0.02	0.07
Northern zone	17.74	12.45	12.6	16.35	19.38	19.27	19.57	16.14	15.53
Southern Zone	60.64	66.79	65.03	62.42	60.89	61.0	59.84	64.64	65.96
Western zone	14.08	12.69	15.23	13.11	12.82	12.94	13.68	12.59	12.13
All zones	100	100	100	100	100	100	100	100	100

Source: Annual reports on Performance of Primary Agricultural Credit Societies, National Federation of State Cooperative Banks Limited issued from 2012-2020.

1.3 Historical Evolution of Credit Cooperatives in India

1.3.1 Peasant Struggles, Famine Commissions and Relief Acts

The presence of cooperatives in India can be traced back to the Cooperative Credit Societies Act of 1904, passed by the colonial government in India. However, it is important to note that credit institutions based on cooperative principles had existed in India prior to the enactment of the Act but in a modest form. These early credit institutions include practices, such as the old system of collecting money collectively known as Chit Fund or Nidhis in Madras (present-day Chennai), the Bunda in Vidarbha, the Phad System in Kolhapur, and the Gonchi system in Andhra Pradesh (Mamoria, 1983).

The cooperative movement in India has historical roots in the peasant movements of colonial India. One significant event in this regard was the Deccan Riots in the Bombay Presidency, which compelled the colonial government to take action.

The Deccan Riot originated as conflicts between moneylenders and peasants in the Bombay Presidency. The peasant struggle against moneylenders in the Deccan resulted from the Ryotwari system⁷ introduced by the colonial government. The Ryotwari system impacted the relationship of peasants with the moneylenders through a shift in transactional relationships. The traditional moneylenders ordained on caste lines (such as Kunbis) were now replaced by new moneylenders (such as the Vani, Sowcar, and Marwari). Moreover, the transition from the earlier system of collecting land revenue from villages as a collective unit to collecting revenue from individual cultivators marked a significant change in the agrarian landscape of India and this shift resulted in riots during that period (Kumar, 1985).

In response to these riots, the British colonial administration established the Deccan Riot Commission in 1878. The Deccan Riot Commission urged the colonial government to pass the Deccan Agriculturist Relief Act of 1879, which authorized courts to investigate the debt history and provide a safety net for debtors, primarily peasants. The Relief Act proved ineffective in providing debt relief to the peasants primarily because of the pre-existing contractual agreement between creditors (traditional moneylenders) and debtors (cultivators). Due to such complex contractual arrangements in the rural countryside, the court cases piled up and became a hurdle for the speedy delivery of judgment.

After the Deccan Agriculturist Relief Act was introduced to rural indebtedness, the colonial government enacted three more Acts - the Land Improvement Loan Act of 1882, the Agriculturist Loan Act of 1884, and the Contract Act of 1899 - to provide relief to indebted

⁷ The British Government introduced the Ryotwari System in Maharashtra, Berar, East Punjab, Coorg, and Assam in 1820. Ryotwari System is the system of collecting taxes directly from peasants or individual cultivators. Individual cultivators were called Ryot. In the Deccan Province, the Patel belonging to the Kunbi caste were heads of the village who ran the village economy and maintained political authority. With the introduction of the Ryotwari System, the Vani caste, who were moneylenders, became prominent in the village as Riots began borrowing from the Vanis, often leading to disagreements and court cases between Ryots and Vanis. The rise in land tax, sudden drop of cotton production after American civil wars, refusal of loans from moneylenders, and nexus between rural elites led to the conflict between Ryot and moneylenders, which resulted in the Deccan riots in 1875. See Kumar, R. (1985). The Deccan Riots. *The Journal of Asian Studies*, 24(5), 613-625.

peasants. In response to widespread famine in many parts of the country, the Agriculturist Loan Act facilitated credit advances to small landholders and occupancy tenants. Relief measures mentioned in the Report of the Indian Famine Commission 1898 included suspension of land revenue, granting loans for digging wells, roads and tank work to the unemployed by the district board. At the same time, the Contract Act of 1899 authorized courts to assist debtors (primarily peasants) who had fallen into deceitful agreements with moneylenders. However, these Acts failed to achieve much because most creditors were literate and significant asset holders, whereas debtors were often illiterate peasants. The incompetency of such Acts paved the way for cooperative movement in India. (Catanach, 1970).

The Famine Commission Reports of 1898 and 1908 were landmark developments in the context of rural credit in India. The reports highlighted the plight of peasants suffering from famine. The recurring famines and the recommendations made by the Famine Commissions compelled the colonial government to enact legislation aimed at providing institutional credit to agriculture. The Indian Famine Commission in 1901 endorsed credit support for agriculture and agriculture-related industries. The colonial government emphasized establishing agriculture banks, village banks, and organizational societies. The 1901 Commission's report released in 1908 recommended the establishment of agriculture banks, village banks, and organizational societies based on the cooperative movement's Raiffeisen principles⁸

Meanwhile, credit cooperatives as an organizational society had already been successful in European countries such as Germany and the Netherlands. The successes of the cooperative movement in European countries served as inspiration for colonized countries such as India.

⁸ The cooperative movement in India drew inspiration from the Raiffeisen and the Rochdale Pioneers. Raiffeisen principles are mainly for agricultural cooperatives, guided by self-help, self-administration, and self-responsibilities. The Rochdale Pioneers principles are open and voluntary membership, democratic management and control, one member, one vote, limited return on capital, and political neutrality. The Rochdale Pioneers principles are for consumer cooperatives. See Münkner, (2006) *One Hundred Years: Cooperative Credit Societies Act in India: A Unique Experience of Legal Social Engineering*. Marburg: Alliances de recherche universités-communautés en économie sociale.

External factors such as irregular rainfall patterns, drought, famines, stiff competition among moneylenders, and bank lending to agriculture were deemed risky. As a result, credit cooperatives as lending institutions were more welcoming as an idea⁹.

1.3.2 The Cooperative Credit Society Act of 1904 and the beginning of Cooperative Movement in India

During the colonial rule in India, some officers had already established cooperative societies on their own accord. However, without proper legislation, rural credit supply remained limited. In response to the recommendations of the Indian Famine Commission of 1901, under the leadership of Sir Edward Law, a committee was formed. In 1903, the Committee advocated for legislation supporting cooperative societies, which eventually resulted in the passage of the Cooperative Societies Act in 1904. This phase marked the beginning of the cooperative movement in India.

Act No. X of 1904...Passed by the Governor General of India in Council...Received the assent of the Governor General on the 25th of March, 1904...An Act to provide for the constitution and control of Cooperative Credit Societies. Whereas it is expedient to encourage thrift, self-help and co-operation among agriculturists, artisans and persons of limited means, and for that purpose to provide for the constitution and control of cooperative credit societies...hereby enacted...

The Cooperative Credit Societies Act, 1904, available at www.indiacode.nic.in, browsed on 30th September 2023

The colonial government contemplated the Act as a requirement to eradicate rural indebtedness and supply rural credit at an affordable rate, as documented by The Famine Commission (1898)

⁹ See Roy, T. (2016). The Monsoon and the Market for Money in Late-Colonial India. *Enterprise & Society*, 17(2), 324-357. And Roy, T., & Swamy, A. (2016). *Law and the Economy in Colonial India*. Chicago: University of Chicago Press as cited in Nath, M. (2021). Do Institutional transplants Succeed? Regulating Raiffeisen Cooperative in South India 1930-1960. *Business History Review*, 95(1), 59-85

(Kamenov, 2019; Nath, 2021). However, the Act of 1904 had limitations as it primarily focussed on credit societies, leaving out non-credit societies. The Act paved the way for credit societies while halting other non-credit societies until the second Cooperative Societies Act of 1912 was enacted. The enactment of the Act of 1912 brought in diversification of cooperative activities by including non-credit activities. As a result, the country witnessed an increase in consumer cooperative stores from 23 in 1911 to 78 by the end of the First World War (Sarma, 2003).

In 1919, the Cooperative Act underwent further reforms, allowing Indian provinces to enact the Acts that were best suited to them. These reforms were due to the Montague-Chelmsford Reforms of 1919. Consequently, The Cooperative Society Act of Bombay was passed in 1925, followed by the Cooperative Act of Madras and Orissa (Madan, 2007). The Second Act also eliminated the distinction between rural and urban by replacing it with the categorization of unlimited liability and limited liabilities¹⁰. The societies with most members as cultivators were considered to have unlimited liabilities and vice-versa. These developments led to a rapid increase in the number of societies.

1.3.3 Second World War and Stagnation of Cooperative Credit Societies

During the Great Depression, agricultural cooperatives saw a decline in numbers due to a slump in agricultural prices and a decrease in farmers' income. Subsequently, following the Great Depression, many inquiry committees were appointed in different provinces to revamp the cooperative movement. It was not until 1935, with the recovery in agriculture product prices, that the status of cooperative societies began to improve. However, the Second World War outbreak led to a situation of stress and strain that impeded the progress of the cooperative

¹⁰ Unlimited liability means that each member of the society is equally responsible for debt accrued within the business of the society. Limited liability means that each member is responsible for the debt in a limited amount based on the byelaws of the society.

movement in India. However, during the period, many consumers cooperative stores opened to tackle the impact of the war. The period of food grain rationing and economic controls enforced during the war led to the rise in consumer, marketing, and industrial cooperative societies (Sarma N. , 2003). The end of the Second World War had varying effects on cooperative societies in India. While agricultural societies were impacted, consumer cooperatives were expanding. The country's partition also hugely impacted the cooperative movement in India, particularly in the provinces of West Bengal, East Punjab, and Assam. Many cultivators and farmers had to leave cooperative societies without paying their overdue (Madan, 2007).

In 1944, the Gadgil Committee recommended the adjustment of debts and advocated for Agricultural Credit Corporations wherever cooperative agencies were not sufficiently strong. In 1945, on the recommendations of the fourteenth Registrars Conference, an All-India Cooperative Planning Committee was formed under R.G. Saraiya's chairmanship to oversee the planning and development of the cooperative.

The 1945 R.G. Saraiya committee recommended that rural credit societies function as multi-purpose societies to meet farmers' economic needs and connect credit with marketing and supplying agricultural commodities. It also instructed to include 30 percent of the village and 50 percent of the rural population within the cooperative movement. Consequently, the extension of the cooperative movement in India became a State-led initiative involving establishing rural cooperative institutions.

Following the establishment of the Reserve Bank of India (RBI) on April 1, 1935, and its nationalization in 1949, the government of independent India began to implement and govern rural credit through credit cooperative institutions.

1.4 Credit Cooperatives in Post-Independence India

1.4.1 The 1950s and 1970s

In 1955, through an amendment, RBI established the National Agriculture Credit (Long-term operation) and the National Agriculture Credit (stabilization) fund. The National Agriculture Credit (Long-term operation) fund provided loans to states for subscribing to the share capital of cooperative credit institutions (Balachandran, 1998). Meanwhile, in 1955, India passed the landmark Essential Commodities Act of 1955, which authorized the government to distribute essential commodities. Consumer cooperatives became a preferred means for distributing essential commodities in rural areas. In 1960, the National Cooperatives Development and Warehousing Board (the predecessor of the Present National Cooperatives Development Cooperation) set up a committee under the chairpersonship of Dr. P. Natesan to assess the status of the Consumer Cooperatives and to recommend measures for the sound development of consumer cooperative movement in the country. Following the policies and amendments implementation, the Government of India established the National Cooperation Development Corporation (NCDC) in 1963 through an Act in the Parliament. The primary objective of NCDC was to promote and develop cooperative institutions by providing loans and finance for various activities, including the production, processing, marketing, storage, export, and import of agricultural produce and foodstuffs. NCDC also provided loans to the states for subscribing to the share capital of non-credit cooperative institutions (Sarma N. , 2003). During 1955-65, cooperative credit institutions were the significant institutions disbursing rural credit in India. These policies and amendments brought about significant changes in the country's establishment and functioning of cooperative institutions.

In 1962, the report of the All-India Rural Debt and Investment Survey (AIRDIS) (1961-1962) observed that in India, borrowings from cooperative institutions had increased to 15.5 percent, but private lenders were still dominant. It indicated that India continued to face challenges

associated with informal credit agencies. Despite many efforts by the RBI in the cooperative sector, significant progress was yet to be made. Following the recommendations of AIRDIS, the RBI established the Agriculture Refinance Corporation in 1963, which was later renamed the Agriculture Refinance and Development Corporation (ARDC). The emphasis was on medium- and long-term loans, which were provided by Land Mortgage Bank (LMB) and Scheduled Commercial Bank¹¹. The LMB was later renamed the Land Development Bank. In 1968, the National Credit Council¹² acknowledged commercial banks as complementary to cooperative institutions (Chakrabarty , 2003).

All India Rural Credit Review Committee in 1969 emphasized easy accessibility of credit to small and marginal farmers. In the context of the Green Revolution, the committee reported that cooperatives must be strengthened. To address the credit requirement of agriculture and related activities, the committee recommended adopting a multi-agency approach as the most viable and appropriate response. Consequently, the committee advocated for commercial banks to take an active and positive role in disbursing agriculture credit.

In 1969, fourteen large scheduled commercial banks were nationalized by the government of India. These newly nationalized banks were oriented to meet the requirements of priority sectors¹³ of the economy. Through the succeeding policies, the flow of rural credit was extended from cooperative institutions to commercial banks.

¹¹ Any bank listed in the second schedule of the Reserve Bank of India Act of 1934 is considered a scheduled bank. The scheduled bank will meet the various parameters and criteria of clause 42 of this act.

¹² In 1967, the National Credit Council was established to provide a forum for discussing and assessing credit priorities on an all-Indian Basis. The council would assist the RBI and the government in allocating credit.

¹³ Priority sector includes agriculture, micro, small and medium enterprises, export, education, housing, social infrastructure, renewable energy and others.

1.4.2 The 1970s and 1980s

In 1970, RBI authorized commercial banks to finance Primary Agriculture Credit Societies in regions where District Credit Cooperative banks showed signs of weakness. This marked the initiation of integrating PACS into commercial banks (Reserve Bank of India, 1978). Subsequently 1972, the RBI conducted the All-India Debt and Investment Survey. The report observed that the commercial banks did provide the necessary financial assistance. However, there was a need for emphasis on the revival of the societies (referring to PACS) and the professionalism of their management. Issues such as wilful defaulters, over-financing, flawed lending processes, and untimely credit contributed to the rural credit system's ineffectiveness, primarily driven by the cooperative sector.

Meanwhile 1971, the National Commission on Agriculture (1971) recognized the imperative of directing credit to small and marginal farmers and agricultural labourers. As an implication, Farmer Service Societies were formed, partially like the PACS. This period also saw the introduction of the regulatory measures of Priority Sector Lending (which imposed social control on banks for specific sectors like agriculture and microenterprise) and Lead Bank Scheme (assigning one commercial bank in each district) – these two landmark development policies that not only persist till date but have also served as the roles for channelizing agricultural credit and fostering rural development. During this phase, the RBI mandated banks to open branches in urban, rural, or semi-urban areas (Government of India, 1976; Chavan & Ramakumar, 2022).

To speed up the credit flow despite earlier setbacks, The government of India took a significant step in 1975 by establishing 48 Regional Rural Banks (RRB)¹⁴. These Institutions were tasked with providing loans to small and marginal farmers, artisans, and rural entrepreneurs whom

¹⁴ RRBs were established by enacting the RRB Act of 1976 to provide credit to agriculture and rural sectors.

existing policies and regulations of rural credit had previously underserved. This marked a transition from the cooperatives-centric approach to a multi-agency approach for rural credit.

1.4.3 The 1980s and 1990s

In 1979, RBI convened a committee to review arrangements for institutional credit for agriculture and rural development. Under the chairmanship of B. Sivaram, the committee observed the rural credit problems and complexity, but also the presence of larger tasks and handling of rural development. It recommended an apex bank to provide direction to rural credit issues and integrated rural development. This recommendation led to the establishment of the National Bank for Agriculture and Rural Development (NABARD) in 1982 (Chakrabarty, 2003).

The Seventh Five-Year Plan (1985-1990) primarily emphasized on agriculture. The plan recommended that all working PACS at the village level be developed as multipurpose cooperatives capable of various activities such as disbursing credit, agricultural inputs, and consumer goods (Sarma N., 2003).

In the meantime, NABARD played a crucial role in enhancing rural credit and development. NABARD took the initiative of the linkage between Self Help Groups and Banks. The linkage brought a positive impact on credit facilitation. As agriculture and rural sectors progressed through new technology and infrastructure, new finance was required to meet such progress. In response, in 1995, NABARD created the Rural Infrastructure Development Fund (RIDF), mainly for rural infrastructure, by providing loans to state governments and state-owned corporations. While this expansion of the government's focus on credit supply to rural infrastructures benefited banks and state and central governments, it deprived farmers of credit (Dadhich, 2014).

The government of India introduced The Kisan Credit Card (KCC) scheme in consultation with the RBI and NABARD in 1998-99. Its primary objective is to provide crop loans directly from institutions (banks and village-level credit cooperative societies) to the farmers.

The provision of timely and adequate credit has been one of the significant challenges for banks in India in the facilitation of agricultural and rural credit to farmers. Regulatory measures have been implemented over time to regulate cash credit facilities, public sector banks, and cooperative banks to farmers with the aim of enhancing farmers's access to credit. In the post-independence period, the government primarily relied on cooperative institutions to supply rural credit. However, it was evident that cooperatives required substantial strengthening in supply of credit to agriculture and rural credit. Consequently, the government initiated multi-agency approaches for the credit supply to rural credit. Scheduled commercial banks, RRB, and the introduction of KCC emerged as agencies responsible for supplying rural credit apart from cooperative institutions.

1.4.4 The Rural Credit Reforms of 1990s and 2000s

RBI and the Government of India took responsibility of rural credit supply by implementing various policies and regulations aimed for accessibility of credit by rural people. However, till 1990 rural financial institutions exhibited weaknesses like decline in productivity, efficiency and bad repayment and profitability (Mohan, 2006).

Consequently, the central government set up the Narasimhan Committee in 1991 to conduct a comprehensive review of the country's financial system. The committee recommended remodelling the banking sector by reducing the statutory and cash reserve ratio, deregulating interest rates, phasing out direct credit, and implementing bank autonomy. The committee emphasized banks to operate on commercial basis. The banks must put primary concern on their profitability. As noted by many scholars, after the period of the Narasimham committee,

there was a fall of credit flow to agriculture (reversal in the revival of social and development banking policies towards agriculture credit) in India (Ramachandran & Swaminathan, 2004; Chavan, 2005; Ramakumar, 2012)¹⁵

The year 2004 celebrated 100 years of cooperative movement in India. The year 2004 is also crucial for rural credit institution particularly PACS. A Task Force on Revival of Rural Cooperative Credit Institutions was set up in August 2004, headed by Prof. A. Vaidyanathan, Emeritus Professor, Madras Institute of Development Studies, Chennai as a chairperson. The Task Force identified four distinct phases of the cooperative movement in India: The first phase from 1904-1930s, which was the period of expansion of cooperatives and bringing it under the ambit of provincial subject; the second phase from 1930s to 1950s, when the RBI took the lead and established institutions such as the Agricultural Finance Sub-Committee and Cooperative Planning Committee; the third phase from 1950-1990 saw the formation of NABARD and increased partnerships of state and central governments in terms of equity, governance and management; and the fourth phase from 1990s onwards which reflected governance mismanagement due to excessive state patronage. The Vaidyanathan Committee recommended that a revival financial package will be able to deal with the problems of cooperatives (Vaidyanathan Committee, 2005).

Over the years, rural cooperative credit institutions have been performing poorly regarding efficiency, viability, and the persistence of financial difficulties. The Vaidyanathan Committee Task Force focused primarily on Primary Agriculture Credit Societies (PACS) that provide rural short-term credit. This is because PACS held the most extensive coverage in rural areas

¹⁵ In 1967, the policy of Priority Sector Lending was introduced through the amendment to the Banking Law of 1967. The priority sector lendings serves as the social control on bank requiring them to allocate 40 percent of their lending to priority sectors. Such policy of social and development banking was supply led approach. The policy mandate commercial banks for the provision of credit to agriculture at affordable interest rates. Early 1990s witnessed growth of rural banking and agriculture credit. However, after implementation of recommendation of Narsimham Committee, there was decline in credit flow to agriculture.

and the number of credit seekers (Vaidyanathan, 2014). Moreover, improving the health of PACS brings recovery to the other rural cooperative credit institutions such as District Credit Cooperative Banks and Scheduled Credit Commercial Banks which were incurring losses. In 2003, this committee estimated losses accumulated by PACS to be around Rs 4595 crores. Vaidyanathan Committee directed the injection of Rs 15,000 crores to revive rural cooperatives credit institutions under specific terms and conditions (Sriram, 2006). However, over time, PACS has continued to be known for discredit in their overall performances and limit in rural credit disbursal in India (Purkayastha, 2001; Vaidyanathan, 2014).

To understand the growth of agriculture credit, scholars have looked at the growth of agriculture credit through two components.

- 1) The volume of agriculture credit
- 2) The number of bank branches.

Going by the volume of agriculture credit, one cannot deny the increase in growth of agricultural credit after the year 2000. However, credit disbursal was skewed in favour of large-scale agriculture and allied activities, which accounted for a rise in indirect credit volume and a decrease in direct credit volume¹⁶. It signifies the disbursal of credit towards prominent players in agriculture and allied activities. Ramakumar and Chavan (2007) have explained that the increase in indirect finance at the national level is due to a change in the definition of priority sector lending. Direct finance primarily caters to non-corporate farmers or small and marginal farmers. Increased agriculture credit through direct finance at the national level does not necessarily mean that every category of farmer is accessing agriculture credit. The increase

¹⁶ The agriculture credit is defined by two types of credit, namely direct credit and indirect credit. Direct credit is that credit which is given to cultivators directly by the bank institutions. Indirect credit is that credit which is given to cultivator through the means of intermedator.

in agriculture credit thus translates into banks' profitability rather than an equitable distribution of credit.¹⁷

One also cannot deny the increase in the number of branches. After 2005, around 5,000 RRBs were set up, carrying the trend upwards. However, comparing the total population per branch with the total rural population per branch, one can see that after combining urban and rural branches, the total population per branch decreases compared to the total rural population per branch. This implies that the increase in RRBs is needed to catch up with the rising rural population (Chavan, 2005).

Rath (2005), based on the Indebtedness of Farmer Households NSSO (2003), critiqued the policy on cooperative societies advocated by the Vaidyanathan committee report. He pointed out that farmers access credit mostly from commercial banks and moneylenders and not from cooperative societies. He further pointed out that each state has different share of debt from cooperative institutions. For example, around 40-60 percent of indebted farmers took loans from cooperative institutions in Maharashtra, Haryana, Gujarat, and Kerala, while in Andhra Pradesh, Tamil Nadu, Karnataka, and Madhya Pradesh, around 50-89 percent were in debt, of which minimal amounts of credit came from credit cooperative societies. Thus, the cooperative sector in agriculture has ceased to matter significantly except in a few states.

Overall, one of the achievements of the rural credit policy of India is to replace informal or non-institutional credit agencies with institutional credit agencies (include banks, bank-linked SHGs, cooperative bank and societies) in India. The achievement was also significant in urban

¹⁷ In the context of the Structural Adjustment Programme of the 1990s and liberalization of the economy, paving way for private banks and international banks, The Narasimhan Committee Report of 1991 entitled Report of the Committee on the Financial System recommended lowering the statutory liquidity ratio (SLR) and cash reserve ratio (CRR) to enhance profitability of banks. The Narasimhan Committee Recommendations were instrumental in bringing down the number of branches in rural areas, which deviated from the principles of social banking under which regional rural banks and rural branches were opened post bank nationalization (Ramachandran & Swaminathan, 2002)

areas. Curbing non-institutional credit agencies, especially in rural areas, was necessary because of the exorbitant interest rates charged by non-institutional credit providers.

As evident from National Sample Survey (NSS) data, the share of institutional credit¹⁸ in outstanding cash debt rose from 29 percent (1971) to 57 percent (2002), and non-institutional credit outstanding in cash debt declined from 71 percent (1971) to 43 percent (2002) (Pradhan, 2013).

NABARD's All India Rural Financial Inclusion Survey 2016-17 estimated that the percentage of households having access to institutional credit was 58.75 while the percentage of households with non-institutional credit was 31.8. The percentage of households accessing both institutional and non-institutional credit was 9.5 percent. During the same period, the percentage of households availing loans from cooperative societies/banks was around 5.7 percent. Commercial bank /RRB accounted for the highest share at 36.6 percent. A decline in the share of non-institutional credit can also be observed due to a progressive move in credit flow in the country (Misra et al., 2016).

At the all-India level, there is a decline in the percentage of households taking loans from cooperative societies with a simultaneous rise in the percentage of households taking loans from RRBs/commercial banks (All India Rural Financial Inclusion Survey 2016-17, NABARD).

All-India Debt & Investment Survey (AIDIS 2019) reveals a 35 percent incidence of indebtedness in rural areas, while in urban areas, the incidence of indebtedness was 22.4

¹⁸ By institutional credit, we mean credit from institutional agencies. They are banks, co-operative Societies, insurance companies, provident funds, employer, financial cooperation/institution, non-banking financial companies, bank linked and non-bank linked Self-Help Groups/Joint Liability groups, and other institutional agencies. Non-institutional credit refers to informal institutions such as landlords, agricultural moneylenders, professional moneylenders, input suppliers, relatives and friends, chit funds, commission agents/traders.

percent. Among various occupational categories, including cultivators, non-cultivators, self-employed, and others, the highest incidence of indebtedness (40.3%) was observed among cultivators. The source of incidence of indebtedness among cultivators indicated that 21.2 percent of their debt came from institutional sources, 10.3 percent from non-institutional sources, and 8.8 percent from both sources. The distribution of outstanding cash debt in rural areas showed that 66.1 percent was taken from institutional sources and 33.8 percent from non-institutional sources. Commercial banks accounted for the majority of institutional sources or agencies, supplying 41.9 percent of outstanding cash debt. Thus, we observe that in rural India, there is more flow of credit from institutional agencies and less from non-institutional agencies. Commercial banks have become a significant source of credit supply, while cooperative institutions play a lesser role in providing credit to rural populations.

1.5 Cooperative Movement in Assam

On 3rd September 1904 the first cooperative credit society were established in Assam known as the Shillong Cooperative Town Bank Limited (Basu, 1905). As early as 1904, ten cooperative credit societies were formed in Assam under the Cooperative Credit Societies Act 1904. Four were in urban areas and six were in rural areas. They are Shillong Cooperative Town Bank Limited, Jorhat Town Bank Limited, Rajahauli Village Bank, Charigaon Ditto, Sylhet Cooperative Town Bank Limited, Raigarh Dharma Bhandar, Chotadesh Gramya Mahajai Sabha, Charnao Gramya, Gurabhu Gramya and Silchar Cooperative Town Bank Limited. The Urban Cooperative Credit Society in Sibsagar was marked as the earliest consumer society. It was formed by 30 members and with the support of the local government. The society opened its first store named Sibsagar Cooperative Store Company Ltd (Sarma, 2003). This marked the legitimization of cooperative societies in Assam. Prominent men like the Raja of Gauripur took a keen interest in the cooperative movement (Basu, 1905).

At the beginning of the cooperative movement in Assam, the credit cooperatives found it challenging to raise working capital. However, slowly, the cooperative societies expanded. During the period of 1911-1912, there were 125 rural and 16 urban societies with membership of 7859 and 1829 persons respectively. The rural societies comprised working capital of Rs. 2,05,782 while urban societies comprised an amount of Rs. 1,92,555 (Goswami, 1969). By the end of March 1913, the total number of societies were increased to 188. These societies were purely credit societies (Baker, 1914). It is estimated that by 1916, the Central and Provincial Bank supplied 75 percent of total credit to rural society. However, mostly the wealthy landlords were able to reap the benefits of the cooperative movement (Saikia, 2010).

During the 1920s in Assam, levels of indebtedness among peasants was significantly high (Saikia, 2010). During 1920-1930 important studies on working of cooperatives were carried out by the bureaucracy in Assam. For example, the report on the Cooperative Credit Societies at Work in the Province of Assam 1904-05, the Maclagan Committee report of 1915 and the Report of the Assam Provincial Banking Enquiry 1929-30.

During 1928-1946, the term “hopeless societies” started being used in the context of Assam as cited in the report of the Assam Provincial Banking Enquiry Committee (1929-30). There was an increased feeling that the cooperative societies have become “hopeless” institutions due to the absence of a cooperative minded community. It was further aggravated by the presence of overdue and lack of supervision from cooperative department. This period was also impacted by the Second World War. The provincial Government of Assam insisted on the formation of cooperative societies for supplying essential commodities as the war began impacting Assam. During this period, many consumer cooperatives sprang up. Following the period after the Second World War, a significant milestone in the cooperative movement was the expansion of cooperative societies into hilly areas of Assam that were not previously included since the

establishment of cooperative societies in Assam. The government led this expansion as a part of relief scheme Prior to this period, cooperatives were only operative in plain areas of Assam (Das, 1989).

The report of the Assam Provincial Banking Enquiry Committee (1929-30) stated that during this period, the Assam Valley deposition value was around rupees 20 lakhs whereas the Surma Valley (present day Barak Valley)¹⁹ deposition value was only 20 thousand rupees. This indicated that performance of the cooperative credit institutions in Assam was differentially impacted by region. After 1931, increased overdue dwindled central and provincial banks in Assam. The report also explained that there was not much progressive work despite the presence of numerous rural societies. The failure of these societies was mainly due to insufficient care of organization and benami loans, i.e., delinquent loans (Dawson, 1930). In the aftermath of World War, a decontrol order was passed in 1946, and consumer cooperatives faced competition from private traders resulting in decline in their numbers (Goswami, 1963). The introduction of food control in 1942 led to the emergence of two modes of market- one controlled and another uncontrolled. During this period, the Assam Steel Brothers²⁰, a private party, was appointed as a foodgrain procurement agency. In 1946, the procurement of paddy through private agencies was stopped. In 1949, a new cooperative apex bank was established due to the wrapping up of the Provincial banks of Assam. In 1948, the Government of Assam implemented that each panchayat would have a primary trading cooperative. Each panchayat with 2000 memberships was to form a primary trading cooperative (Das, 1989). The primary

¹⁹ Assam Valley is the region through which the Brahmaputra River flows, situated in the northern part of Assam. Surma Valley is the area through which the Barak River flows, located in the southern region of Assam.

²⁰ See Saigal (2009-2010): During Second World War, government laid Basic Plan for supplies of food items from surplus region to deficit regions. At that time Economic Advisory Board of Assam appointed Messrs Shaw Wallace & Co. of Calcutta as distributor of food items. Hence Messrs Steel Brother and Company became as government agency to procure and distribute paddy and mustard seed in Assam and received commission from government. Soon such agency replicated in numerous sub-agencies in the states producing multiple intermediaries between farmers and customers.

trading cooperatives' main function was facilitating trade through sales, and providing banking facilities and insurance to its members. Such multipurpose societies with the functions of consumer society were mandated to link with the Assam Cooperative Apex Bank. Every family must be a member of the primary trading cooperative in order to access essential commodities. Thus, to access essential commodities, the new primary trading societies increased in number (Dutta, 1991). The state government introduced the trading cooperatives as an initiative of the rural development scheme. Federating such many primary trading cooperative societies would form a central trading cooperative.

Many reforms took place in the cooperative sector in Assam during the Second Five-Year Plan (the 1950s). By the end of the Second Five-Year Plan, there were 75 societies per one lakh population against 32 societies against one lakh population in the first Five-Year Plan (Goswami, 1969). The provision of finance by the RBI to the Assam Cooperative Apex Bank provided thrust to rural societies, as well as the construction of large godowns financed by the central government (Goswami, 1963). However, during 1950-51, numerous societies went through liquidation, especially non-agricultural societies. With the withdrawal of foodgrain control by the government in 1952, primary trading societies wound up due to competition from individual traders (Goswami, 1969).

India was going through major agrarian reforms during 1960s. These reforms encompassed institutional and land reforms and played a crucial role in reshaping the agriculture landscape (Prasad, 2009). Strengthening of cooperative credit was also a key aspect of the reform. Assam was predominantly constituted of small landholders in the 1940s (Goswami, 1962). Consequently, Assam's primary crop under cultivation, paddy, did not result in marketable surpluses. However, by the 1960s, there was a considerable increase in paddy marketing in Assam. Despite these developments, similar to the rest of India, Assam still faced challenges

to be food-reliant, and most of the population suffered from food insecurity (Goswami, 1962). The bargaining power of farmers was weaker than that of rice mill owners, which led to distressed sales among farmers (Goswami, 1962). In 1952, there was a negligible difference between the controlled and open market prices. The price received by farmers, especially in the interior regions, was substantially lower. Eventually, under the advocacy of the Planning Commission and Food Grains Committee (1957), state trading of food grain was introduced in Assam in 1958. By 1961, the state trading scheme was implemented throughout Assam. The state government brought and organized service cooperative societies²¹ for the state trading of foodgrains (mainly paddy). Through this step, the cooperative societies were given the position of monopoly traders in procuring paddy crops.

During 1962-63, there was uneven regional growth of PACS in India. There were around 39,129 dormant societies. The highest share of dormant societies (72%) was in Assam (Dantwala, 1966).

Following the recommendations of the Dantwala committee (1966)²², the role of marketing cooperatives in state procurement of foodgrains and its alignment with the Food Corporation of India (FCI) was considered in Assam. The committee recommended that the marketing society should be an agent of the state government. A three-tier cooperative machinery was implemented for the marketing cooperative; at the top was the Apex Marketing Society, the second tier was the Primary Marketing Society, and the third tier was the village-level Service Cooperative Societies. These service cooperative societies include cooperative farming

²¹ A three-tier cooperative structure in Assam in the 1960s undertook paddy procurement as state agencies. The first tier was the Apex Marketing Society, the second tier was the Primary Marketing Society, and the third and bottom tier was the Service Cooperative Society, which was based at the village level.

²² Dantwala Committee (1966) published the Committee of Cooperative Marketing Report in 1966 under the Ministry of Food, Agriculture, Community Development and Cooperation, Government of India. The committee recommended reviewing the pattern of organization of cooperative marketing of agricultural produce, distribution of produce, and supply of consume articles. It recommended measures that could enable cooperative marketing societies to play the role in the integrated structure of credit, supplies, and processing.

societies at the village level which was also multipurpose societies. They were formed with the tasks of disbursing credit, distribution of fertilizers, and marketing. Further, they set as sub-agents of licensed primary marketing cooperatives that procured paddy for the government and millers. During the second Five-Year Plan, there were 3,361 service cooperatives in Assam. Later, in the third Five-Year Plan (1961-1966) a crop loan system was introduced in Assam. The Assam Cooperative Apex Bank started crop loan system based on the Rural Credit Survey of 1952 recommendation. The crop loan system operated based on farmers' requirements, considering factors such as land size and cultivation costs (Deka, 1984). Later, *Gaon Sabha*²³ was implemented in the field of operation of a service cooperative (Das, 1989)

A report on Cooperative Farming in Assam: Problems and Prospects was published by the Agro-Economic Research Centre for Northeast India in 1969 under the direction of P.C. Goswami²⁴. It estimated that by the end of June 1961, i.e., the end of the second Five-Year Plan, there were 200 cooperative farming societies in Assam. It is essential to highlight cooperative farming in Assam as various cooperative societies were formed for the explicit

²³ Gaon Sabha in Assamese language refer to assembly of all people of a village or villages.

²⁴ Policies on Cooperative farming at the central and state level was implemented on the recommendation of various committees and reforms. Some of these committees are the Congress Agrarian Reform under the leadership of J.C Kumarrappa (1947), the Report of the Panel on Land Reform under the chairmanship of Shri Gulazarilal Nanda (1956), and The Nagpur Session of the All India Congress Committee (1959) stated that “the future agrarian pattern should be that of cooperative farming in which land will be pooled for joint cultivation, farmers continuing to retain their property rights and getting share from the net produce in proportion to their Land” (Goswami, 1969). One of the landmark recommendations was made by the Working Group on Cooperative Farming under the chairmanship of Shri S Nijalingappa, under the direction of the Ministry of Community Development and Cooperation under Government of India. The working group recommended four different types of cooperative farming societies. These are:

- Cooperative Better Farming Society: It introduces new farm techniques and types of machinery, joint purchases, and services without affecting farmer's holding and farming.
- Cooperative Joint Farming Society: pooling together of farmers and land for cultivation, but farmers are not required to pool the entire holding area. Output is distributed according to labour input and land contribution.
- Cooperative Tenant farming societies: The Society takes land from the government or landlord and distributes it to tenants. Society acts as an intermediary between the tenant and the land owner (whoever owns the land).
- Cooperative Collective Farming Society: The Society takes land leased from the government, and the output is distributed according to individual's input.

purpose of cooperative farming, and many existing cooperatives were also involved in these activities.

Assam agriculture was subsistence in nature in 1960s. This was due to inadequate and uneconomic land holding of large majority of farmers and low-income level of farmers. Cooperative farming paved a way to alternate agrarian system. Although cooperative farming in Assam was not a new phenomenon, tracing its origin is quite difficult. The cooperative farming among small and landless farmers got impetus due to land ceiling in Assam (Fixation of ceiling Act 1956) and resettlement of government waste land.

As a policy implemented by the state government and in line with the National Cooperative Farming Advisory Board, the state government established a state cooperative farming advisory board. State advisory Board under the state government advised to form cooperative farming committee in each block of a district with the president of Anchalik Panchayat²⁵ as the Chairman and the Block Development officer as secretary. Thus, the state policy reflected decentralized administration for the establishment of cooperative farming societies at grassroot level with the involvement of local government (Goswami, 1969).

Table 1.4 Number of Cooperative Farming Societies, 1963

<i>District</i>	<i>Number of Collective cooperative farming society</i>	<i>Member of collective cooperative farming society</i>	<i>Number of joint cooperative farming society</i>	<i>Member of joint cooperative farming societies</i>
Darrang	26	1297	1	15
Sibsagar	64	2502	5	358
Nowgong*	31	1626	2	66
Lakhmipur	33	916	0	0
Cachar	8	429	0	0
United K & J* Hills	1	20	0	0
Goalpara	6	213	0	0

²⁵ A group of Gaon Panchayats form Anchalik Panchayat; hence, it is higher level of Gaon Panchayat.

Kamrup	28	1376	0	0
Total	197	8379	8	439

Source: Cooperative Farming in Assam: Problems and Prospects published by Agro Economic Research Centre for Northeast India, Assam in 1969

Note-* Nowgong is the old name of Nagaon, United K & J (United Khasi & Jaintia Hills) is in present day Meghalaya.

Despite government initiatives, cooperative farming did not grow in Assam. One of the reasons for its decline was the requirement of compulsory pooling of all land into societies which made people hesitant to be members. Other reasons for the downfall of cooperative farming were improper maintenance of accounts, low productivity and limited use of modern farm inputs (Goswami et al 1969).

In 1973, the cooperative movement in Assam went through reformation by forming Gaon Panchayat Sambai Samiti (GPSS), a village level consumer cooperative society serving various purposes like provision of credit, and marketing of agricultural commodities to the village people. In 1975, to link the activities of consumer cooperatives, agricultural marketing cooperatives, processing cooperatives and their trading needs, Assam Apex Cooperative Marketing Society Ltd was incorporated into Assam State Cooperative Marketing and Consumer's Federation, known as STATFED. STATFED was responsible for procuring and distributing food grains and other essential commodities from surplus areas to deficit areas. STATFED was also given the responsibility to link with GPSS to maintain balance of producers and consumers interests (Das, 1989). STATFED became as agent of the state Public Distribution System. Also in 1965, FCI was established, both FCI and STATFED became agent of state government for public distribution system, procuring foodgrains in distinct areas and producers. While STAFED procured through cooperatives for state account, FCI procured through private traders for the central pool. This setup in procurement of foodgrains eliminated

almost all individual agents between producer and consumers in Assam. Other items procured by STATFED were tea, and jute.

Deka (1984) assessed the performance of PACS from secondary data. He observed from period 1951-52 to 1973-72, performance of Assam's PACS was far behind than rest of India. By 1973-74, loans issued by PACS were the lowest in India. However, regarding loan issue through PACS in Assam, it was observed that more than 50 percent of loan were disbursed to those who had landholding less than 2 hectares, reflecting small landholders were getting more credit than large landholders. Nevertheless, in spite of inclusive lending, loans disbursed to tenant cultivators and agriculture labourers accounted to be very small (accounted a total of Rs. 1 lakh only in 1973-74).

1.6 Formation of Gaon Panchayat Samabai Samiti

In Assam, cooperative movement started from 1912 inspired by the country wide cooperative movement which had started since 1904. In the first phase, there were a few loan grant committees in Assam. In 1920, for the first time a mouza-level (revenue unit constituted of number of villages) society was established in Bholaguri for Kaliabor. In 1966, the area of operation of the society shrank, because many gaon-sabha level committees came into existence. In 1973 again, cooperative societies were reorganised. Gaon-Sabha committee were abolished. Uniting a number of Gaon-Sabhas a society at the Gaon Panchayat level was constituted.

From the handwritten autobiography of a school teacher instrumental in setting up Bholaguri Satra Samabai Samiti in Kaliabor, Nagaon district, Assam, cited in Bhattacharyya (1990).

With the onset of the green revolution in India, tremendous efforts from the government through agricultural policies, scientific inputs, and social and economic inputs were implemented to make the country self-sufficient in agriculture production. New Agricultural strategies were implemented from 1966-67. The strategies were based on the modernization of

agriculture by adopting science and technology methods for agriculture development. The medium and bigger farmers who had more or enough required resources could reap the benefits of the new agriculture strategies. The small and marginal farmers and agricultural labourers were left out of these strategies (Government of India, 1976).

In order to share the benefits of the modernization of agriculture, the small and marginal farmers and agricultural laborers must be provided with the requisite resources. Thus, integrated credit service was the utmost step in addressing such requisite resources. Therefore, the concept of the Farmer's Service Society (FSS) was introduced²⁶. The Farmer Service Society was an organization of 10-11 members of farmers registered under the Cooperative Societies Act. FSS would supply credit from affiliated banks. These banks can be cooperative banks or commercial banks (Dutta, 1991.)

Subsequently, a report titled Review of Agricultural Development and Cooperative Credit in Assam 1961-1976 published by RBI in 1978, stated that between 1961-1976, PACS and Cooperative Credit Banks were crippled due to increasing overdue. The cooperative movement along with PACS was in a state of disarray compared to other parts of India. Only 11 percent of cultivators in Assam relied on cooperatives. About 64 percent of cultivators relied on non-institutional money lenders. Although during this period, cooperative credit covered 85 percent of rural areas but the disbursements were insignificant. Only 21 percent of cultivators took credit from PACS, and only 10 percent of 3,062 societies could provide credit. The Assam State Cooperative Bank had the highest share of overdue in the country as a whole. Due to overdue of Central Cooperative Banks, Central Cooperative Banks merged with the Assam State Cooperative Bank. The reason behind such overdue was devastating floods and wilful default. By 30 June 1972, 3,062 PACS in Assam became dormant. A master plan was suggested to the

²⁶ As per Report on National commission of Agriculture, 1976, Part XII Supporting Services and Incentives.

state government by the RBI to replace dormant PACS with new societies organized along the lines of the Farmer Service Societies. However, the Government of Assam set up new societies within the area of operation coterminous with a Gaon Panchayat. In 1972, following the recommendation of the National Commission on Agriculture and in the line of Farmer's Service Societies, and also restructure base-level societies and improve the viability of PACS, the RBI and Government of Assam merged Krishi Sahayak Samabai Samiti, dormant PACS and other Gaon Panchayat Samabai Samiti were liquidated into Gaon Panchayat Samabai Samiti (GPSS). GPSS were also brought under the 'Single Window' approach by the leadership of the former chief minister of Assam Sarat Chandra Singha. This approach aimed to facilitate farmers in accessing agricultural credit and essential commodities through Gaon Panchayat Samabai Samiti (GPSS). The state government subsidized the cost of management of the societies for maintenance of staff, godowns and salesman. 664 PACS were newly formed under the state government initiative and the dormant PACS were either liquidated or given time to recover their overdue. By 30 June 1977, 1757 societies were established. During this period, 388 out of 664 PACS were transferred to commercial banks.

Under the recommendation of the Talwar committee (1975), commercial banks became the sole institutional agencies to advance loans to farmers either directly or through PACS. The overdue of short-term loans rose from 86 percent to 97 percent from 1969 to 1972.

Apart from the credit activities of PACS, a report titled Study on the Gaon Panchayat Level Cooperative Societies in Assam published by the Directorate of Evaluation and Monitoring Planning and Development department, the State Government of Assam in 1976 cited many shortcomings of GPSS. This report carried out case studies of three GPSS in Assam. Based on the report, it was found that GPSS were not maintaining their byelaws, and the assistant registrar was incapable of supervising the societies due to huge volume of work. Additionally,

GPSS in Sivasagar district was incurring huge expense in transporting essential commodities. A case study in Karimganj district showed that villagers were unaware of credit facilities offered by such societies.

S. K. Dutta (1991) conducted an elaborate study on the functioning of GPSS in Assam. His study highlights that the GPSS authorize activities like the supply of agriculture credit, small-scale, cottage and industrial inputs, distribution of products or goods for mass consumption under the Public Distribution System. The nomenclature GPSS came into use from 1973, and they were earlier known as Krishi Sahayak Samabai Samiti. Initially, the GPSS were mainly planned for the plain areas of Assam. It is in 1970s, that there were political rallies favouring expanding state intervention in other areas.

However, amidst all the intricacies, the GPSS in Assam became a platform for supplying the essential commodities under the Public Distribution System which it continues till date. GPSS operate in plain areas of Assam. In hilly areas of Assam, Large Sized Multipurpose Societies carried out their activities. The dissertation is focused only on GPSS which are PACS. There are 808 GPSS which are PACS in Assam and 1437 GPSS which are not PACS. A total of 2245 GPSS are present in Assam, as updated in 2022.

1.7 Conceptual Framework to Analyse Cooperatives

The thesis evaluates village-level cooperative credit societies, focusing on whether the societies are successful in reaching their goals. Literature on cooperative societies, especially on dairy cooperatives and PACS, has been extensively studied in western India. To understand why some cooperatives in this region are more successful compared to those in the rest of India, scholars have examined the factors contributing to both successful and unsuccessful cooperatives.

Scholar like Baviskar (1968, 1987, 1988 & 2007), Attwood (1987 & 1988), and Shah (1995) have provided their respective assessments regarding the reasons for successful and unsuccessful cooperatives in this region. Shah (1995) explained various schools of thought when analysing success stories of cooperatives, such as the 'leader-manager school', the 'cooperative principles school', and the 'domain-context school'. Leader-manager school attributes the success of exceptional cooperatives to outstanding leaders or managers. Cooperative principles school evaluates successful cooperatives based on their adherence to the principles of cooperatives set by the International Cooperative Alliance. The domain-context school argues that a cooperative society's success depends on the attitudes and behaviours of its actors—members, managers, leaders, etc.—which are governed by the peculiar features of the domain within which the cooperative operates.

Tushar Shah emphasized the domain-context school of thought as the most appropriate approach to studying cooperatives in the Indian context. The method implied in domain-context school is quasi-positive method, where researchers compare “exemplars” with other subject, questioning what and how. In this school of thought, Baviskar and Attwood (1988) attribute the success of cooperatives in the western region to the assessment of local culture, the presence of a homogenous group (upper middle peasantry class), and the dynamics of the political scenario. Their work brought forth significant research at the village level in India; however, it did not provide practical guidelines for successful cooperatives beyond the western region (Shah, 1995).

Therefore, Tushaar Shah in his book titled *Making Farmers' Cooperative Work* (1995) presented his conceptual framework based on how efficiently cooperative reaches their purposes which are central to its members, and how well the cooperatives are designed to achieve these purposes. Shah conducted an extensive survey of 100 village-level cooperatives

across Tamil Nadu, Kerala, Andhra Pradesh, Uttar Pradesh, Rajasthan, Madhya Pradesh and Gujarat.

A successful cooperative depends upon whether a cooperative society is able to attain 'salience' or not. Whether a cooperative is salient depends whether the society behaves as Captive Decision Unit (CDU) or Self-Contained Decision Unit (SDU). A CDU is defined as a society where the objectives are undetermined, operating as life-less appendages of the government or their federal structure. A SDU is a society that has acquired power to pursue its own goal. A society's status as an SDU, is measured through "centrality" which refers to how member perceived the performance of the society by patronizing the societies and making it to the central. Centrality is determined by patronage centrality, member centrality and domain centrality²⁷.

The performance of cooperatives is based on the objectives of cooperatives and motives of members i.e. the centrality depending upon the five subsystems consist of the nature of governance structure, extend of critical linkage, presence of microenvironment, responsiveness to patronage system and operative system²⁸. He applied the interactive outcomes of the workings of each of its five subsystems. This is because any outstanding performance in one or more subsystems will bring 'upward ratchets (positive adjustments or improvements in the overall system due to outstanding performance in one or more subsystems)', whereas abysmal

²⁷ Shah (1995) defined Patronage centrality as the share enjoyed by the cooperatives in the lines of businesses which it competes with other channels within the domain. Member centrality is defined as the relative importance enjoyed by the cooperative in the household economies of its members. Domain centrality is defined as an indicator of the relative quantitative significance of a cooperative and its business in the total economy of its domain.

²⁸ Shah (1995) explained five subsystems in assessing a cooperative to be salient or not. These are 'governance structure', 'critical linkages', 'micro environment', 'patronage system' and 'operating system'. Governance structure is determined by Internality of locus of control and patronage cohesiveness. Critical linkage is determined by competitive advantages and performance demand and support. Microenvironment is determined by intensity of competition, and selective insularity. Patronage system is determined by centrality potential. Operative system is determined by patronage responsiveness and integrity of member cooperative relation.

performance in any one subsystem would bring ‘downward ratchets’ (negative adjustments or deteriorations in the overall system due to poor performance in any one subsystem).

The thesis attempts to evaluate 40 GPSS-PACS based on this conceptual framework by assessing the narratives of 40 GPSS-PACS. The study analyses the narratives concerning the five subsystems: governance structure, critical linkage, microenvironment, patronage system, and operative system in the attainment of centrality. As a result, the analysis will determine if GPSS-PACS is CDU or SDU

1.8 Justification of the Study

The GPSS-PACS serve as multipurpose societies engaging in various activities such as credit supply, procurement, production, distribution, and marketing of agricultural produce in Assam. GPSS-PACS function as formal credit institutions have the most extensive reach among the rural population in Assam. Furthermore, GPSS-PACS play a crucial role in the supply management of the Public Distribution System, establishing their significant importance at the village community level in Assam.

The historical context of cooperative societies in India and the present scenario of Primary Agricultural Credit Societies (PACS) in India and Assam highlights the substantial role of PACS in extending credit facilities to rural masses.

The contemporary literature on GPSS in Assam is limited. Additionally, post-2000s agriculture credit has increased at the national level; scholars such as Chavan (2007) have argued that such an increase in agriculture credit does not necessarily mean equitable distribution of credit among beneficiaries. There is an indication of inequalities in the distribution of credit among rural populations. Notably, there is a side-lining of small and marginal farmers or non-corporate farms in accessing rural credit. In contrast, corporate farms or agri-related industries have

greater access to credit. The research objectives and questions for the thesis are framed in the context outlined above.

1.9 Research Objectives & Questions

Research objective 1: To study the evolution of village-level credit cooperatives in Assam, post rural credit reforms of the 1990s

Research question 1.1: What are the changes that have occurred at the organizational level among GPSS-PACS in Assam?

Research question 1.2: What are the types and volumes of credit and non-credit businesses undertaken by the GPSS-PACS?

Research question 1.3: Are the credit activities of GPSS-PACS financially viable? Are there any efforts towards revival?

Research objective 2: To study the role of village-level credit cooperatives in the supply management of PDS commodities in Assam.

Research question 2.1: Assam follows a 2-tier system of credit cooperatives, state-level cooperative banks, and GPSS. The district-level cooperative banks are absent. Moreover, Assam undertakes essential commodities distribution through rural cooperatives without a Civil Supplies Corporation. So then, how do the village level cooperatives, particularly the GPSS-PACS, coordinate their supply management activities with the state government?

Research question 2.2: Are essential commodities distributed through GPSS-PACS financially viable in Assam?

1.10 Methodology

The discipline of social science aims at producing knowledge on which decisions can be made. The methods employed may range from descriptive studies, exploratory studies, explanatory studies, interpretative studies, applied and action-oriented studies (Mikkelsen, 2005, p. 125). In recent decades, evidence-based research has taken centre stage. Qualitative research is one of the significant ways in which evidence can emerge, particularly if variables are unknown (Flick, 2014). This thesis is of an interdisciplinary nature and explores the research questions through case studies and interpretation.

This thesis explores the evolution of credit cooperative societies in Assam, and therefore, a case study method is the best suited approach. Case study approach means conducting an empirical investigation of a contemporary phenomenon within its natural context using multiple sources of evidence (Yin, 2003). Case oriented research is also used to understand the facts rather than predicting (Ragin, 1999). The fundamental question that we tried to answer is why GPSS-PACS are failing in Assam. We have analysis of secondary data as well based on published reports of the Reserve Bank of India, various news reports, court cases, and extant literature to understand the institutional and financial arrangements of Gaon Panchayat Credit Cooperative Societies. To understand the ground level functioning a census enumeration of all the 40 Gaon Panchayat Credit Cooperative Societies was carried out, which are operational in the Kamrup and Kamrup Metropolitan districts as per records. A semi-structured schedule was prepared for interviewees to capture objective and subjective questions. Respondents were the members of the managing committee of the societies. Out of 40 respondents 32 are secretary, four are president, three are office assistants, one was office in charge. When visiting GPSS-PACS offices, the usual respondents were the secretaries, who were mostly present. However, in the president's presence, I observed that the president came forward to conduct the interview.

In cases where the secretary and the president were absent, either the office assistant or the office in charge gave the interview.

It is to be noted here that a personal interview with a GPSS in Kamrup district and telephonic interviews were conducted with 6 GPSS in six districts of Assam, to understand the basic nature of activities of GPSS in Assam. Since the literature on GPSS was limited and there was a prevailing lockdown due to Covid-19 Pandemic, a pilot study based on telephonic interviews were conducted before conducting case studies in the Kamrup and Kamrup Metropolitan districts. The six districts were randomly selected, however, the GPSS in each district were selected by a snowball sampling method. Out of six GPSS, 2 informed they operated as PACS, 3 GPSS provided details of their credit activities, and 3 GPSS dealt only with PDS. The details of personal interview and telephonic interviews are in Appendix A1.1 and A1.2

Chapter 2 Rural Credit Scenario in Assam: 1970 - Present

This chapter examines the flow of rural credit in Assam concerning the PACS. We also focus on rural credit growth in Assam vis-à-vis agricultural progress and overall rural development in the post-economic liberalization phase. There is scant literature on the performance of rural credit in Assam in the most recent years. For this analysis, we have relied on the following sources: Agricultural Censuses published by the Ministry of Agriculture and Farmers Welfare, Reserve Bank of India, National Statistics Office (NSO) or National Sample Survey Organisation (NSSO), and the State Level Banker's Committee.

Meyer (2011) defined *rural finance* as a broader category that provides financial services to rural households for farm and non-farm activities. Following Meyer (2011), we also use rural credit in this thesis as a broader category that includes providing credit to rural households for farm and non-farm activities. Agriculture credit means credit provided for agriculture and agri-allied activities ranging from input supplies to marketing.

This chapter has three sections. The first section discusses indebtedness among rural households of Assam. The second section examines the status of the supply of rural credit in Assam. The third section examines the spread of institutional credit for agriculture in Assam vis-à-vis India. We focus on agricultural credit as the vehicle of disbursement of such loans in Assam through the GPSS-PACS which is the core of this thesis.

Data on household indebtedness in India is available primarily from the All-India Debt and Investment Surveys (AIDIS) presently conducted by the NSO/NSSO. The RBI conducted the first two rounds of AIDIS after which the NSSO took over. Accordingly, the AIDIS reports are available for 1951-52 and 1961-62 published by the RBI and later for 1971-72, 1981-82, 1991-

92, 2002-03, January to December 2013, and January to December 2019 published by the NSO.

So far there have been eight rounds of the AIDIS.²⁹

2.1 Indebtedness among Rural Households of Assam

Indebtedness among rural households is one of the structural features of India's rural economy. For a large part of the post-independence years, high levels of indebtedness among rural households were mainly a result of informal institutions such as moneylending that charged usurious interest rates. The situation in Assam was similar to the rest of India, which saw the emergence of different types of moneylenders from pre-independence until now (Saikia, 2010). Although the spread of formal credit institutions has been much lower in Assam, non-repayment of dues is a recurrent phenomenon. For example, in 1970, Assam was reported to have the highest overdue with PACS compared to the rest of India (*Review of Agricultural Development and Cooperative Credit in Assam, AIDIS 1971-72*). Thus, rural households' indebtedness in Assam was high due to informal moneylending and the borrowers' inability to repay loans.

The NSS 59th round (2003) showed that the incidence of indebtedness (IoI)³⁰ in Assam was 8 percent, one of the lowest in the country. The IoI at all India level increased steadily from 20 percent in 1981 to 27 percent in 2002-03. In a relative sense, IoI in rural Assam also increased, but the levels were low compared to other states. For example, in 1991, the average amount of outstanding debt among rural households in Assam was Rs. 254 and the all-India average was Rs. 1906. In 2002-03, the AoD of a rural household in Assam was Rs. 643 compared to Rs.

²⁹ The first round was conducted in 1951-52, published in 1954; second round conducted in 1961-62 and published in 1963; third round conducted in 1971-72 and published in 1977; fourth round conducted in 1981-82 and published in 1987; fifth round conducted in 1991-92 and published in 1998; sixth conducted in 2002-03 and published in 2005; seventh round conducted in 2013 and published in 2014; and the eighth round conducted in 2019 and published in 2021.

³⁰ IOI- Incidence of indebtedness which means the percentage of indebted household

7539 in all-India level. In 2019, a rural household in Assam had cash borrowing of Rs. 16,000 compared to Rs. 59,748 at the all-India level. Among all formal credit agencies, cooperatives supplied the lowest volume of credit in Assam. The following table shows the difference in rural indebtedness among rural households in Assam versus India.

Table 2.1 Percentage of Incidence of Indebtedness of Rural households in Assam versus India, 1971-72 to 2019

Year	1971-72	1981-82	1991-92	2002-03	2012-13	2019
IOI (%) in Assam	27	5	6	8	10.07	19.2
IOI (%) in India	42.8	20	23.65	26.5	31.44	35
AOD (In Rupees) in Assam	199*	557*	254	643	5256	16000
AOD (In Rupees) in India	500	661	1906	7539	32522	59748

Source: NSS 50th and 59th Round report (2003), NSS 70th round report (2013) and NSS 77th round report.

Note- *denotes total amount of borrowing by rural household, in those two amounts of average debt was not estimated.

In the 1970s, one of the successes of credit policies and reforms of the Government of India was replacing non-institutional credit with institutional credit. However, while the expansion of institutional credit took place, loan outstanding also increased. For example, in India, between 1971-2002, loans outstanding due to institutional credit grew from 29 percent to 57 percent, and due to non-institutional credit dropped from 71percent to 43 percent (Pradhan, 2013). In Assam, loans outstanding due to institutional credit grew from 35 percent to 58 percent during the same period, and those due to non-institutional credit dropped from 65 percent to 42percent.

Studies have shown that farming households in agriculturally advanced states have a higher incidence and extent of indebtedness. Between 1991-92 and 2002-03, (Narayanamoorthy & Kalamkar, 2005) showed that the incidence and extent of indebtedness increased in all Indian states. Among 17 major Indian states, they highlighted Assam as the state showing the lowest incidence and extent of indebtedness. However, Assam's relatively low levels of indebtedness

were associated with a low supply of agricultural credit. Further, they categorised all 17 states into two groups: agriculturally less developed and more developed. Agriculturally less developed states showed a lower incidence of indebtedness. Their study highlighted that various socio-economic factors influence the reasons for indebtedness among farming households.

Contrary to the widespread assumption that indebtedness in agriculturally less developed states is due to low agricultural productivity or low repaying capacity, low credit supply is a significant determining factor. Similarly, (Khan et al., 2007) show that Assam had the lowest agricultural credit per hectare from 1980-2002 compared to the rest of India. (Narayanan, 2016) showed negative credit elasticity of agricultural GDP for Assam from 1995 to 2011.

The 2003 AIDIS report showed that in Assam commercial banks were the largest source of credit, followed by friends and relatives, and other banks. Assam had one of the lowest average outstanding debts (AoD) per household. Assam also reported a much lower average amount of borrowings than the rest of India. Between 1971-72 and 2002-03, the percentage of households reporting cash borrowings in rural Assam did not change significantly. However, institutional cash borrowings had doubled between 1981-82 and 2002-03.

Table 2.2 Percentage of Incidence of Borrowing in Assam, various years

Year	1971-1972	1981-82	1991-92	2002-2003
Incidence of Overall Cash Borrowings ³¹ (%)	11.0	4.8	11.1	12
Cash borrowings from institutional (%)	-*	22.6	44.7	46.5

Source: NSS 50th round (1992-93) and 59th round (2003), NSS 70th round report (2013)

Note-* Data was not provided.

³¹ IOB- Incidence of borrowing is the number of households borrowed cash.

2.1.1 Source of Indebtedness

The NSS 77th round (2019) estimated the Gini coefficient for average per capita asset value and ranked rural Assam 34th among 36 states (28 states and 8 union territories). Rural Assam was highlighted as experiencing asset inequality higher than the national average. However, the overall debt to assets ratio in Assam was much lower at 2.3 percent. The amount of debt per household was also lower (1.6%) compared to the rest of rural India. The 2019 survey also found higher IoI among cultivator households (22.5% compared to 15.6% among non-cultivator households). Overall, the IOI in rural Assam was 19.2 percent.

By sources of credit, the IoI from institutional sources (banks, cooperatives, SHGs) were higher among both cultivator and non-cultivator households.³² Among cultivator households, the highest borrowings were from commercial banks (11.4%), followed by bank-linked self-help groups/joint liability groups (SHG/JLG) (3.1%), non-bank financial companies (NBFC) including microfinance institutions (2%), and Regional Rural Bank (1.8%). In the case of non-formal credit institutions, the major sources are friends and relatives (1.6%), followed by professional money lenders (0.9%). Friends and relatives as a source of borrowing are preferred over even cooperative banks (0.1%) and cooperative societies (0%).

Non-cultivators in rural Assam borrowed the highest from commercial banks (7.8%), NBFC including microfinance (2.3%), followed by bank-linked SHG/JLG, Regional Rural Banks (0.9%), cooperative societies (0.7%) and cooperative banks (0.3%). Whereas, in the case of

³² It is to highlight that AIDIS provide data on formal institutions and non-formal institution based on household debt that is outstanding credit (Chavan, 2012). Therefore, in this data on outstanding credit was undertaken.

non-formal credit institutions, the major sources for borrowing are friends & relatives (0.7%) followed by professional money lenders (0.3%)³³.

By 2019, Cooperatives did not appear as a source of credit for cultivator households in Assam. Some borrowings by non-cultivators were observed. Commercial banks were the biggest source of lending to rural households, followed by SHGs and microfinance institutions. Let us now turn to the issue of the supply of rural credit in Assam.

2.2 Cooperatives and Supply of Rural Credit in Assam

In Chapter 1 we have seen that the growth of formal rural credit in Assam has been slow and gradual. In fact, immediately after India's independence, government rural credit disbursal actually saw a decline. For example, Deka (1984) observes that during 1952-1962 role of state government in rural credit disbursal was decimated. It came down from 6.2 percent in 1951-1952 to 4.5 percent in 1961-1962. Further, the credit requirement for agriculture was barely met, accounting for only 7.2 percent of the estimated production requirement.

In 1959, the government of Assam decided to channel all the Taccavi³⁴ loans for production purposes through cooperatives. Thus, cooperatives were given primacy in rural credit supply to agriculture. The interest rate at which the government disbursed Taccavi loans to PACS through Apex Cooperative Bank was 4.5 percent, which in turn disbursed loans to beneficiaries at a 7.5 percent interest rate per annum to the ultimate lenders. 7.5 percent interest rate was the normal economic interest rate at the time.

³³ Chavan (2012) highlighted that AIDIS provide data on debt at household levels. The data on household debt are underestimated about 46 percent in 1991-92 and 35 percent in 2002-03.

³⁴ Taccavi loan are the loans provided by government to cultivators in the time of distress

The Taccavi loans provided to poor peasants through cooperatives impacted the latter's efficiency, allegedly due to the piling up of overdue payments (Deka, 1984). The creditworthiness of cooperatives in Assam was impacted, and it received a setback in their inability to obtain future loans from the Reserve Bank of India. It is reported that poorer peasants and borrowers were not aware of the differences between cooperative loans and government loans. Cooperative loans were disbursed against the security of production or sureties whereas government loans were disbursed against the surety of land. The overdue losses incurred by the cooperatives were ultimately borne by the shareholders (Government of India, 1962). Assessing the flow of Taccavi loans in Assam, a report of the Committee on Taccavi loans and Cooperation Credit headed by B R Patel, recommended that channelising of Taccavi loans through cooperatives should be revisited and considered only after reforms of cooperative institutions. However, there was not much effective rehabilitation of cooperatives in Assam until 1974 when the existing PACS were restructured and renamed as the Gaon Panchayat Samabai Samitis (Deka, 1984).

Deka (1984) also investigated if credit flow to agriculture in Assam met the estimated requirement of production and observed wide gaps. The study highlighted the requirement of rural credit as Assam's agriculture is adversely impacted due to the unpredictability of weather conditions, small economic holdings of land, and lack of modernisation in agriculture.

Talukdar (1985) studied the efficiency and equity of farm prices received by small farmers in Kamrup District of Assam in 1982-1983. The study found that apart from market reasons such as marketing margins, cost of marketing, institutions involved in marketing, and size of land holdings, the source of borrowing and levels of indebtedness among the farmers also influenced the farm prices. Farmers who borrowed from formal credit institutions were less likely to sell to intermediaries than those who borrowed from non-formal credit institutions like

moneylender cum traders. In his study, a sample of 130 farmers who borrowed from agencies received the highest price (rupees/quintal) for paddy produced in 1982-1983. There was also an inverse relationship between the borrowing ratio of farmers and the average price of the rice they received. This means farmers with more borrowings received lower prices of paddy (Talukdar, 1985). Talukdar's study indicated the interlocked nature of the credit market with agricultural produce, in terms of the bargaining power that the moneylender cum traders held in the paddy business of Assam. It was also an indication that increasing borrowings from formal sector institutions weaken the hold of moneylender cum traders.

Purakayastha (2001) outlined a gloomy situation of rural credit in Assam. Based on NSSO, 48th Round, Report No 431 (1991-92), it was found out that the sources of loans in Assam are commercial banks (35 percent), relatives and friends (18 percent), government (18 percent) and cooperatives (8 percent). These 18 percent of "friends and relatives" has largely contributed as creditors in his study of 256 sampled households. In this study, 34 percent of the sample households had borrowed money from informal sources as against a mere 10 percent from institutional sources. This trend is quite opposite to that of national where the informal source is declining in major states.

One of the peculiar findings in his sampled region is that out of total bank loans, the percentage of bank loans (formal credit) taken by landless households was highest (47%), followed by small farmers (37%) semi-medium farmers (19%) and marginal farmers (12%). Fourteen percent of total debts by small farmers are from institutional sources other than banks and one-fourth of the total debt of semi-medium farmers was from government and cooperatives. Thus, in Assam, small farmers and marginal borrowed heavily from commercial banks than cooperatives. Purkayastha (2001) advocated for the restructuring of cooperative institutions along the lines of Bangladesh' Grameen Bank.

Pathari (2017) examined the problems of agriculture finance in Assam based on a survey of rural households. He surveyed 236 rural households in the Lakhimpur district of Assam and examined the problems of accessibility of rural credit. The study highlighted the following reasons: distance from banks, maintenance of collateral, engagement of middlemen in accessing formal credit, supervision of bank officials, credit diversion and lack of timely repayment.

Overall, it is evident that there is a low supply of rural credit in Assam. Assam is a laggard state compared to the rest of India in terms of creating rural credit supply. Post 2000s, the scenario has not changed much. Borrowing from rural cooperatives is minimal. Rural populations seek the highest credit from commercial banks. Microfinance and bank-linked SHGs have entered the rural credit market, however, we need to assess its reach. Borrowings from friends and relatives are still popular in rural Assam.

2.3 Spread of Institutional Credit to Agriculture in Assam

So, who supplied institutional credit to agriculture in Assam? We looked into the supply of credit from formal institutions for the period 1991-2017. Formal credit institutions are PACS, Commercial banks, Regional Rural Banks and Primary Land Development Banks/ State Land Development Banks. PACS has been the highest supplier of institutional credit for agriculture purposes in India from the period 1991-92 to 2016-17. The Commercial bank branches and regional banks are expanding in the share of institutional credit for agriculture purposes. Although PACS has the highest share of providing agriculture credit, the amount of short-term loans through PACS has been declining.

Assam has shown sporadic distribution of institutional credit by different agencies for agriculture purposes. Notably, in the case of PACS, we observed the share of institutional credit

decline rapidly. It has never remained as the top supplier of institutional credit as observed at the all-India level except for the year 2001-2002 when the supply of agricultural credit through PACS was the highest (48.95%) in Assam. In the same year, the share of short-term loans was highest (44.7%). Commercial Banks hold a higher share of institutional credit than regional rural banks from 2001-2012. By the end of 2016-2017, the RRBs held the highest share of institutional credit for agriculture. From Table 2.5, it can be observed that in Assam, short-term loans through PACS held the highest share (25% to 45%) of agriculture credit than medium-term or long-term loans. The low supply of medium-term loans and long-term loans also indicates that there is low modern agriculture input use in Assam

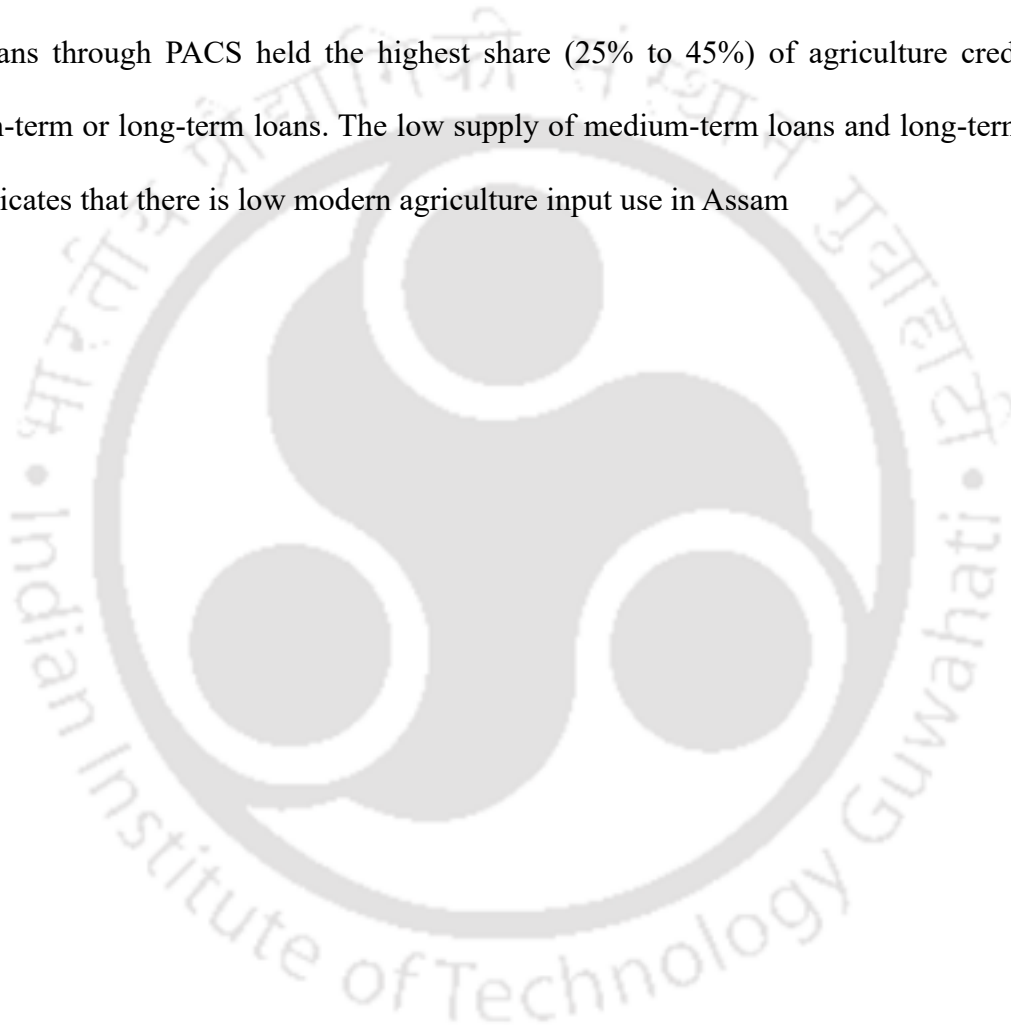


Table 2.4 Share of Institutional Credit to Agriculture, 1991-2017, India and Assam

Year	India					Assam				
	Borrowers availing institutional credit	PACS	PLDB/SLDB	CBB	RRB	Borrowers availing institutional credit	PACS	PLDB/SLDB	CBB	RRB
1991-1992	17.25	52.05	0	28.17	18.87	0.95	20.85	0	54.16	20.85
1996-1997	13.40	64.67	6.92	18.18	16.43	0.037	0	1.02	48.97	51.02
2001-2002	20.23	66.49	8.76	11.99	17.52	2.46	48.95	9.27	25.12	16.70
2006-2007	25.01	48.66	3.85	25.42	25.05	2.80	6.03	7.81	59.79	26.57
2011-2012	34.48	45.62	3.67	39.27	16.15	7.63	32.31	17.76	40.24	20.31
2016-2017	39.04	50.44	3.96	32.23	21.08	7.61	21.33	14.26	23.19	40.43

Source: Input Survey, 1992-93, 1996-97, 2001-02, 2006-07, 2011-12, and 2016-17, Ministry of Agriculture and Farmer Welfares, Government of India, Online Available at <https://agcensus.nic.in/docris.html>

Note: PACS: Primary Agriculture Credit Societies, PLDB: Primary Land Development Bank (or branch of SLDB), SLDB: State Land Development Bank, CBB: Commercial Bank Branches and RRB: Regional Rural Bank

Table 2.5 Share of Agriculture Credit by PACS in India and Assam

Years	(Amount In Percentage)					
	Share of Short-Term Loan		Share of Medium-term Loan		Share of Long-Term Loans	
	India (I)	Assam (II)	India (III)	Assam (IV)	India (V)	Assam (VI)
1991-1992	72.38	25.23	27.74	23.50	11.66	5.52
1996-1997	71.96	0	0	0	0	0
2001-2002	66.70	44.76	21.71	0	11.93	0
2006-2007	48.71	5.89	0	0	0	0
2011-2012	47.52	34.79	0	0	0	0
2016-2017	45.39	35.35	0.019	0	0.016	0

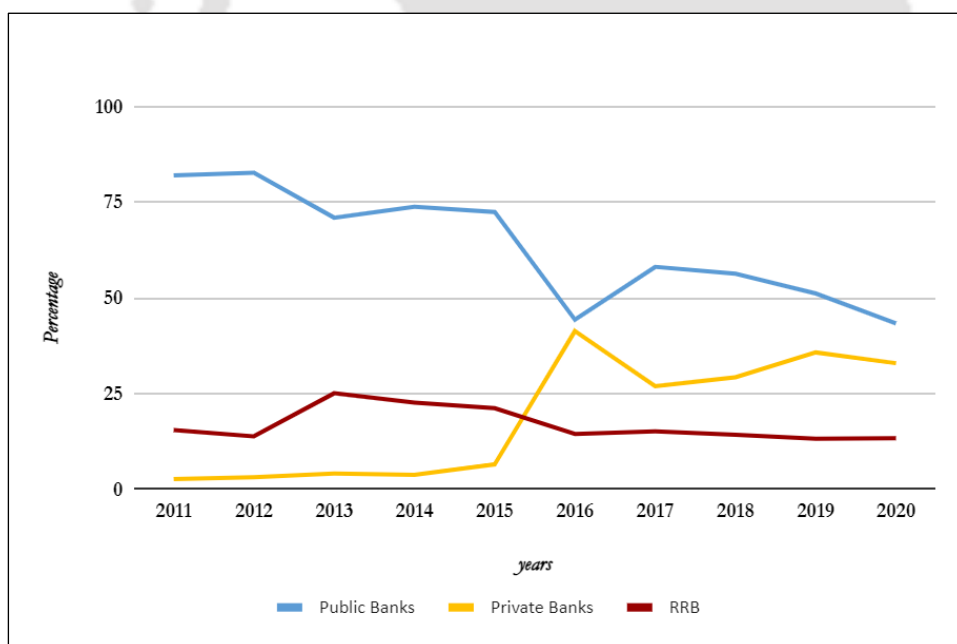
Source: Input Survey, 1992-93, 1996-97, 2001-02, 2006-07, 2011-12, and 2016-17, Ministry of Agriculture and Farmer Welfares, Government of India, Online Available at <https://agcensus.nic.in/docris.html>

Note- The data have been assessed from All India Report on Input Survey from 1991-92 to 2016-17. The report is published by the Ministry of Agriculture & Farmers Welfare. The surveys are conducted every five years. Sampling is drawn from each state of India.

To assess the spread of institutional credit to agriculture in Assam, let us look at the patterns of credit outstanding from public banks versus private banks and RRBs. Let us also look at the patterns between commercial banks versus cooperatives and RRBs.

Between 2011 and 2020, the share of outstanding credit from public banks is declining and credit outstanding to agriculture from private banks is rising. However, in terms of overall levels, public banks continue to have the highest share of outstanding credit by private banks. Similarly, outstanding credit to agriculture from RRBs is on a decline. While credit outstanding does not give us a correct picture of people's dependence on the type of banks, given the history of low repayment rates in Assam, it does inform us about where rural people go to seek rural credit.

Figure 2.1 Total Outstanding Credit to Agriculture, Public, Private and Regional Rural Banks, 2011 to 2020

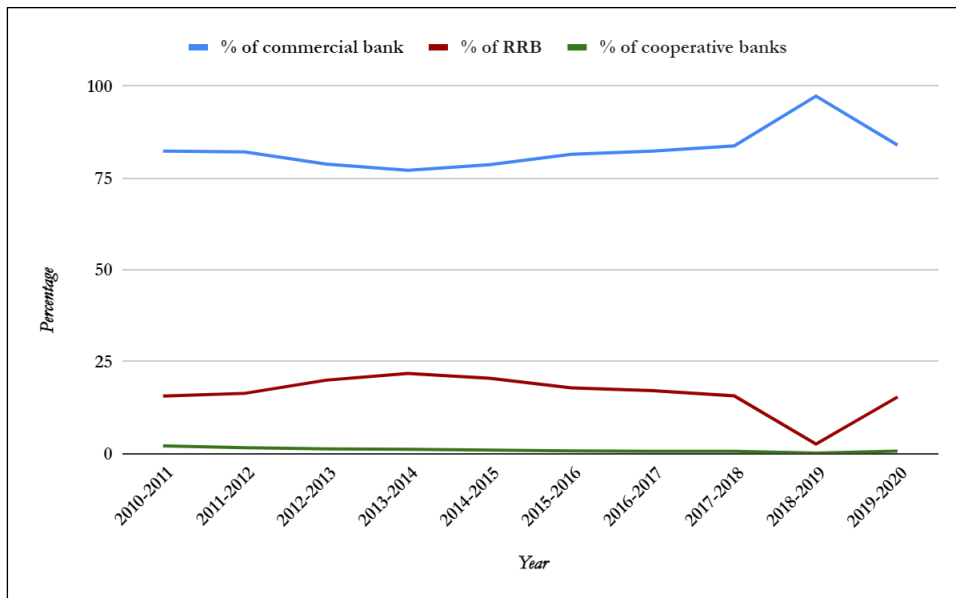


Source: Basic Statistical Returns: Credit, annual issued by RBI, 2011-March 2020

As already witnessed in the previous sections, the share of credit outstanding to agriculture in Assam is highest from commercial banks, followed by RRBs. The share of credit outstanding to agriculture from cooperatives is negligible. This is consistent with NSSO report of 70th

(2013) and 77th (2019), where rural households seeking credit from cooperative banks is the least.

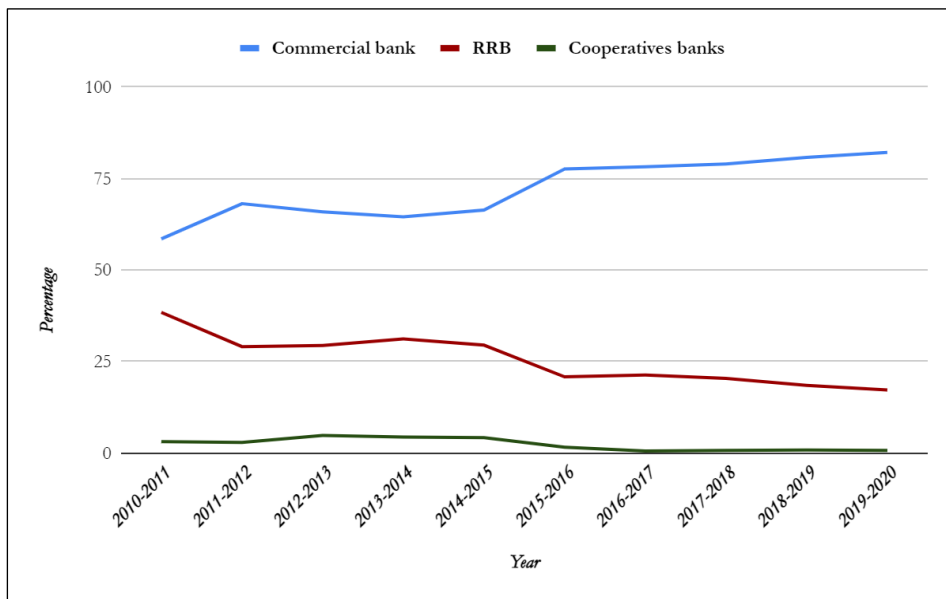
Figure 2.2 Total Outstanding Credit to Agriculture, from Commercial banks, RRBs and Cooperative Banks, Assam, 2010-11 to 2019-20



Source: Background Paper by State Level Bankers' Committee quarterly issued. Access at the website: http://slbcne.nic.in/bkg_assam_current.html

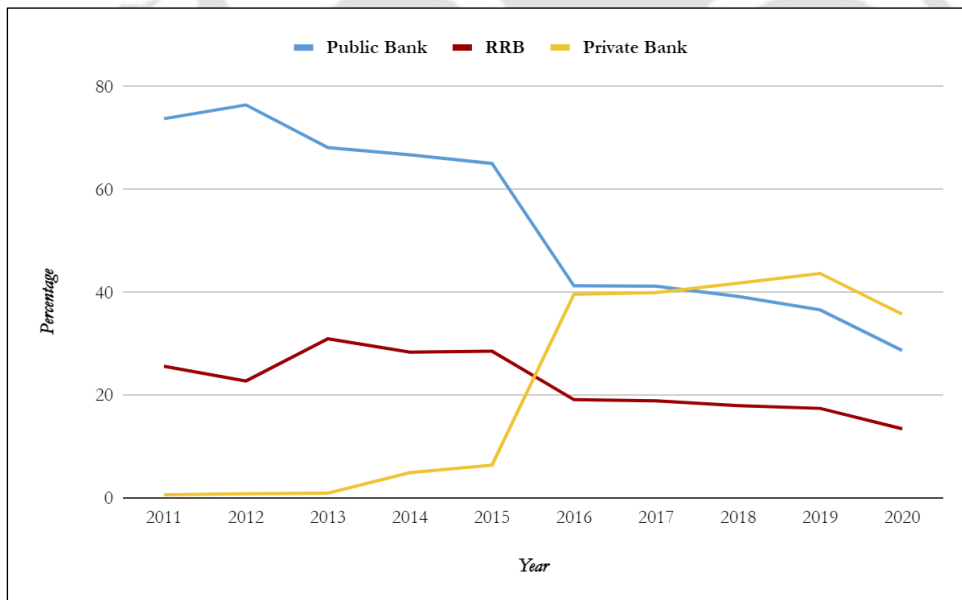
Let us also look at the number of bank accounts held to receive agriculture credit. The number of accounts held in cooperatives has crashed in the present times compared to the beginning of the decade. The number of accounts held with commercial banks dipped from 2011-12 to 2013-14, after which they rose. In the case of RRBs number of accounts held to receive agricultural loans has fluctuated in the last decade.

Figure 2.3 Total Number of Accounts for Agriculture Lending from Commercial banks,



Source: Background Paper by State Level Bankers' Committee quarterly issued.

Figure 2.4 Total Number of Account for Agriculture Lending from Public Banks, Private Banks and RRBs, Assam, 2010-2011 to 2019-2020



Source: Basic Statistical Returns: Credit, annual issued by RBI, 2011-March 2020

When commercial banks are further fragmented, the number of accounts for agriculture lending by public banks decreased from 2011-2020, whereas the number of accounts for agriculture

lending by private banks rose till 2019. After 2019, it decreased. From 2017-2020, private banks had the highest number of accounts for agriculture lending. In the case of RRB, the number of accounts for agriculture lending dipped. The pattern of RRB is consistent with the preceding pattern of RRB in Figure 2.4. During the period of 2011 to 2020, the number of accounts of agriculture lending by foreign banks was negligible compared to the other types of banks.

Compared to the all-India pattern, agriculture credit in Assam has shown a contradicting trend. Borbora and Sarma (2017) analysed the share of institutional credit source by size class of land possessed by farmer households in Assam and India during 1996-97 and 2001-02. In 1996-97, the share of PACS in providing institutional credit in Assam was zero compared to 49.1 at the national level. In 2001-2002, the share of PACS in institutional credit was 24.1 and 47.5 percent in Assam and India respectively. Of those who accessed rural credit from PACS however, the maximum was from the small and marginal land size class of households.

Thus, it is clear that agriculture credit from PACS in Assam has receded over the period of the last two decades. Moreover, in Assam, there is an increase in direct finance and a decline in indirect finance (from 24.59 percent in 1996 to 16.6 percent in 2008) which is in contrast to the national trend. Borbora and Sarma (2017) claim based on their results that inputs of agriculture are underfinanced in Assam.

Borbora and Sarma (2017) did a credit impact assessment for Assam. They regressed gross agricultural domestic product for Assam with the explanatory variables of agriculture credit per hectare, agriculture labour per hectare, cropping intensity per hectare and found that institutional credit affects agricultural product positively. They estimated that a nine percent increase in institutional credit would induce a one percent increase in agriculture GDP. Hence

more and more institutional credit to agriculture was required to increase incomes from agriculture.

Credit is crucial for agriculture and rural development and PACS is a vital platform for rural households. The contraction of agriculture credit to rural households of Assam is further aggravated due to the poor performance of PACS. The amount of loss incurred by PACS in Assam is more than the number of profits earned in 2020.

2.4 Conclusion

India witnessed a reduction in rural poverty when access to rural credit was enforced through the policies undertaken from 1969-1991 (Burgess, Wong, & Pande, 2005). The period was marked by social banking principles by nationalising 14 banks in 1969 and introducing a branch licensing policy in 1977. The period from 1969-1991 marked progress in accessing rural credit and expansion of bank branches (Burgess, Wong, & Pande, 2005; Chavan, 2005; Ramachandran & Swaminathan, 2002).

Post-1990s, Structural Adjustment Programme led banks to choose profitability over expansion in rural areas which led to reduced rural bank intensity (Chavan, 2005) and marked the entry of private banks in India. With the implementation of the Comprehensive Credit Policy of 2004 and the revival of agriculture credit in the 2000s, the increase in the volume of agriculture credit in the post-2000s can mainly be attributed to a broadening of the definition of priority sector lending. The extended priority sector included an increase in direct credit and credit to corporate farmers.

The overall flow of agriculture credit in Assam as compared to the national average is low. In this regard, PACS in Assam does not hold an appreciable volume of agriculture credit as

compared to India. Also, the volume of agriculture credit, through PACS is undersupplied from 2010 to 2020 (Report on Trend and Progress of Banking in India, RBI, various issues). Thus, there is a gap between the demand and supply of agriculture credit in Assam. We have earlier observed that both cultivators and non-cultivators have a very high share of institutional outstanding cash debt and at the same time, supply of agriculture credit shows a declining trend from 2017.

We can observe that public sector banks, such as regional rural banks, and cooperative banks which are the main rural credit institutions, are on a decline in regards to disbursement of agriculture credit. Total outstanding agricultural credit through public banks is declining from 2011 to 2020. In their place, credit outstanding from private banks has been on the rise, particularly from year 2015-2016 (Figures 2.2 and 2.4). Even in the case of the total number of accounts for agriculture lending, private banks are leading. The performance of public banks is more visible once it is segregated from commercial banks.

We also observe that total outstanding agricultural credit in Assam has been always in the range of 0.4 percent to 1.3 percent. The increase in credit disbursement and the number of accounts for agriculture through private banks can be attributed to the introduction of the Interest Subvention Scheme to private sector banks from 2013-2014 and the financial inclusion policy.

It is also observed that private banks and other non-government banks provide loans beyond their deposit ratios. For example, in the Kamrup and Kamrup Metropolitan districts, in 2020-21, the volume of loans advanced from private banks was more than the volume of rural deposits in the Kamrup district. The rural Credit Deposit Ratio³⁵ (CDR) of private banks was 164.2 percent. Such high rural CDR (518.09%) is also observed with Small Finance Bank

³⁵ Here, CDR is defined as the volume of rural credit advanced with respect to total rural deposits.

(SFB)³⁶. The rural CDR of public banks is 52.74 percent in the Kamrup district. The rural CDR of RRB is 42.65 percent and for cooperative banks, it is 6.79 percent. In the Kamrup Metropolitan district, CDR is 59.88 percent for private banks, 187.94 percent for SFB, 34.73 percent for public banks, 85.25 percent for RRBs and 49.3 percent for cooperative banks.

The Assam Cooperative Apex Bank (ACAB) is the only state cooperative bank that caters to the need for short-term agricultural credit. The ACAB looks after 519 out of the 808 PACS. The Apex Bank extends crop loans to the eligible members of such societies to boost economic conditions as well as to enhance the self-reliance of the rural masses. However, the role of ACAB in supplying rural credit is grim.

³⁶ Small Finance Banks are banks with limited financial resources and are regulated by RBI. Such banks work on the principles of microcredit and provide loans to households involved in informal sectors or poor households.

Chapter 3 GPSS-PACS in Rural Assam and Introduction to Study Area

Let us begin by highlighting that all PACS in Assam are known by the nomenclature Gaon Panchayat Samabai Samiti. However, all GPSS may not function as PACS³⁷. Therefore, we use the term GPSS-PACS in this thesis instead of only GPSS. In the thesis, we are only considering the GPSS which are PACS. We identified the GPSS-PACS for our study through discussions with the Office of Registrar of Cooperative Societies Assam, under the Department of Cooperatives, Government of Assam. The Superintendent in charge of GPSS division at the Office of Registrar of Cooperative Societies, Government of Assam, located in Khanapara, Guwahati was our primary respondent from whom we collected the details about GPSS-PACS operational in Assam as well as in rural and urban Kamrup. At the outset, we must highlight that administratively Kamrup and Kamrup Metropolitan are two separate districts in Assam. However, for the sake of convenience, we will refer to Kamrup as rural Kamrup and Kamrup Metro as urban Kamrup. District Kamrup was earlier known as Kamrup Rural. With the rapidly changing rural landscape, the term rural has been dropped and the district is now officially named Kamrup. However, Kamrup continues to be dominantly rural in terms of population composition. Kamrup Metro comprises Guwahati city and a rapidly expanding area that is slowly being modernised.

The data on consumer cooperatives in Assam is dynamic and changes at frequent intervals. The focus of our study is on GPSS that are PACS. The records of the Registrar of Cooperative Societies (RCS) in Assam are the only reliable source of information on GPSS-PACS. When I began my field work in 2021, the website of the RCS listed 2177 GPSS. However, from discussions with the Superintendent in charge of GPSS division, we came to know that many

³⁷ It is note here that all PACS are GPSS, but all GPSS are not PACS. The GPSS who were formed in 1973-74 to supply agriculture credit and essential commodities are PACS. Over the time, GPSS are formed according to their socio-economic needs of the rural community, but may not perform credit supply activities. These GPSS operated at two or more Gaon Panchayat, but they are not considered as PACS

of the GPSS are newly formed and some may be non-functional. However, the Superintendent in charge of GPSS division identified 709 GPSS as PACS which are fully functional in Assam. The Office provided a printed copy of a list of 709 GPSS sub-division wise in Assam, which was last updated in 2014. These 709 GPSS are also active in PDS distribution in the State. A few GPSS were added by 2020 taking the number of GPSS that operate as PACS to 808. In Year 2015, five new districts were demarcated in Assam. In 2021 a sixth new district was demarcated. There were 37 subdivisions as categorised for 709 PACS as per data provided by the Registrar of Cooperative Societies Assam.

Table 3.1 Number of GPSS Districts wise in Assam

<i>Sl. no.</i>	<i>District</i>	<i>Number of Present Old GPSS-PACS</i>	<i>Number of Present New GPSS</i>
1	Nalbari	22	43
2	Kamrup	33	88
3	Kamrup Metropolitan	9	30
4	Nagaon	43	130
5	Morigaon	28	57
6	Barpeta	41	88
7	Kokrajhar	30	0
8	Dhubri	27	81
9	Goalpara	22	59
10	Bongaigaon	13	47
11	Chirang	13	0
12	Baksa	24	0
13	Sonitpur	29	49
14	Darang	21	54
15	Udalguri	21	0
16	Lakhimpur	28	53
17	Karimganj	33	63
18	Cachar	39	42
19	Tinsukia	22	64
20	Dibrugarh	35	58
21	Sivasagar	22	61
22	Jorhat	29	61

23	Golaghat	40	45
24	South Salmara	13	39
25	Hojai	18	46
26	Biswanath	13	40
27	Dhemaji	14	51
28	Charaideo	11	27
29	Majuli	6	14
30	Hailakandi	16	47
31	West Karbi Anglong	20	0
32	Karbi Anglong	49	0
33	Dima Hasao	24	0
<hr/>			
	All	808	1437

Source: Assam State Cooperative Union provided the list they received from the Registrar of Cooperative Societies, Department of Cooperative, Government of Assam. The data is updated till 27th December 2022.

Since, my thesis focuses on evaluating GPSS's credit facilities and supply management activities of Public Distribution System in Kamrup, I select Kamrup and Kamrup metropolitan districts. These two subdivisions were nearest to state headquarters of Assam, meeting and interviewing stakeholders at the top of administrative hierarchy and interviewing GPSS at grass root level was useful. Out of 42 GPSS-PACS in Kamrup and Kamrup metropolitan districts, 40 GPSS were interviewed. The other two GPSS-PACS were closed due to Covid protocols and ceased to exist during the time of field study. Thus 40 GPSS-PACS are the sample on which case studies were conducted. Out of 40 interviewed GPSS-PACS, 37 GPSS-PACS were in Kamrup district (or rural Kamrup) and 3 GPSS were in Kamrup metropolitan district (or urban Kamrup). We have interviewed and recorded transactions of all the 40 GPSS-PACS in the field study

3.1 Assam

The geographical area of Assam covers around 78,438 sq. Km. Situated in the northeast region of India, Assam is landlocked with seven Indian states and two international boundaries. Assam shares boundaries with Arunachal Pradesh and Bhutan in the north; with Nagaland and Manipur to its south east; with Mizoram and Tripura to its south; to its south west with

Bangladesh and Meghalaya; and to its west with West Bengal. India's largest river Brahmaputra flows through the entire landmass of Assam. Assam is prone to flood and soil erosion and its population stands at 31.2 million which is also the largest in the northeast region of India. The population of Assam is heterogeneous in composition; with rural population 86 percent and urban population 14 percent. At present, Assam has 31 districts for administrative and revenue purposes (Economic Survey of Assam, 2023).

Assam's economy draws its incomes largely from agriculture. Rice is the major crop under cultivation as well as widely consumed. There are three types of rice cultivation. These are autumn rice, winter rice and summer rice. The total contribution of agriculture sector to Gross State Value Added (GSVA)³⁸ at current price was 26.59 percent in 2020-2021 which rose from 17.85 percent in 2018-2019. During 2020-21 the agriculture and its allied services achieved growth rate of 12.98 percent surpassing industry and service sectors. However, the largest contribution to GSVA is service sector followed by industry.

³⁸ Gross State Value Added is the measurement of the total value of goods and services produced in a state, after deducting the intermediate value of consumption (Economic Survey of Assam, 2021).
GSVA= Gross Domestic Product + Subsidies on Products – Taxes on Product

Figure 3.1 Map of Assam in India

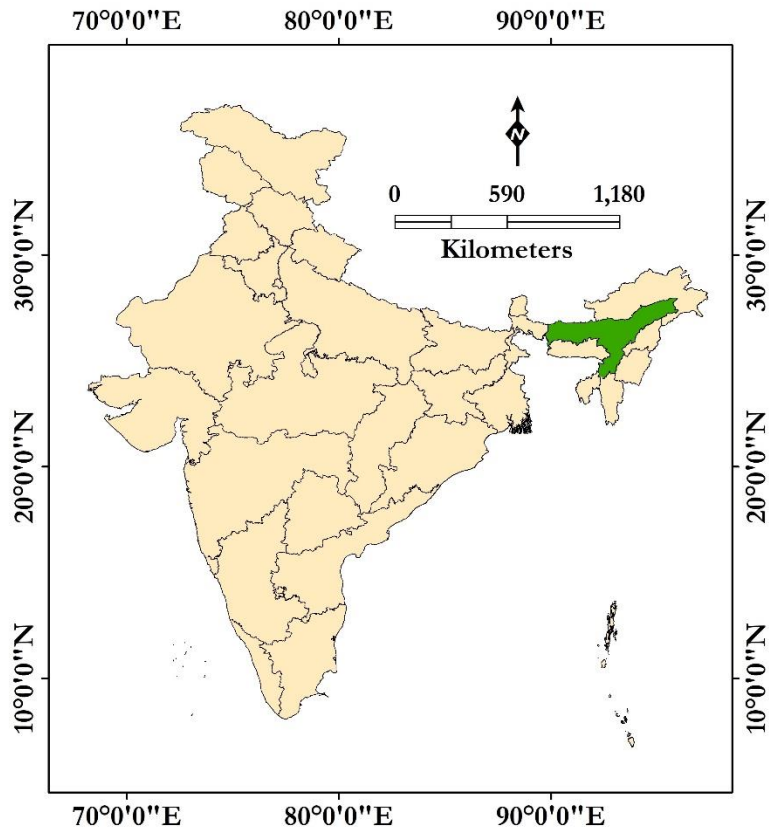
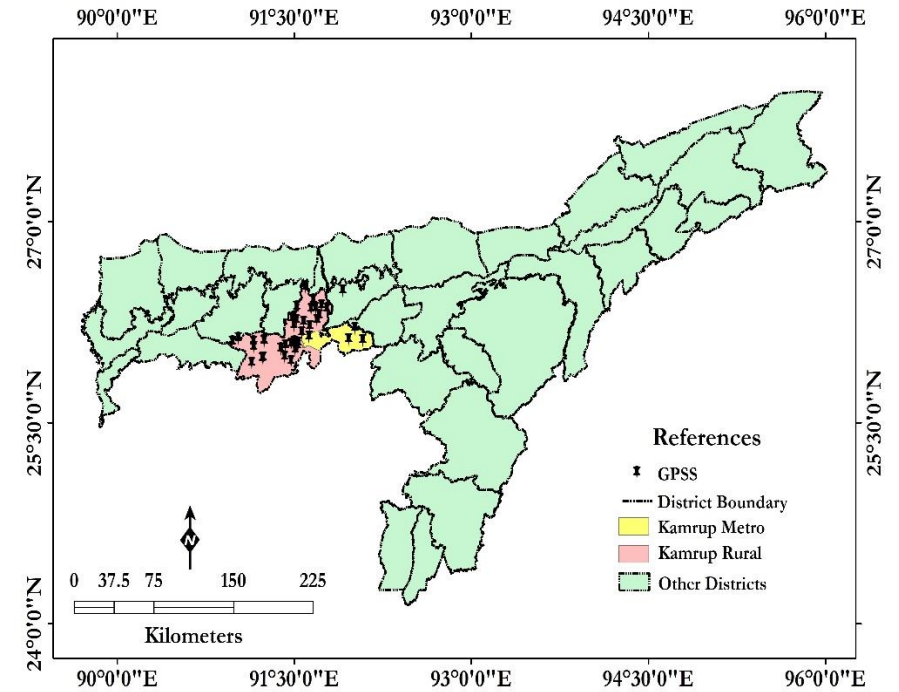


Figure 3.2 Map of Kamrup and Kamrup Metropolitan Districts



3.2 Kamrup Rural

Kamrup is the one of the oldest districts of Assam. The state administration also operates from the district of Kamrup. The district is bounded by six districts of Assam and shares boundary with one Indian state at south of the district, which is Meghalaya. Based on 2011 census, Kamrup district has population of 15,17,542 with urban population of 1,42,394 and rural population is 13,75,148. There are 1027 villages in the district. The river Brahmaputra flows across the district dividing the area into almost two equal parts (Census of India, Assam, 2014).

The district's economy is mainly agriculture. The soil is mostly alluvial, best suited for agriculture. Paddy is the major crop under cultivation. The total cropped area is 1,84,098 hectares. It yielded around 9942 kg per hectare of rice³⁹, which include summer rice, autumn rice and winter rice (Statistical Handbook of Assam, 2021). Other crops grown are matikalai (Black gram), jute, mustard seed, potato, sugarcane and red lentils. The district is also abundant with banana plantation, comprising of different varieties of banana.

Sualkuchi located in the district is widely known for silk industry in Assam for producing pat (mulberry) silk, muga silk and eri silk. Muga silk is geographically tagged to the state of Assam.

A characteristic feature of Assam's physiography is the presence of Char/Chapori or riverine areas. The Brahmaputra River creates numerous long and vast sandbars and islands called as Char or Chapori in native language. These areas are vulnerable in the sense that it often changes its areas and shapes due to floods and erosion almost every year. These areas lag in overall socio-economic development. Kamrup district has 175 Char villages comprising impoverished population. The south-west region of Kamrup constitutes riverine area.

³⁹ The yield of the rice includes the yield of both Kamrup and Kamrup Metropolitan district as mention in Statistical Handbook of Assam, published by Directorate of Economic and Statistics, under government of Assam in 2021

The district is well flourished with 11 public banks, 4 private banks, 3 small finance bank, 1 regional rural bank and 1 state cooperative bank⁴⁰. The district has total of 161 branches of commercial banks, and 19 branches of regional rural banks (Statistical Handbook of Assam, 2021).

3.3 Kamrup Metropolitan (Urban)

Kamrup metropolitan district was formed in 2002 by bifurcation of Kamrup district. Kamrup Metropolitan district is an important district for its presence of state capital and headquarters. It is also the largest city and India's gateway to the North-east. Based on Census 2011, the population of Kamrup Metropolitan district is 12,60,419 with rural population is 2, 16,927 and urban population is 10,37,011. The district covers area of 1528 Sq. Km, and has 31 municipal wards in Guwahati city. Guwahati became a municipal town in 1852 (Sarma, 2022). Kamrup Metropolitan district shares its northern boundary with river Brahmaputra. It also shares its boundaries with three district of Assam and one Indian state which is Meghalaya.

The outskirts of the district is rural area, and has 216 villages. Total cropped area is 29,541 hectares. Our studied GPSS are located on the outskirts of the district. The district has much better status in case of banking. It has 12 different public banks, 12 different private banks, 5 different small financial institute, 1 regional rural bank and 1 cooperative bank⁴¹. There are total of 432 branches of commercial banks, 16 branches of regional rural banks in the district (Statistical Handbook of Assam, 2021).

⁴⁰ The data has update till March 2021. The data was available at the www.onlineslbcne.nic.in

⁴¹ The data has update till March 2021. The data was available at the www.onlineslbcne.nic.in. However, during field work in Kamrup metropolitan district, there are presence of other types of cooperative banks which are not included in the data. For example, Gauhati Cooperative Urban Bank, Nagarik Samabai Bank.

3.4 Credit Cooperatives in Kamrup

The historical literature on credit cooperatives in Kamrup is plentiful. Earlier accounts of rural credit cooperatives can be drawn from the first report of The Assam Provincial Banking Enquiry Committee (APBEC) 1929-30. We have elaborated on this report in Chapter 1. In the province of Assam, undivided Kamrup was part of Brahmaputra valley. The district comprised three natural divisions. These were low land, Chaporis and higher belt areas. Paddy cultivation was dominant in higher belt which is locally termed as Rupit Mahal. It was densely populated and inhabited mostly by cultivators. One of the earliest developments in Kamrup was the establishment of Amingaon Railway station (situated in present Kamrup district) in 1906 by the British Indian government. The railway station connected to Calcutta via Lalmonihat (now in Bangladesh).

Guwahati (presently located in Kamrup Metropolitan district) was a significant market for inter-region trade even before the advent of British in India. Towards the end of Ahom rule, Guwahati emerged as a commercial place for Kamrup division. It became prominent for market, rise of infantry and became a hub for Marwari and Bengali traders. Kamrup division then comprised Guwahati, Barpeta, Sonapur, Rangia and Nalbari (Sarma, 2022).

The population of Kamrup district in census of 1921 was 7,62,671. During this period, accounts of presence of Marwaris as ordinary buyers of agriculture produce or as money lenders are widely documented (APBEC, 1929-30). Unlike other parts of Assam province, Kabuli Wala as money lenders were also prominent in Kamrup (APBEC, 1929-30) These accounts point to a thriving credit market in Kamrup, historically.

Cooperative societies were few in numbers. Mostly there were societies with unlimited liabilities, which indicated that majority of members were cultivators. Such societies provided loans for agriculture, land improvement and for industrial purposes. Such societies were

financed by the provincial banks during the colonial period. Batarhut Gaonliya Bank registered on 7th November 1907 was one of the earliest cooperative societies in Kamrup.

In 1927, the Kamrup Land Mortgage Bank was started. Memberships of Kamrup Land Mortgage is confined to those who had land in Kamrup. The occupational borrowers were government servants, mauzadars, merchants, cultivators and landholders (especially brahmins and Kayastha) (APBEC, 1929-30). The highest number of occupational borrowers were landholders followed by cultivators, government servants and then merchants and mauzadars. Palasbari in Kamrup during those times had well organized market for Endi and Muga cocoon. They weaved in Palasbari and sold in Gauhati⁴² bazar. Gauhati Emporium was formed by the then government to provide assured market and loans to weavers in Kamrup (APBEC, 1929-30). Thus, even before India gained independence, a sizeable network of credit cooperatives was prevalent in Kamrup. Chapters 1 and 2 have elaborated on the evolution of credit cooperatives in Assam post-independence.

3.5 Village Level Cooperative Credit Societies or GPSS-PACS

Gaon Panchayat Samabai Samitis are a multipurpose cooperative society at the village level. The objective of GPSS is to facilitate agriculture credit activities, production, marketing and sale of consumer goods with the broad aim of eradicating rural poverty and uplifting livelihood of rural masses. The GPSS are guided by eight cooperative principles as prescribed by The Assam Cooperative Act 2007 and byelaws of GPSS. By Byelaws we mean the laws amended for the Gaon Panchayat Samabai Society. According to section 9 of The Assam Cooperative Society Act 2007, a cooperative society can frame their own bye-laws. The cooperative society shall be managed in accordance with the terms, conditions and procedure specified in the byelaws.

⁴² British India nomenclature used for present day Guwahati.

The eight guiding Cooperative principles followed by the GPSS-PACS are:

- (i) **Voluntary and Open Membership:** Cooperative societies are voluntary organisations and are open to all persons irrespective of gender, social status, race, political status or religious background.
- (ii) **Democratic Member Control:** Persons serving as elected representatives are accountable to the members of the society and each member must have one vote.
- (iii) **Member Economic Participants:** The society must benefit members in proportion to their transactions with the society and support other activities as approved by the members.
- (iv) **Autonomy and Independence:** Co-operative societies are autonomous, self-help organisations controlled by its members.
- (v) **Education, Training and Information:** Co-operative societies provide education and training for their members, elected representatives, managers, and employees, so that it brings growth to their society.
- (vi) **Co-operation among Co-operatives Societies:** Co-operative societies strengthen the co-operative movement by bringing working members together at local, national, regional and international levels.
- (vii) **Concern for Community:** Co-operative societies work for the sustainable development of their community through policies approved by their members.
- (viii) **Professional Management:** Co-operative Societies need to be managed in a professional manner for all activities.

3.5.1 Operation of Area

Operation of the area by GPSS-PACS refers to the extent to which GPSS-PACS can reach rural populations. All interviewed GPSS-PACS covered 148 Gaon Panchayat (or village panchayat). According to the Gaon Panchayat demarcation, GPSS-PACS covers more than 1,024 revenue villages in the study area. On average, each GPSS-PACS covered more than 3 Gaon Panchayat

and over 25 villages. The study area comprises two districts- Kamrup and Kamrup metropolitan districts. We consider the rural population of both districts because GPSS-PACS are consolidated to serve the rural population. The rural population is 1,592,075⁴³. The total shareholder membership of 40 studied GPSS-PACS is 163,292. This implies that GPSS-PACS reach 10 percent of the rural population in the study area.

Let's consider the number of rural households in the study area⁴⁴. There is a total of 3,66,526 rural households in the study area⁴⁵. According to the byelaws of GPSS, one member from each household can be a member of the society. This means 40 studied GPSS-PACS can reach 44.55 percent of rural households, which is nearly half of the total rural households in the study area. Thus, the studied GPSS-PACS have a significant network at the village level for the supply of agriculture credit and other items.

⁴³ The total population and rural population are calculated from *Village and Town Directory, Kamrup Metropolitan*, District Census Handbook published by Directorate of Census Operations, Assam, Census of India, 2011 and *Village and Town Directory, Kamrup*, District Census Handbook published by Directorate of Census Operations, Assam, Census of India

⁴⁴ As per the Census of India 2011, for enumeration of "household," "household" is defined as a group of people living normally together and taking their meals from a common kitchen.

⁴⁵ Data is collected and calculated from the Socio-economic & Caste Census (SECC), Department of Rural Department, Ministry of Rural Development, Government of India.

Table 3.2 Profile of 40 GPSS-PACS

Sl. no.	Name of GPSS	Year established	Block (Specify if riverine area)	GPs reached	Revenue Village reached	Shareholder membership	Share holders Capital (Individuals) (Rupees)	Share holders Capital (Government) (Rupees)	Share holders Capital (others) (Rupees)	Whether records are computerised
1	Madhukuchi GPSS Ltd	1973	Rangia	4	25	4118	41180	-	-	Handwritten
2	Baidyagarh GPSS	1973	Rangia	4	26	2483	25280	136000	206120	Handwritten & computerised
3	Dakhin Chayani GPSS Ltd	1973	Chayani Borduar	3	9	2816	76120	117098	100000	Handwritten
4	Ranibhologaon GPSS Ltd	1973	Rani	4	67	7340	79339	494700	-	Handwritten
5	Borduar GPSS	1973	Chayani Borduar	4	-	3410	47820	206200	143560	Handwritten
6	Chaygaon Pantan	1973	Chaygaon	3	72	2916	30820	208323	-	Handwritten
7	Champak Nagar GPSS Ltd	1973	Chaygaon	4	20	4091	112788	138473	-	Handwritten
8	Dakhin Rampur GPSS Ltd	1973	Rampur	3	9	6589	-	-	-	Computerised
9	Uttar Chayani	1973	Kamrup	4	40	3146	43730	147533	-	Handwritten
10	Dakhin Saru Bongshar	1973	Rampur	3	13	-	-	-	-	Handwritten
11	No. 2 Hajo GPSS	1973	Hajo	3	17	3874	-	-	-	Handwritten
12	No.1 Hajo GPSS	1973	Hajo	3	14	4563	53800	192823	100	Handwritten
13	Pati Darrang	1973	Bihdia Jajikona	4	26	6227	62270	198000	-	Handwritten & computerised
14	No.2 Ramdia GPSS Ltd	1973	Hajo	3	18	3752	34690	90273	-	Handwritten & computerised
15	No.1 Ramdia GPSS	1973	Hajo	3	16	3074	51920	126473	-	Handwritten
16	Karara GPSS Ltd	1973	Vijay Jazipora	5	30	5024	238559	699000	100000	Handwritten & computerised
17	Puthimara GPSS	1973	Kamalpur	4	22	3301	3859	168000	-	Handwritten
18	Borigog GPSS	1973	Rangia	4	40	4645	89950	177000	300000	Handwritten
19	Paschim Bongshar GPSS	1973	Hajo	4	14	1818	28320	106437	-	Handwritten
20	No1. Pub Bongshar GPSS	1973	Sualkuchi	4	30	4799	66525	335098	250	Handwritten

21	No.2 Pub Bongshar GPSS	1973	Sualkuchi	4	17	1898	49%	51%	-	Handwritten
22	BorBongshar GPSS	1973	Bezera	3	10	3703	-	-	-	Handwritten
23	Bangaon GPSS	1973	Bangaon	4	62	3727	50630	163500	-	Handwritten
24	Ramcharani GPSS	1973	Rani	4	8	2614	-	-	-	Handwritten & computerised
25	Saraighat GPSS	1973	Bezera	2	20	3500	-	-	-	Handwritten & computerised
26	Uttar Rampur GPSS	1973	Rampur	4	7	2542	82728	110473	-	Handwritten & computerised
27	Modartola GPSS	1973	Kamalpur	4	20	4528	58260	142000	-	Handwritten
28	Kamalpur GPSS	1974	Kamalpur	4	19	4382	-	-	-	-
29	Tupamari GPSS	1973	Chamaria	3	11	3223	39000	114000	-	Handwritten & computerised
30	Nagarbera GPSS	1974	Chamaria	4	20	3562	-	-	-	Handwritten
31	Borkhat Panbari GPSS	1973	Dimoria	4	25	6094	75498	197200	-	Handwritten
32	Boko GPSS Ltd	1973	Boko	4	60	4285	-	-	-	Handwritten & computerised
33	Pub Samaria GPSS	1974	Goraimari	4	45	4999	54989	104000	-	Handwritten & computerised
34	Goraimari GPSS	1973	Goraimari	4	26	4985	-	-	-	Handwritten
35	Santoli GPSS	1973	Chamaria	4	37	3500	-	-	-	Handwritten
36	Sonapur GPSS	1973	Dimoria	4	14	4999	128617.8	128200	-	Handwritten
37	Dimoria GPSS	1973	Dimoria	4	19	6339	-	-	-	Handwritten
38	Luki GPSS	1973	Boko	4	47	4189	77995	176200	-	Handwritten
39	Bekali GPSS	1973	Boko	3	29	4329	68295	806000	-	Handwritten
40	Chamaria satra GPSS	1973	Chamaria	4	20	3880	-	-	-	Handwritten & computerised

Source: Field data (2021)

Note- GPs -Gaon Panchayat

3.5.2 Composition of GPSS-PACS Management Committee

Bye laws of the society and The Assam Cooperative Society Act lay down the procedures of electing committee members. The management committee is entrusted with basic management principles laid down for business organisation. These principles are significant in distinguishing cooperative society from a corporate organisation. The management committee of a GPSS usually contains 15 members. They are president, vice president, secretary, and 12 ordinary members. The President and Vice President is elected through general assembly by shareholder members, general secretary is full time paid employee appointed by management committee and approved by the Registrar of Cooperative Societies. Certain memberships of the management committee are reserved for women, scheduled caste and schedule tribe communities

3.5.3 Shareholder Membership and Voting Rights

One can become member of the society by paying one time share subscription. The share subscription is kept minimal and fixed. As per the interviews, there are mainly two categories of shareholders. Such categories were conceptualised during the 1973-74 period as per based on interviews with GPSS-PACS. These categories are “Nihakotia” or “Durbol” means poor people, “Hokotia” or “Sobol” means rich people. There are also D voters who are not allowed to vote even if they have membership, or the members who have died. The total studied GPSS-PACS constitute 1,63,292 shareholder members including both Nihakotia, and Hokotia members. The total number of memberships of study area are the member of class A category. Categorising shareholder members based on poor (Nihakotia) and rich (Hokotia) was done back in the year when societies were formed according to the interviews. According to the Bye-laws, there are 5 categories of memberships.

1. Class A or “Ko Sreni” (Ko is the first alphabet of Assamese language, and Sreni means class) are the individual members who are aged above 18. This Class A is divided into two sections, which is part I and Part II. Part I of Class A are “Nihakotia” or the people who belong to weaker sections of the society. According to Bye-laws, weaker section of the societies is those family who has less than 9 Bigha land and has income less than Rs 2001 per annum. 9 Bigha land means 1.20483 hectares of area, which implies it include marginal farmers and small farmers⁴⁶. Part II of Class A are the person who does not belong to Part I of Class A. Class A category are the actual representation of villages. Therefore, headcounts on class A or individuals’ members were taken for the thesis.
2. Class B or “Kho Sreni” (kho is the second alphabet of Assamese language) are the members of state government and financial banks.
3. Class C or “Gau Sreni” (Gau is the third alphabet of Assamese language) are members of other affiliated cooperative societies.
4. Class D or “Gho Sreni” (fourth alphabet of Assamese language) are the members who have share of Class A as a family member. Such member has no voting rights.
5. Nominal members are those members who belong to weaker section of the society. Such members can pay Re.1 as a subscription fee. A portion of share must be paid within a year to become shareholder member of the society, until then nominal members have no share on profits and voting rights.

⁴⁶ According to Agriculture Census Division Department of Agriculture, Cooperation & Farmers Welfare under Ministry of Agriculture & Farmer Welfare classifies 5 class size of landholdings. These are

- i. Marginal farmers who have below 1 hectare of operation holding land
- ii. Small farmers who have operation holding land between 2 hectares to 4 hectares.
- iii. Semi-medium farmers who have operating holding land between 4 hectares to 10 hectares

Large farmers who have more than 10 hectares of operational holding lands.

According to Bye-Laws, Part I of the Class A shareholder category will elect eight male members and one female, while Part II of the Class A shareholder category will elect four males and one female. Additionally, one member belonging to the Schedule caste and the Schedule tribe categories will be elected by both Class A and Class B. Apart from the elected members, there are nominated members. A financial bank can nominate one member, and the Class C category can nominate one member for the society. There will also be an office secretary who is an employee. Therefore, the society's managing committee will consist of 15 elected members and three nominated members. Thus, the managing committee includes representatives of small and marginal farmers, minority communities, and females. However, in the study area, out of 40 GPSS-PACS, 16 GPSS-PACS do not have a complete number of committee members. Among these 16 GPSS-PACS, 4 have fewer than ten members on their management committee. The reason cited for not being able to form a 15-member committee is the absence of nominations from memberships.

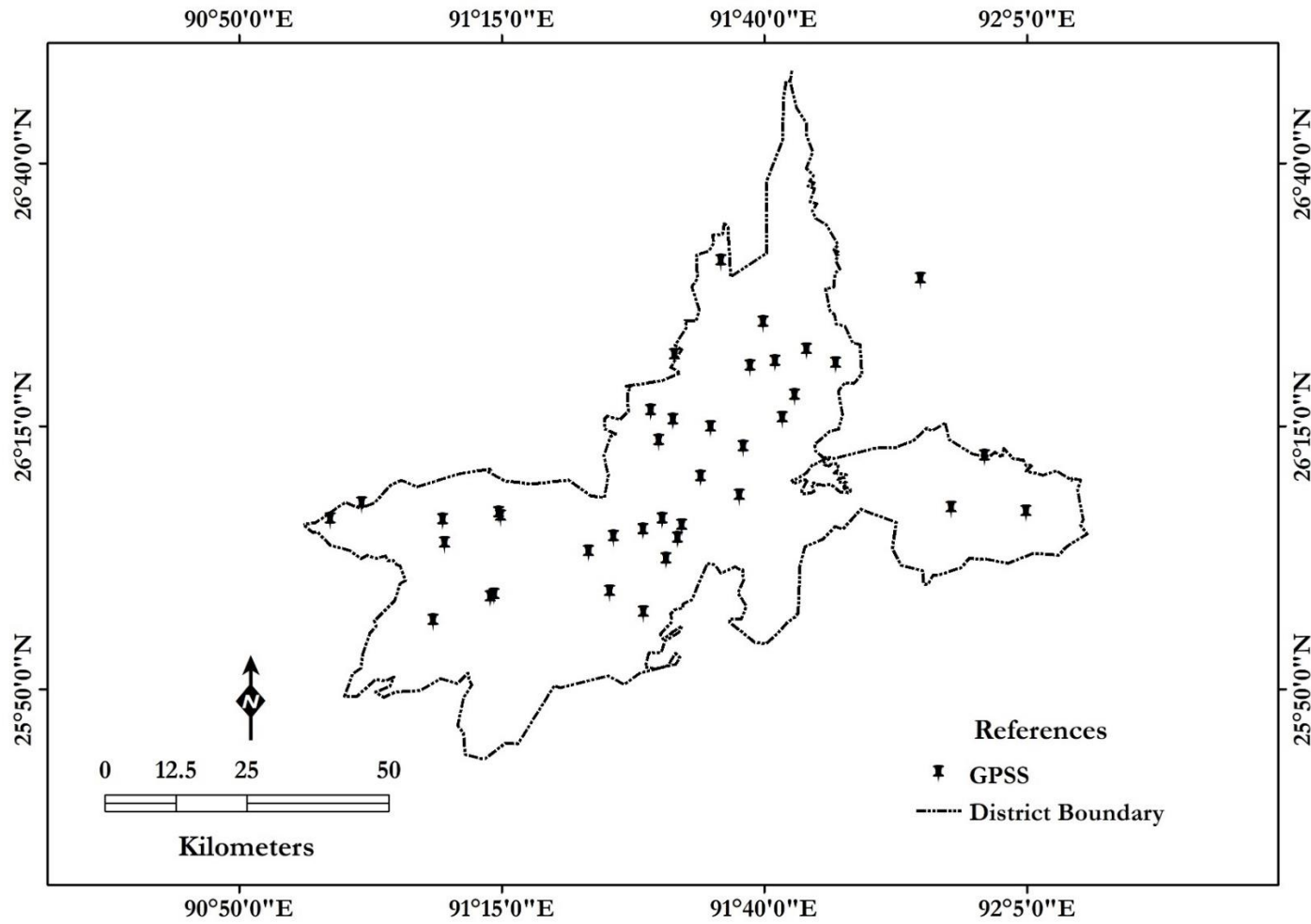
Regarding female membership, three GPSS-PACS have no female members, while three GPSS-PACS have more female members than the reserved number. Out of these 16 GPSS-PACS, two could not form management committees at all, and as a result, office assistants (recruited from the Cooperative department) are running their societies. The society's inability to form a 15-member committee in the study area reflects the distress of the societies. The absence of nominations for elections, as observed in the study of 40 GPSS-PACS, implies that cooperative societies face difficulties in functioning and become burdensome for their members. Hence, the GPSS-PACS, with a smaller number of managing committees, reveals distress in the cooperative societies in the study area.

Table 3.3 Interviewed GPSS-PACS and Management Committee

Sl. no.	Name of GPSS	No. of Committee Member	No. of Female Committee Member	Year of last election
1	Madhukuchi GPSS Ltd	15	2	2019
2	Baidyagarh GPSS	12	2	2018
3	Dakhin Chayani GPSS Ltd	15	2	2016
4	Ranibhologaon GPSS Ltd	15	2	2017
5	Borduar GPSS	15	2	2017
6	Chaygaon Pantan	13	2	2017
7	Champak Nagar GPSS Ltd	15	2	2016
8	Dakhin Rampur GPSS Ltd	14	2	2020
9	Uttar Chayani GPSS	14	2	2020
10	Dakhin Saru Bongshar GPSS	9	1	2019
11	No. 2 Hajo GPSS	15	3	2020
12	No.1 Hajo GPSS	15	2	2020
13	Pati Darrang	12	2	2018
14	No.2 Ramdia GPSS Ltd	12	1	2016
15	No.1 Ramdia GPSS	15	2	2017
16	Karara GPSS Ltd	15	2	2018
17	Puthimara GPSS	15	2	2016
18	Borigog GPSS	8	1	2018
19	Paschim Bongshar GPSS	15	2	2020
20	No1. Pub Bongshar GPSS	15	2	2018
21	No.2 Pub Bongshar GPSS	15	1	2018
22	BorBongshar GPSS	13	2	2019
23	Bangaon GPSS	15	1	2018
24	Ramcharani GPSS	15	2	2017
25	Saraighat GPSS	15	0	2021
26	Uttar Rampur GPSS	15	2	2017
27	Modartola GPSS	15	2	2021
28	Kamalpur GPSS	1	0	2018
29	Tupamari GPSS	14	3	2018
30	Nagarbera GPSS	14	1	2016
31	Borkhat Panbari GPSS	15	3	2018
32	Boko GPSS Ltd	14	2	2018
33	Pub Samaria GPSS	15	2	2017
34	Goraimari GPSS	15	2	2016
35	Santoli GPSS	15	2	2017
36	Sonapur GPSS	15	2	2016
37	Dimoria GPSS	15	2	2016
38	Luki GPSS	12	1	2021
39	Bekali GPSS	13	3	2017
40	Chamaria satra GPSS	1	0	2015

Source: Field data (2021)

Figure 3.3 Study Area Comprises of Kamrup and Kamrup Metropolitan Districts



Chapter 4 GPSS-PACS and Credit Activities

This chapter discusses the composition, formation, and performance of Primary Agricultural Cooperative Societies or GPSS-PACS in Assam. The analysis is based on field work carried among 40 GPSS-PACS in Kamrup and Kamrup Metropolitan districts. This chapter addresses the second research question of the thesis. We investigate the types and volume of credit activities or businesses undertaken by the GPSS-PACS. Section 4.1 highlights the structure and volume of short-term credit disbursal in rural Assam. Section 4.2 identifies the number of GPSS-PACS engaged in credit supply in Kamrup and Kamrup Metropolitan districts. In sections 4.3, 4.4 and 4.5, we examine the types of credit supplied and the reasons for the slowing down or in some cases discontinuation of credit supply by GPSS-PACS. The section 4.6 addresses the state of everyday functioning of GPSS-PACS in the study area. We also highlight why GPSS-PACS engage in informal borrowings for their survival. Section 4.7 addresses the disconnect of GPSS-PACS with State cooperative banks in the current juncture. Section 4.8 further highlights the role of microcredit on GPSS-PACS. The final section summarizes our discussion.

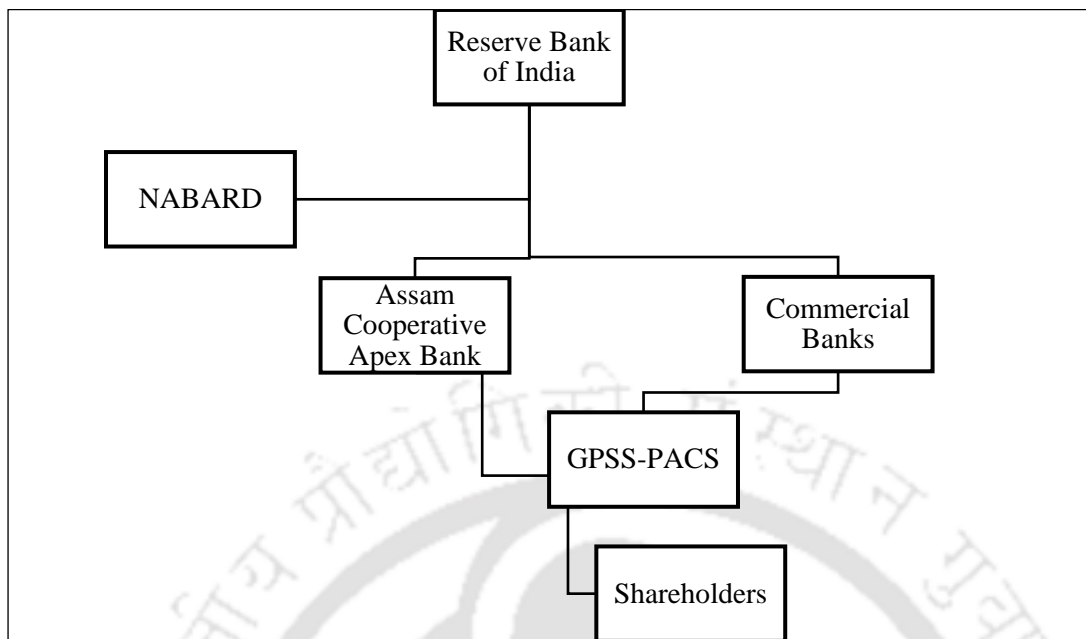
4.1 Structure of Credit Disbursal to GPSS-PACS in Assam

In Assam, at present, GPSS-PACS follow a two-tier structure for credit flow unlike most of the other states of India that follow three tier structure. By two tier structure we mean GPSS-PACS forms the bottom tier engaged in disbursing credit to PACS members. The Assam Cooperative Apex Bank (ACAB), which is the state level cooperative bank in Assam forms the upper tier. The supply of credit is disbursed and monitored from state-level cooperative banks. The Assam Cooperative Apex Bank has 67 branches spread all over Assam. The ACAB is governed by the RBI. National Bank of Agriculture and Rural Development (NABARD) also manages some aspects of ACAB for various purposes. The RBI is the topmost tier of the overall structure.

However, most Indian states have a three-tier structure of credit flow. Firstly, the PACS at the village level. The supply and monitoring of credit to PACS will be from district-level cooperative banks. Thus, all PACS in a district will be affiliated to district-level banks. The district level banks are further affiliated and directed by state level cooperative banks. On moving upward in the hierarchy, the state-level cooperative banks are directed by NABARD and RBI. In Assam, there is an absence of district level cooperative banks.

However, an absence of a three-tier structure was not always the case. In Assam, credit supply under cooperative institutions followed a three-tier structure up till 1948. Post 1948, district banks and provincial banks became burdened with outstanding loans that started to weaken these institutions (Chapter 1 discusses in detail the deplorable conditions of credit cooperative institutions in Assam pre- and post-independence). The ACAB was established following the dissolution of Provincial banks in 1948 after which a two-tier structure came into being (Sarma, 2003). Currently, ACAB monitors the supply of credit to GPSS-PACS. However, GPSS-PACS can also avail credit from other commercial banks. The GPSS-PACS were permitted to receive credit supply from commercial banks for the first time in 1974-75 (RBI, 1978).

Figure 4.1 Short term rural credit disbursal in Assam in the Study Area



Source: Author's adaptation based on field study (2021)

4.1.1 Supply of short-term and medium-term loans through GPSS-PACS in Assam

Short term and medium-term loans are the main credit businesses of GPSS. Table 4.1 depicts the flow of short-term and medium-term loans issued by GPSS in Assam during the period 2010 to 2020. Short term loans are generally crop-loans or loans given for a year only. We can observe that the short-term loans were increasing between 2010 and 2013 after which there has been a dip. Post 2013, short-term loans from cooperatives have not risen much. This could mean that either there is a decline in loans supplied by the societies or the members of the societies have lesser demands for a loan through PACS, especially for short term loans. However, from 2016 to 2019, although the number of GPSS were constant, there is an increase in the volume of short-term credit supply implying that the supply of credit has increased in Assam. In the case of medium-term loans, there was an increase in the volume between 2010 and 2013, while it fluctuated between 2013 and 2016. Since 2017 however, the volume of medium-term loans has been on a rise.

In the case of ‘Other loans’ we observed that from the period 2010 to 2016, the volume has decreased significantly. The ‘Other loans’ are meant for purposes other than crop loans. From 2016 to 2020, the volume of other loans category began to rise at a diminishing rate. Thus, from table 4.1, we can observe that disbursement of short-term and medium-term credit through GPSS follows approximately a similar pattern, except other loans category. We have already seen that the volume of credit supply through PACS is the lowest in Assam compared with the rest of India⁴⁷.

Table 4.1 Supply of short-term loan, medium term loan and other loans through GPSS in Assam

<i>Year</i>	<i>Number of GPSS</i>	<i>Short-term loan (In lakhs) (Rupees)</i>	<i>Medium term loan (In lakhs) (Rupees)</i>	<i>Other loan (In lakhs) (Rupees)</i>
2010-2011	714	143.8	28.2	130.64
2011-2012	714	176.85	28.2	130.64
2012-2013	880	367.26	30.22	130.64
2013-2014	1484	244.1	23.01	109.58
2014-2015	2044	218.66	12.69	26.75
2015-2016	2181	256.72	34.13	23.80
2016-2017	2202	237.84	25.16	27.55
2017-2018	2202	448.9	65.22	117.96
2018-2019	2202	499.7	150.99	121.10
2019-2020	2159	380.66	120.88	122.20

Source: Statistical Handbook of Assam issued from year 2010-2020 published by Directorate of Economic and Statistics, Government of Assam.

Let us also look at the volume of outstanding debt held by GPSS in this ten-year period, which is depicted in column IV in Table 4.2. We observe that the total volume of outstanding loans has exceeded the total volume of credit supply by GPSS. The sustained increase in loan disbursement and volume of outstanding debt signifies the persistence of demand for short-term loans within the period of 2010-2020

⁴⁷ We observed from *Report on Trend and Progress of Banking in India*, (annually issued from 2010-2020), published by Reserve Bank of India that volume of loan issued through GPSS-PACS is the lowest in the country.

Table 4.2 Loans Issued and Outstanding loans by GPSS in Assam

Period (I)	Number of GPSS (II)	Total loan (In lakhs) (Rupees) (III)	Outstanding Loan (In lakhs) (In Rupees) (IV)	Ratio of Total Loan disbursed to Outstanding loan (In Percentage) (V)
2010-2011	714	302.64	2141.271	14.14
2011-2012	714	335.69	2051.14	16.37
2012-2013	880	528.12	Not provided	Not Applicable
2013-2014	1484	376.69	Not provided	Not Applicable
2014-2015	2044	258.10	2138.55	12.07
2015-2016	2181	314.65	Not provided	Not Applicable
2016-2017	2202	290.55	Not Provided	Not Applicable
2017-2018	2202	632.08	836.13*	74.52
2018-2019	2202	771.79	4173.50	18.50
2019-2020	2159	623.74	4120.66	15.14

Source: Statistical Handbook of Assam issued from year 2010-2020 published by Directorate of Economic and Statistics, Government of Assam

Note: * In 2017-18, Government of Assam waived off 25 per cent loan of farmers up to a maximum of Rs. 25,000 of all farm loans, taken via Kisan Credit Card (KCC) from public sector banks. The KCC loans distributed through GPSS-PACS were also a part of this.

4.2 Do the GPSS-PACS identify themselves as a rural credit agency?

We inquired with the representatives of the GPSS-PACS whether they identified themselves as suppliers of rural credit or not.

27 GPSS-PACS or 72.5 percent identified themselves as rural credit supply institutions. By this, they agree that the society can give loans to farmers or shareholders. GPSS-PACS share an understanding about the responsibilities to be fulfilled. Those GPSS-PACS that identify themselves as rural credit supply institutions have expressed willingness to undertake credit activities for agriculture purposes, provided that repayment of loans happens from borrowers' side along with regulated financial management of the societies.

“Initially it was PACS, but now, it has become GPSS. Disbursement of Agriculture credit stopped in 1981 in this GPSS. This is due to large defaulters and also, Sualkuchi⁴⁸'s agriculture activities diminishing due to urbanization”- A GPSS president, who has been a member of the society since 1981

Out of 40 GPSS-PACS, 5 GPSS-PACS do not consider themselves an institution for rural credit supply and have no record of credit activity. The respondents believed their primary responsibility was distribution of essential commodities as part of the National Food Security Act. Similarly, 8 GPSS-PACS do not consider themselves as rural credit institutions, although their books reflected credit supply activities in the past. These GPSS-PACS who do not identify themselves as PACS are however listed as PACS by the department of Cooperative, Government of Assam.

4.3 Type of Credit Activities by the GPSS-PACS

During field study conducted in 2021, 12 GPSS-PACS were engaged in credit activities. Given the challenging credit supply environment in Assam and experience shared by the majority of the GPSS-PACS, the performance of these 12 GPSS-PACS is appreciable. The profile of 12 GPSS-PACS who were active in disbursing credit activities in 2021 are detailed in the following table

⁴⁸ Sualkuchi block is in Kamrup district. It is situated in the north of river Brahmaputra. Sualkuchi is famous for handloom and weavers, for their excellent expertise in weaving Muga Silk and Pat Silk. Sualkuchi is popularly known as Manchester of Assam

Table 4.3 List of GPSS-PACS that were active in credit disbursal activities during field work

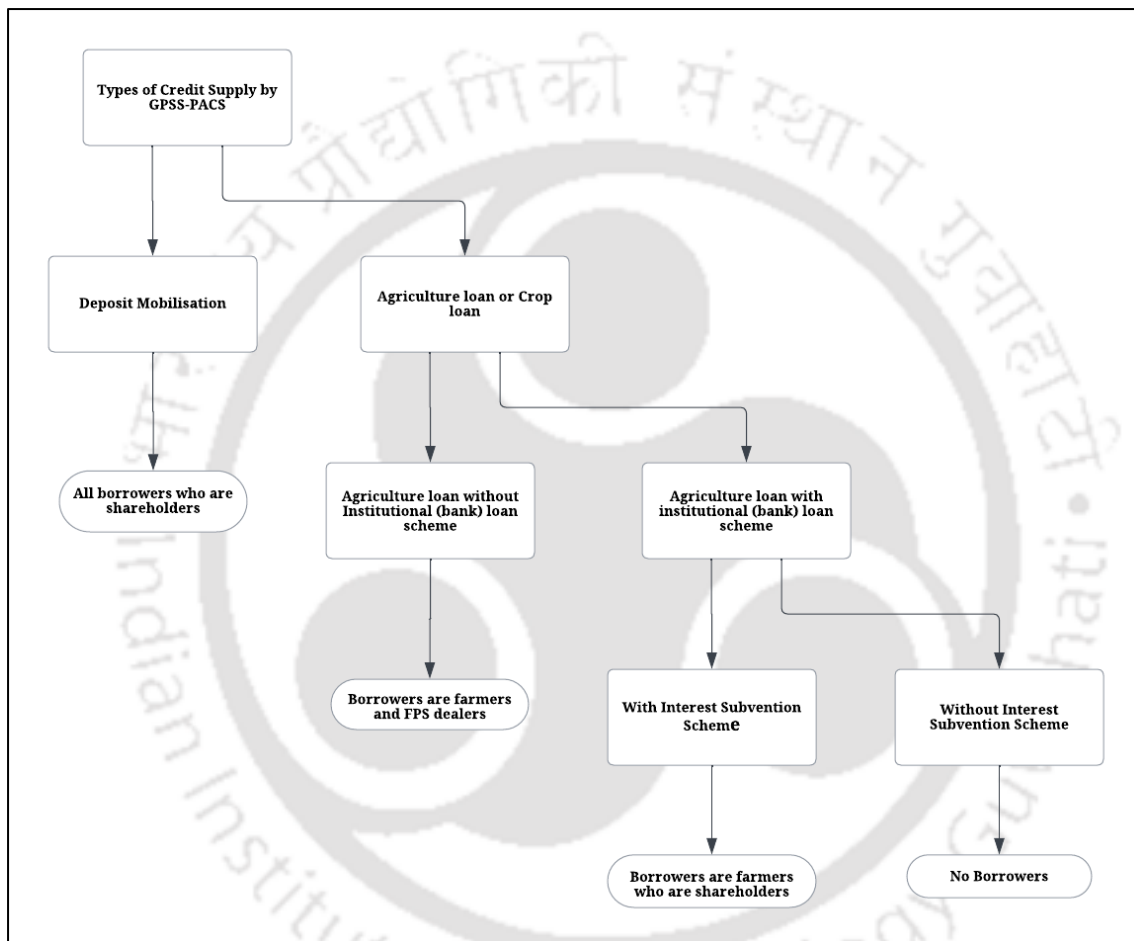
Sl. No	Name of GPSS	Kind of credit disbursal	Interest rate (In percent) (Per year)	If GPSS are in loan debt from formal institutions	Any overdue from borrowers
1	Borduar GPSS	Agriculture loan, Deposit mobilisation	7%	Yes; agriculture loan at 7% p. a	No
2	Champak Nagar GPSS	Agriculture loan	7%	Yes; agriculture loan	Yes, but it was in 2011-12
3	Chaygaon Pantan GPSS	Agriculture Loan	7%	Yes; agriculture loan at 7% p. a	No
4	No.2 Pub Bongshar GPSS	Agriculture Loan	2%	No	No
5	No.2 Ramdia GPSS	Agriculture Loan	12.5	No	No
6	No.1 Hajo GPSS	Agriculture loan	13.3%	No	No
7	No.1 Ramdia GPSS	Agriculture Loan	2%	No	No
8	Paschim Bongshar GPSS	Agriculture Loan	2%	Currently in debt at 6.5% per loan	No
9	Rani Bhologaon GPSS	Deposit Mobilisation	15%	No	Yes, but it was in 1980
10	Sonapur GPSS	Deposit mobilisation	Not started	No	Yes, 14 Lakhs
11	Borkhat Panbari GPSS	Deposit Mobilisation	Not started	No	No
12	Dimoria GPSS	Deposit Mobilisation	7%	Yes, from two banks	No

Source: Field study, 2021

From Table 4.3, agriculture loan means crop loans supplied to farmers, and deposit mobilization involves opening saving accounts of GPSS-PACS shareholders. Under deposit

mobilization, loans are disbursed for any purpose based on the savings of account holders and not on immovable collateral such as land or household assets. We can see that GPSS-PACS currently transact in two types of credit supply activities. These are agriculture loan and deposit mobilization.

Figure 4.2 Types of credit supply by GPSS-PACS in Study Area



Source: Author's adaptation based on field work

4.3.1 GPSS-PACS disbursing loan under Institutional loan Scheme

Figure 4.2 summarizes the modalities of credit supply from GPSS-PACS in the study locations. Agricultural loan is disbursed either through institutional support or without institutional support. Institutional support comes in the form of bank loan scheme which provides loans to GPSS-PACS from banks. The Institutional Loan Disbursal Scheme is a loan scheme provided

by the ACAB to the GPSS-PACS. That means there is a systematic way of providing loans through bank support. Since ACAB is the top tier of state-level short-term rural credit flow, loans provided by ACAB are pertinent to the study. Landowners, owners of sharecroppers, and farm tenants can be the borrowers of this type of loan. These loans are provided for Kharif crops (crops which are sown in June to August), Rabi crops (crops which are sown in the month of September to November), and Pre Kharif crops (crops which are sown in the month of December to May). The bank categorizes crops into rabi, kharif, and pre-kharif crops because the bank could then provide timely credit for crops grown in different seasons. Banks determine the volume of crop loans to a farmer based on the cost of production required per acre of land. The State/District Level Technical Committee prepares this production cost. The preparation for deciding the cost of production by banks also consider current prices of agriculture inputs and the absorption capacity of loanee farmers. The bank provides the loan to society (GPSS-PACS in this case), and then GPSS-PACS to villagers. The fieldwork was carried out in 2021, so the interest rate from the year 2017 as mentioned in Table 4.4 titled *Institutional Loan Disbursal Scheme*, was applicable.

The first part (Part A of Table 4.4) of the institutional loan disbursal scheme involves loan disbursal under the Interest Subvention Scheme, where the amount of the loan is up to 3 lakhs. The Interest Subvention scheme was launched in 2006 by the Government of India. It is an interest subsidy scheme. The scheme provides crop loans up to 3 lakhs at 7 percent interest rate per annum to farmers. The interest subsidy was 1 percent in 2009-10, then increased to 2 percent in 2010-11, and finally increased to 3 percent in 2011-12, which was applicable till 2017. So, under this scheme, the farmer received 3 percent subsidy if the farmer can repay the loan before or on the date of repayment fixed by the bank.

The Secretary of Chaygaon Pantan GPSS explained in detail how their society supplies loans to farmers. The secretary explained that they take loans from ACAB at 7 percent interest rate. If the farmers can return the loan to GPSS-PACS within a year, the society must only pay back the loan at 5 percent to the bank. The 2 percent interest rate is the earnings of the society. However, the secretary emphasised that the bank had not subsidised the 2 percent interest rate. The Society paid back their loan at 7 percent to the bank. The society does not generate substantial income from this credit disbursement scheme. The Society is providing credit to farmers as a means of supporting farmers. When the interviewee was questioned about their motive for engaging in credit activities despite not gaining from credit business, the secretary of Chaygaon Pantan GPSS stated

“Just for the convenience of the farmers, we are doing credit activities, there is not much earning from credit activities”

The provision of agriculture loans by Chaygaon Pantan GPSS is an example of institutional loan disbursement under the interest subvention scheme, as mentioned in Table 4.3. However, this scheme has failed in terms of the society's economic gain. Out of 12 GPSS-PACS active in credit supply, only 3 GPSS-PACS take loans from ACAB, which they disburse to the villagers. These GPSS are Borduar GPSS, Champak Nagar GPSS, and Chaygaon Pantan GPSS. The credit supply of these GPSS-PACS is supported by institutional loan disbursement scheme which is explained in Table 4.3. Based on interest rate, which is 7 percent, the mentioned 3 GPSS-PACS supply loan size up to 3 lakhs to farmers. These GPSS-PACS have not supplied larger loan size.

Table 4.4 Institutional Loan disbursement Scheme

Loan Disbursement Scheme (in rupees)	2017		2021	
	Bank to Society	Society to Individuals	Bank to Society	Society to Individuals
A With Interest Subvention (Up to 3 lakhs)	5.5% p. a	7.5% p. a	5.5% p. a	7% p. a
Without Interest Subvention (3 lakhs to 5 lakhs)	10% p. a	11% p. a	9.5% p. a	11% p. a
B 5 lakhs and above	11% p. a	12.5% p. a	9.5% p. a	11% p. a

Source: The table tabulated based on the circular notice titled 'Revision of Interest Rates on Loans & Advances (W.E.F 11-10-2021 no.3/2021', Assam Cooperative Apex Bank, Guwahati.

Note: p.a implies per annum

In Part B of Table 4.4, we examine the scenario where loans are disbursed without an interest subvention scheme under the institutional loan disbursement scheme. In this case, the loan size is larger. When loan size falls within the range of 3 lakhs (or 0.3 million) to 5 lakhs (or 0.5 million), the bank provides loans to society at a 10 percent interest rate annually. Further, the society disburses it to farmers at an 11 percent interest rate annually. Here, the one percent interest rate per year represents the society's earnings in this loan size category.

If the loan size exceeds five lakhs (or 0.5 million), the bank loan extends the loan to the society at 11 percent per annum, and from society, it disburses to farmers at 12.5 percent per annum. The society earns a 1.5 percent annual interest rate within this loan size category.

In summary, when the loan size ranges within three lakhs (or 0.3 million), the societies have the potential to generate higher income than when the loan size exceeds three lakhs (0.3 million). In the study area, we observed there was no loan transaction between GPSS-PACS and borrowers without an interest subvention scheme under the institutional loan scheme.

4.3.2 GPSS-PACS disbursing loan without Institutional Loan Scheme

The second type of agriculture loan disbursement is the non-institutional loan disbursement scheme. Five GPSS-PACS are engaged in disbursing such agricultural loans. They disburse the loans either from their own capital or acquired from commercial banks. The interest rate on credit is the income they generate from credit activities. These GPSS-PACS are elated and satisfied with their agriculture loan supply. The distinct feature of these 5 GPSS-PACS is that they do not have transactions with Assam Cooperative Apex Bank, i.e., the state cooperative bank. Instead, they have transactions with commercial banks and regional rural banks. Although all five GPSS-PACS hold accounts with Assam Cooperative Apex bank accounts, these accounts are mostly formal and non-operational.

Under Chapter XIV, titled Special Provision Applicable to the Cooperative Credit Societies of The Assam Cooperative Act of 2007, the cooperative credit societies have autonomy in all financial areas. Such societies shall have autonomy on interest rates in deposits and loans within the compliance of guidelines provided by the Reserve Bank of India.

Cooperative Credit Societies in The Assam Cooperative Act of 2007 are defined to include state cooperative banks and Primary Agriculture Credit Societies only. Therefore, GPSS-PACS are covered under this provision of the Act. The mentioned five GPSS-PACS charge from 2percent to 13.3 percent interest rate per year. They have the autonomy to set interest rates and fund credit disbursement. These 5 GPSS-PACS generate a significant amount of earnings from credit activities.

For example, during the interview, the secretary of No.1 Hajo GPSS detailed their credit activities. The society provides agriculture loans every year. They charged 13percent interest rate for a period of 18 months. Through these credit activities, they earned 2-3 lakhs (or 0.2

million to 0.3 million) in Indian Rupees per year. In 2020, they had earned three lakhs (or 0.3 million) from their credit activities.

Another example is that No.2 Ramdia GPSS Ltd performed credit activities that have expanded and accelerated. In 2020, the GPSS-PACS provided its shareholders with short-term credit amounting to Rs 12,58,504. They charged 12.5 percent interest rate per annum. They reported a net income of around Rs. 1,57,313 from credit activities in the year. They have transaction with two banks. These are the Indian Bank, which is a public bank and the ACAB. However, the transaction with ACAB has been inoperative for several years. They aim to extend the progress of credit supply to diverse beneficiaries. They proposed to supply credit to Self-Help Groups. The supply of crop loans occurs with no delay by the society. The total revenue in 2020 by the GPSS-PACS was Rs. 3,13,81,970.86, with a net profit of Rs. 19,74,559.36 from all its business activities during the year.

No.2 Pub Bongshar GPSS Ltd was awarded as the best performing GPSS in Assam by the state government in 2018. As part of the award, the GPSS-PACS received Rs 3 lakhs. According to them, their credit activities are performing well, they are able to provide crop loans to farmers annually, charging 2 percent interest rate per annum. This highlights the importance of credit activities in enhancing their overall performance. They have established linkages with commercial banks, Assam Cooperative Apex Banks and State Bank of India (a public bank). However, like most GPSS-PACS, they do not engage in transactions with ACAB. Instead, they have stronger ties with the local branch of State Bank of India. Approximately nine years ago, around 2012, they took out a loan to construct a bank complex for the State Bank of India branch within their office compound. The loan was successfully repaid and today they receive rent from leasing out the office space to the State Bank of India branch.

The other two GPSS-PACS also provide agricultural loans annually at a 2 percent interest rate per year. Overall, these five GPSS-PACS represent the most reliable sources of short rural credit in their respective areas and have been notably successful in extending credit to farmers compared to the rest of the GPSS-PACS in the study area. Regarding credit repayment or hypothecation to GPSS-PACS, it was reported by the societies that they have never kept collateral as a guarantee for repayment. The managing members of the societies assess the creditworthiness of the borrowers based on their personal backgrounds, trust, or personal income.

“Credit has been extended for many years based on trust”- a secretary of a GPSS in Hajo Block

4.3.3 GPSS-PACS disbursing loan through Deposit Mobilisation

The second type of credit supply is the implementation of deposit mobilization by GPSS-PACS. It is an innovative way to raise deposits or savings of the PACS, which further augments its lending activities. Out of 40 GPSS-PACS, 7 GPSS-PACS had dealt with deposit mobilization or “mini bank”⁴⁹. At present, 5 GPSS-PACS are active in deposit mobilization. Other 2 GPSS-PACS had stopped their deposit mobilization due to unrecovered loans.

Table 4.5 List of GPSS-PACS performing deposit mobilisation

<i>Sl.no</i>	<i>Name of the GPSS</i>	<i>Active years of deposit mobilisation</i>
1	Dakhin Rampur GPSS	2004-2010
2	Rani Bhologaon GPSS	2006-Present
3	No.1 Pub Bongshar GPSS	2008-2018
4	Dimoria	2011-Present
5	Sonapur GPSS	2018- Present
6	Borkhat Panbari	2018-Present
7	Borduar GPSS	2019-Present

⁴⁹ Respondents often term deposit mobilisation as “mini bank” as it acts like bank.

Source: Field data (2021)

The interviewees emphasized that deposit mobilization through mini banks is not considered as bank and falls outside the purview of RBI banking regulations or SEBI (Securities and Exchange Board of India). Additionally, as per the Assam Cooperative Act 2007, the use of the term 'Bank' by PACS is prohibited (Chapter XIV, Section 147 of the Assam Cooperative Act 2007). Deposit mobilization operates using shareholders' deposits and aims to provide dividends. Shareholders have accounts and passbooks, and typically one or two employees are hired for deposit mobilization. Initially, only savings accounts are opened, but as the years pass, they attempt to open recurring or fixed deposit accounts. Deposit mobilization typically enhances their profit-making business.

Deposit mobilization operates under different mechanisms compared to the conventional credit activities of a society. Conventional credit activities or agricultural loans by GPSS-PACS work on funds from share capital or working capital⁵⁰ or bank loan schemes like interest rate subvention. Conventional credit activities do not work on the regular savings of members of society. Also, conventional credit activities provide only agriculture loans in the form of crop loans or medium-term loans as reported in the study area.

In contrast, deposit mobilization focuses on saving deposits, which further augment the lending activities in the future, and also, the types of credit can vary from agriculture loans to non-agricultural loans or consumption purposes.

The creditworthiness of depositors of deposit mobilization can be easily assessed on the strength of their savings. The advantage of this approach is that it tends to ensure repayment

⁵⁰ One of the interviewees explained that working capital is the amount of security subtracted from the total debit of the society

by borrowers, and if there is any repayment failure, the savings deposits can protect the society from incurring substantial losses. The disadvantage of assessing creditworthiness is that if the members are incapable of saving their money with society, they will be excluded from accessing credit through deposit mobilization of GPSS-PACS. Some of the details of GPSS-PACS who are active in deposit mobilization are as follows;

Rani Bhologaoon GPSS established their deposit mobilization in 2006. The society charge an interest rate of 15 percent per annum for credit. Among the four GPSS-PACS who are engaged in deposit mobilisation, Rani Bhologaoon GPSS is the only one that provided credit under the framework of deposit mobilization for last 15 years.

Borkhat Panbari GPSS, situated in urban area of the study area is also engaged in credit activities through deposit mobilization. Borkhat Panbari outlines its saving interest rates based on the time period. Saving accounts of members received 3 percent interest rate for the first 6 months. If there are no withdrawals from the saving accounts within this 6-month time period, the interest on the saving increases from 3 percent to 6 percent per annum. Additionally, the society's deposit mobilisation includes a recurring deposit feature. They offer an 8 percent interest rate per annum for monthly recurring account, considering the condition that the account must be active for 1-2 years. These interest rate offering on saving and recurring accounts indicate that the society is incentivizing shareholders to increase their saving deposits. The society has not yet initiated credit disbursal through deposit mobilization. However, they reported to handle transaction like deposits and withdrawal from saving accounts in future.

Similarly, Sonapur GPSS, situated in an urban area, is in the process of increasing the savings base of their deposits. They have introduced savings accounts, but lending activities had not commenced at the time of the fieldwork (2021). The interest rate on their savings accounts is 6 percent per annum if the savings are kept for at least 30 months or more. From 36 months to

48 months, the interest rate increases to 6.25 percent per annum. Beyond 48 months, the interest rate rises from 6.25 percent to 6.27 percent, and for durations of 60 months and above, the interest rate is 6.28 percent per annum.

In the study area, GPSS-PACS can facilitate both types of credit. For Example, Borduar GPSS supply agriculture loan and have deposit mobilization (the GPSS called it as *mini sanchoniti*). They supply agriculture loans at 7 percent interest rate per annum. The operational modality involves society procuring loans from the ACAB which are subsequently disbursed to farmers. Also, they have started deposit mobilization in 2019. GPSS-PACS takes loans for themselves from their deposit mobilization. On enquiring about the credit activities performed by GPSS-PACS, the following response was obtained

“The Credit activities is going well, we have *mini sanchoniti*, and sometime we give loans to SHG”-the secretary of the GPSS

We observed that the debtors or borrowers of the GPSS-PACS are primarily farmers among the 12 credit-active GPSS-PACS. However, at times, the societies specifically select farmers with licenses for fair price shops as debtors. 3 GPSS-PACS out of 12 GPSS-PACS mentioned that their debtors or borrowers are none other than agents who are fair-price shop dealers. We must understand that under one GPSS-PACS, several fair-price shops are connected. The credit transaction between fair price shop dealers and the society sounds more reliable than other members of the society. This is because the functional relationship between agents and the societies is tied due to the share of commission (as received for doing PDS duties). 70 percent of the commission is received by FPS and 30 percent by GPSS-PACS (we have discussed this in detail in chapter 5). This means that dealers of FPS are receiving credit for their agriculture purposes, and have more inclination to repay loans. However, there is potential discrimination towards other society members who might seek loans but are excluded from credit availing

from the society. Fair Price Shop dealers are also members of the society. Therefore, their credit supply to such debtors exhibits biasness. When enquiring the secretary of the society why they give loans only to agents, the society has provided loans to farmers earlier but now they are providing loans only FPS dealers.

“Long times ago, we used to aid farmers, but at present we provide loans to agents only”.

-Secretary of a GPSS

4.3.4 GPSS-PACS disbursing Other Loans

Only 2 GPSS-PACS mentioned their Kishan⁵¹ Credit Card (KCC) loan distribution to their shareholders. Kishan Credit Card (KCC) was launched in 1998 by the central government of India. It aims to provide adequate and timely credit supply from the banking system with flexible and simplified procedures for farmers. This enables farmers to access their KCC credit through cooperative institutions with added benefits of the interest subvention scheme being applicable to KCC crop loan.

One GPSS-PACS has discontinued disbursing agriculture loan through KCC, primarily due to difficulties in recovering outstanding KCC loans. Only Boko GPSS had disbursed KCC loans to shareholders in 2020; these loans were short-term loans. However, at the time of study, they were unable to disburse any credit through KCC in 2021.

In addition to KCC loan, one GPSS-PACS also offered miscellaneous credit-related activities which is the provision of life insurance. They refer to it as micro-LIC. LIC -Life Insurance Corporation is a centrally owned insurance and investment company. The GPSS-PACS sells life insurance policies of LIC as an agent to the rural population.

⁵¹ Kishan means farmers in hindi language

The Crop loans extended by GPSS-PACS can be categorized as production loans while deposit mobilization loan offered by GPSS-PACS can be categorised as consumption loans. Consequently, diversification of credit activities is broadening its ranging from production loan to consumption loans, but the volume of credit activities remained significantly limited.

4.4 Delinquent Loans

On inquiry, whether you are doing PACS activities, following response was obtained who had discontinued their credit activities.

“Yes, we are PACS, but in name only”- a secretary of a GPSS

As we have seen, among the 40 GPSS-PACS surveyed, 27 GPSS-PACS (72.5%) of Kamrup district and Kamrup metropolitan district classify themselves as rural credit supply institutions. Of these 40 interviewed GPSS-PACS, 36 GPSS-PACS have a history of engaging in credit activities. In 2021, only 12 GPSS-PACS were actively engaged in credit activities. 25 GPSS-PACS have stopped doing credit activities in past years. Among these 25 GPSS-PACS, 22 GPSS-PACS cited non-recovery of loans as the primary reason to stop credit activities. While remaining 3 GPSS-PACS mentioned reasons such as unavailability of loan schemes or absence of government funding as reasons.

When loans are not repaid from the borrowers, the burden often falls on GPSS-PACS to return the loans to the banks or the society itself (if it acts as lender). Therefore, unpaid loans constitute the primary reason for GPSS-PACS discontinuing their credit activities.

Secondly, the respondents reported that defaulters or borrowers sometimes mistakenly believed that loans from cooperatives were government loans and they could default with impunity. This often led to reluctance on the part of GPSS-PACS to engage in credit activities.

Thirdly, the absence of a government scheme or loan scheme was cited as reason for GPSS-PACS discontinuing credit activities. This third reason indicates absence of state government support or regulation in the study area.

Moreover, the proper monitoring of legal enforcement for delinquent loans within these societies was found to be lacking. A high rate of embezzlement inside societies often leads to such legal enforcement. This led to a situation where lending from societies to borrowers is out of question in societies with non-recovery loans and legal issues.

21 GPSS-PACS were able to specify the year when they halted their credit activities. For example, Karara GPSS, one of the 21 GPSS-PACS suspended credit activities twice in 2007 and 2011. The Table 4.6 aimed to examine the implication of policies on these GPSS-PACS, that had discontinued their credit activities. The availability of credit can be assumed to depend upon the consequences of such implications. While it is acknowledged that non-recovery of loans from farmers is a major reason for not supplying loans, we aim to know if policies could hinder or halt the provision of credit.

Table 4.6 List of GPSS halting Credit Activities under Different Policies and Reforms

<i>Year of halting credit activities</i>	<i>Number of GPSS halting credit activities</i>	<i>Policies and Reforms Implementation</i>
Pre- 1990	5	Social Banking Policies & Rural Banking Expansion
1991-1999	1	Implementation of Narasimhan Committee, National Loan waiver by government, RIDF, implementation SHG-Bank Linkage by NABARD, Kishan Credit Card
2000-2006	3	Introduction of Ground Level Credit, doubling of volume of agriculture credit
2007-2020	12	Launched of Interest Subvention Scheme, introduction of Joint Liability Group to SHG-Bank Linkage, Introduction of Agriculture Debt Waiver and Debt Relief Scheme by central government, Assam Government waiving of 25

per cent loan of farmers up to a maximum of Rs. 25,000 of all farm loans, taken via KCC from public sector banks

Source: Field Study (2021)

The proposal for village cooperatives to serve as the exclusive institutional credit agencies for agricultural credit provision was initially put forth in 1960 based on the recommendations of the Patel committee (National Commission on Agriculture; Part XII, 1976). This led to the expansion of credit cooperative in the countries. Also, the period from 1969-1990 marked significant increase of rural bank branching in the country. This expansion of rural bank branching correlated with a decrease in rural poverty and was associated with increased deposits and credit availability (Burgess & Pande, 2005). Consequently, the era preceding 1990 is classified as the ‘pre-1990 period’ in this chapter, characterized by the significant expansion of rural credit services.

However, 5 GPSS-PACS discontinued their credit supply in the pre-1990s, as indicated in Table 4.6. The discontinuation of credit activities by 5 GPSS-PACS was attributed to their inability to recover loans from the borrowers and the absence of government-led loan. In the Pre-1990 period specially from 1952-1962, it is observed in Assam that the lower average borrowing is closely associated with slower growth of cooperative, coupled with the highest incidence of overdue compared to most other states (Ghatak, 2007). Over the period of 1970-1990, rural credit expansion was emphasised through scheduled commercial banks and regional rural banks rather than cooperative banks. In this period, the flow of rural credit in Assam remained the lowest as compared to the rest of India. From 1980-91 period, Assam had the lowest per hectare flow of rural credit, with the credit for agriculture production covering only 0.1 percent of average cost of cultivation (Khan, Shukla, & Tewari, 2007). Consequently, it was evident that there was expansion of rural credit flow and institutions at country level. Despite the growth of rural credit and institution particularly from 1970s to 1980s at country level (Ramachandran & Swaminathan, 2002), it could not bring rural credit institutions in Assam up

to satisfactory level in the pre-1990 period. The period also marked with decline in Taccavi loans and a gap in meeting requirement of credit for agriculture (Deka, 1984) Thus, it implied that the reasons cited by 5 GPSS-PACS for discontinuing credit activities in the period which are non-recovery of loan and unavailability of government loan scheme were reasonably aligned with the impact of the slower growth in cooperative institutions and low supply of rural credit with high overdue in Assam during pre-1990s period.

In 1991, when former Prime Minister P V Narasimha Rao implemented economic liberalization policies, significant reforms were made to the Indian economy. The M. Narasimham committee, established in 1991, recommended that banks prioritize their profitability and viability. Consequently, in terms of the number of rural bank branches and rural loan disbursal, there was a fall in rural banking. 922 rural bank branches were shut down between 1995 and 2000, as stated. The agriculture credit increased at a rate of 2.6 percent per year (at constant prices) from 1991 to 2001 was significantly less than the 6.8 percent per year growth rate from 1981 to 1990. The principles of social banking policy set in 1969 was reversing⁵² (Ramachandran & Swaminathan, 2004; Chavan & Ramakumar, 2014).

Prior to 1993, only direct finance was taken into account for lending to priority sectors. Direct and indirect finance were taken into account for lending to priority sectors after 1993. Indirect finance has been also defined as financing through PACS. Indirect finance, however, has undergone a definitional modification to include value-chained agricultural sectors and rural institutions like rural electrification corporation. The RBI raised the direct finance cap. Analysis of credit sizes in direct financing has exhibited a rise in large-sized credit (greater than ten lakhs in rupees) between 1990 and 2011. Small credit size (lesser than 10 lakhs)

⁵² India has adopted the social and development banking policy since the nationalization of the banks. The policy is social control on banks, where commercial banks must lend 40% of their net bank credit to priority sectors. Agriculture is considered as one of the priority sectors See Ramakumar (2012), "Large Scale Investment in Agriculture in India".

exhibited a decline over the same time period (Chavan & Ramakumar, 2014). This indicated that rural credit flow directed toward large size loans.

Additionally, state cooperative banks were exempted from prudential norms such as asset classification, income recognition, and provisioning until 2007. Only regional and commercial banks were subjected to these requirements. From 1993 to 2004, state cooperative banks' overall loans increased, however there was no net growth throughout the period. Although cooperative banks experienced growth during this period, its percentage of agricultural loans remained the lowest among other institutions. The number of PACS also increased during the same period, as did the number of cooperative bank branches (Sonker, 2019). Thus, the closing down of rural bank branches and declines in rural credit as a consequence of economic liberalization did not significantly affect cooperative banks and PACS. There was a growth of cooperative banks and PACS. However, the principles of the cooperative institutions began to alter. Therefore, the impact of economic liberalization in 1990-99 resulted in only 1 GPSS-PACS discontinuation its credit activities.

Post-2000 shows significant numbers of GPSS-PACS closing their credit activities. 15 GPSS-PACS (3 GPSS-PACS before 2007 and 12 GPSS-PACS after 2007, comprised 37.5 percent of GPSS-PACS in Kamrup and Kamrup metropolitan districts) stopped their credit activities. Post-2000 marked the implementation period of the Comprehensive Credit Policy on agriculture credit, i.e., doubling agriculture credit in the next three years (i.e., from 2004 to 2007). As a consequence, there was an appraisal of growth of rural in the 2000s, especially from the year 2004 onwards. However, this growth featured a decline in agriculture disbursement for marginal & small farmers, regional disparity, and growth of agriculture lending towards big farmers, Agri-allied industries, corporates and partnerships (Chavan & Ramakumar, 2014). At the time, Assam is one of the states at bottom in term of agriculture credit disbursement. Such

changes indicated agriculture credit was increasingly directed towards capital-intensive agriculture more. Therein, the GPSS-PACS, a small enterprise with cooperative principles, could not access the Comprehensive Credit Policy. The finding is consistent to the study conducted by Sonker (2019) The study analyzed and explained that the regularization of neo-liberalization policies has altered specific characteristics of cooperatives with the objective of community and rural development. The implementation has reduced cooperative resources and lending patterns while keeping pace with commercial viability.

Between 2007 and 2020, 12 GPSS-PACS discontinued their credit activities. The number is quite significant in the study area. It is also the period of implementing the Interest Subvention Scheme and Agriculture Debt Waiver & Debt Relief Scheme (ADWDRS) introduced by the central government. The policy also mandates commercial banks, regional rural banks, and cooperatives to lend 30 percent of bank credit for agriculture (Misra et al., 2016). The discontinuation of credit activities by GPSS-PACS, accentuated with policy implementation, draws upon the question of government intervention in rural financial markets.

In this regard, a study was carried out by Bhanot et al. (2021). The study analyzed interest subvention on crop loans under KCC in 70 bank branches across Odisha, India. It was observed in their study that although the borrowers' credit access was widened after the introduction of interest subvention, there was a fall in the repayment of loans under the KCC scheme. The fall in repayment of loans does not relate to larger loans or small loans. Instead, it linked to borrowers with better repayment histories and the borrowers who took first time loan.

We made a similar observation in the study area. Non-repayment of loans was cited as a primary reason for discontinuing the credit activities of GPSS-PACS. The highest number of GPSS-PACS halting activities occurred in this period. Most GPSS-PACS discontinued their credit supply at an interest rate of 7.5 percent per annum. This interest subvention scheme provided

by Assam Cooperative Apex Bank needed to be more effective, as borrowers could not repay their loans. The inability to repay loans indicates that the cost of agriculture production might not be covered enough, which was cited in the study carried out by Dutta (2012), or the loans taken up by the borrowers could be used for consumption purposes, which there is a divergent of loans as indicated in the study carried by Singh and Toor (2005).

While on the borrower side, scholars have found that borrowers erode their repayment of credit discipline in the hope of loan waive. The studies have shown that volume of loan decreased in the succeeding years of implementation of loan waiving scheme (Gine & Kanz, 2018). It is also to be added here that, under the climate of loan waive by the government, borrowers insist in shifting banking to public banks in anticipation of loan waive through public banks⁵³. Adding to it, Deka (1984) rightly observed that farmers generally could not able to put distinguished between government loans and institutional loans. The repayment leverage of government loans is lower compared to institutional loans. Consequently, institutional loans (or cooperative loans) are treated as a form of government loans as the repayment of institutional loans is low in the study area.

“The society was formed for farmers. In 1981, the government gave loan to farmers and our society was nominee, the farmers didn’t pay back. We had to pay back. We are yet to received Rs 2 lakhs from the farmers”- secretary of a GPSS in Boko block

One of the main reasons of halting credit activities is overdue loans. At present, credit activities seemed as clumsy activities of GPSS-PACS as mentioned by one of the presidents. To mitigate

⁵³ See M Kasbekar (2008) “Does Loan Waiver Harm Credit Culture” *Mint*, retrieved from <https://www.livemint.com/Companies/bmjbPPoEebRpyvviV05kPI/Does-loan-waiver-harm-credit-culture.html>, as cited by (Narayanan & Mehrota, Loan Waivers and Bank Credit: Reflections on Evidence and The Way Forward, 2019).

such overdue, either they pay from their deposits of the societies or wait for the repayment of loans.

“We gave credit to farmers, but recovery could not happen, so we waived Rs 75000 amount of their loan” -a secretary of a GPSS in Kamalpur block.

Even if the loan was recovered from the members of society, it demotivated the society to forward their credit activities

“The Loans were recovered from shareholder; recovery was done but we didn’t proceed more because we don’t want to run after people who think loan will be waived in future” a secretary of a GPSS in Chamaria block.

The effort to supply credit by GPSS-PACS and collecting loan from debtors became challenging when transportation cost of PDS foodgrains under NFSA entered in their business. Overdue loans make society as defaulter society term as *bakijai* case in cooperative department under Government of Assam.

In 2014, Prime Minister Jan Dhan Yojana (PMJDY) was introduced. PMJDY is a national mission aimed at providing financial services like deposits, savings, and withdrawals without the requirement of maintenance of minimum balance, and also eligibility for central government direct benefit transfer (DBT), insurance, or pension. The mission for financial inclusion for unbanked person, brought people closer to banks than GPSS-PACS

4.5 Embezzlement and Court Cases

Jodhka (1995) observed that in Haryana, villagers are reluctant to become members of society or want to borrow from society, even though borrowers or farmers are from well-to-do households. The reasons cited for reluctance were bureaucracy and corruption. A similar observation was reflected in the study area. Corruption, court cases, and embezzlement have made few societies in the study area stumble to the extent that societies have become

dysfunctional. In terms of credit activities, management's misplaced capital has also been sighted in the study area. One of the GPSS-PACS is engulfed with embezzlement. They are not in a position to do any activities of the society at the time of fieldwork. Most of the allotted government work of the GPSS-PACS was carried out by another GPSS-PACS. The respondent of the society explained that their ex-secretary misplaced 15 lakhs. The Registrar of Cooperative Societies dismissed the secretary. A new committee was constituted, but it could not function properly. The society has only a one-man committee now. Another GPSS-PACS also detailed that their ex-committee misused 18 lakhs from their fund and gave the loan to wholesale marketing. The amount could not be recovered; therefore, the committee filed a court case against the previous committee. The present committee won the case; however, they are yet to receive the amount of the misused loan. Such corruption and mismanagement interrupt credit activities and non-credit activities of GPSS-PACS that could have benefitted the area where GPSS-PACS resides.

4.6 Borrowing from Institutional and Non-institutional Credit

GPSS-PACS are rural credit institutions in Assam. The studied GPSS-PACS need to take credit for different investments or purposes. However, the studied GPSS-PACS, despite being a rural credit institution, borrows from non-institutional credit institutions, especially from personal borrowing. Personal borrowing means borrowing from a person that the members of GPSS-PACS know personally. Such borrowing may be interest-chargeable or may not be. The history of non-recovery loans of GPSS-PACS gives a doubtful impression of the creditworthiness of GPSS-PACS, which further augments the decline of loans by banks.

The reluctance to borrow from banks is because of the demanding procedures of banks. GPSS-PACS needs to give a security certificate to the bank whenever they seek loans from a bank, which is based on a cash credit account. A cash credit account is a short-term credit given to a

business firm with collateral as security. There is a credit limit, which is the percentage depending upon the value of the collateralized security, as explained by one of the GPSS-PACS. The interest charged is on the daily closing balance instead of the upper borrowing limit. Thus, repayment is only on the amount spent from the available limit. Another GPSS-PACS stated that they took a loan against the case certificate. The interest rate charged was 6.5 percent per annum, which was okay for them as there was no other option. One of the GPSS-PACS stated that they could not seek a loan from the bank as their society has no land ownership. Only 5 GPSS-PACS mentioned taking credit from formal institutions, i.e., banks, for business purposes, excluding agriculture loans. A GPSS-PACS in Kamrup Metropolitan district mentioned taking credit from a bank in 2020 for pandemic-induced business. In 2021, they took a loan to buy a truck and personal borrowing for their society's activities. There is one GPSS-PACS who took a loan from a bank to build the bank office. In 9 years, they recovered the loan and started getting rent from the bank.

24 GPSS-PACS mentioned taking credit from personal borrowing or non-institutional credit. They mostly take non-institutional credit to run PDS activities, not for their credit business or non-credit activities. Interestingly, the interest rate charged by personal borrowing is 3-5 percent, as stated by respondents. Often, they are interest-free or charged after a certain period of lending. All the studied GPSS-PACS took loan sizes ranging from 10 lakhs to 81 lakhs. Moreover, the interest rate is much lower than the bank rate. This low-interest rate or loans without interest inclined GPSS-PACS towards personal borrowing since the loan size borrowed by GPSS-PACS is large.

4.7 Inter-bank Transactions of GPSS-PACS

This section discusses the linkage of GPSS-PACS with public banks, private banks, regional rural banks and state cooperative bank. It is mandatory for each GPSS-PACS to have an account

in ACAB, the state cooperative bank. However, over time, transactions of many GPSS-PACS have ceased with the ACAB. The Assam Cooperative Act allows GPSS-PACS to choose any bank for any business that they need to carry out. Also, in 2013, with the implementation of the National Food Security Act, and the involvement of GPSS-PACS in distribution of essential commodities in Assam, the GPSS-PACS moved towards transacting with commercial banks for food distribution. Thus, the implementation of NFSA made GPSS closer to commercial banks.

Out of 40 GPSS-PACS, only 5 GPSS-PACS have confirmed taking loans from commercial banks. During my field work, the GPSS-PACS respondents informed about the lack of bank loans from the ACAB. The ACAB is unable to provide loans because of the failure to repay the previous loan by GPSS-PACS. GPSS-PACS in the study area, on average, deal with two banks. 3 GPSS-PACS have the highest number, i.e., four banks. All studied GPSS-PACS has 93 bank accounts: 39 in public banks, 20 in RRB, and 34 in state cooperative banks. GPSS-PACS in Kamrup and Kamrup Metro seek loans from commercial banks than state cooperative banks. Further, presence of non-institutional credit (especially personal borrowings from friends & relatives) is significant. My study reveals that for all credit and non-credit activities GPSS-PACS depend on commercial banks. Transaction is highest with public sector banks, followed by regional rural banks. The linkage with ACAB is minimum. A list of GPSS-PACS transacting with different types of banks is provided in Table 4.7

Table 4.7 List of GPSS having bank account in different type of banks

<i>Sl. no.</i>	<i>Name of GPSS</i>	<i>No. of Banks GPSS has account</i>	<i>No. of account having in Public Banks</i>	<i>No. of account having in Regional Rural Banks</i>	<i>No. of account having in Cooperative Banks</i>
1	Madhukuchi GPSS Ltd	3	1	1	1
2	Baidyagarh GPSS	3	-	2	1
3	Dakhin Chayani GPSS Ltd	2	1		1
4	Ranibhologaon GPSS Ltd	1	-	1	-

5	Borduar GPSS	2	1	-	1
6	Chaygaon Pantan	3	2	-	1
7	Champak Nagar GPSS Ltd	3	2	-	1
8	Dakhin Rampur GPSS Ltd	3	2	-	1
9	Uttar Chayani	2	1	-	1
10	Dakhin Saru Bongshar*	-	-	-	-
11	No. 2 Hajo GPSS	1	-	-	1
12	No.1 Hajo GPSS	3	2	-	1
13	Pati Darrang	3	1	1	1
14	No.2 Ramdia GPSS Ltd	2	1	-	1
15	No.1 Ramdia GPSS	2	-	1	1
16	Karara GPSS Ltd	-	-	-	-
17	Puthimara GPSS	2	1	-	1
18	Borigog GPSS	4	2	1	1
19	Paschim Bongshar GPSS	2	-	1	1
20	No1. Pub Bongshar GPSS	2	1	-	1
21	No.2 Pub Bongshar GPSS	2	1	-	1
22	BorBongshar GPSS	2	1	-	1
23	Bangaon GPSS	3	2	-	1
24	Ramcharani GPSS	1	-	1	-
25	Saraighat GPSS	2	-	1	1
26	Uttar Rampur GPSS	3	2	1	1
27	Modartola GPSS	2	-	1	1
28	Kamalpur GPSS	1	-	1	-
29	Tupamari GPSS	4	3	-	1
30	Nagarbera GPSS	3	2	-	1
31	Borkhat Panbari GPSS	2	-	1	1
32	Boko GPSS Ltd	4	2	1	1
33	Pub Samaria GPSS	3	1	1	1
34	Goraimari GPSS	2	-	1	1
35	Santoli GPSS	3	1	1	1
36	Sonapur GPSS	3	1	1	1
37	Dimoria GPSS	3	1	1	1
38	Luki GPSS	2	1	-	1
39	Bekali GPSS	1	1	-	-
40	Chamaria satra GPSS	3	1	-	1
	Total	92	38	20	34

Source: Field data (2021)

We have seen in Chapter 2 that private banks exhibit an increasing number of agriculture accounts than public banks. However, over the ten years, the percentage of public bank's agriculture outstanding credit decreased from 96.11 percent to 54.81 percent. The percentage of private banks' agriculture outstanding credit increased from 3.88 percent to 54.81 percent. Cooperative banks exhibit declining trends in terms of agriculture accounts as well as the

volume of agriculture outstanding credit. Hence, the performance of GPSS-PACS in disbursement of loans is low and can be attributed to limited credit flow through cooperative banks.

4.8 GPSS-PACS, Women SHGs and Microfinance

AIDIS report (2019) observed that cultivators and non-cultivators have come closer to microfinance institutions and bank-linkage SHG in Assam. The report shows that microfinance and bank-linkage SHG/JLG have become a significant source of borrowing after commercial banks, surpassing regional rural banks and cooperative societies in rural Assam. The cultivators borrow the highest amount of cash debt for housing, followed by farm businesses, while non-cultivators borrow the highest amount for housing, followed by non-farm businesses. There is a growing need for rural credit for consumption purpose, which indicates that microfinance institutions are addressing such needs. Thus, microfinance has entered into the “agriculture credit landscape”⁵⁴ in rural Assam. “Microfinance” means providing financial services to people living on the poverty line using informal solidarity group (Self Help Group) in place of physical collateral, as credit agencies do. The Self-Help Group has two forms: bank linkage promoted by NABARD and Government, and the other form involves the linkage with microfinance institutions (Shylendra, 2013). The following Table 4.7 shows that rural households borrow the most from NBFC/MFI and Bank-linked SHG/JLG after commercial banks.

Table 4.8 Percentage of rural households reporting credit outstanding from different credit agencies in Assam in 2019

<i>Formal Credit Institution</i>		<i>Informal Credit Institution</i>	
Scheduled Commercial Banks	9.6	Landlord	0.4
Regional Rural Banks	1.3	Agriculture Moneylenders	0.4
Cooperative Society	0.3	Professional Money lenders	0.6
Cooperative Banks	0.2	Input Supplier	0.1

⁵⁴ ‘Agriculture credit landscape’ was used by Sudha Narayanan and Nirupam Mehrotra to describe the entry of microfinance in rural area. See Narayanan, S., & Mehrotra, N. (2019). Loan Waivers and Bank Credit: Reflections on the Evidence and the Way Forward. *Vikalpa*, 44(4), 198-210.

Insurance Companies	0	Relative and Friends	1.2
Provident Fund	0	Chit Fund	0
Employer	0	Market Commission/Traders	0
Financial Corporation/Institutions	0.6	Other	1.1
NBFC including Micro financing Institution (MFIs)	2.1		
Bank Linked SHG/JLG	2.4		
Non- Bank Linked SHG/JLG	0		
Other Institutional Agencies	0.4		
All Institutional Agencies	16.0	All Non-institutional Agencies	3.8
Borrowers from all agencies			19.2

Source: NSS 77th Round (AIDIS-2019)

4.8.1 Introduction to SHG in Assam

Bank-linked SHG promoted by NABARD and government Started in India in 2011. Before 2011, the Swarnajayanti Grameen Swarojgar Yojana was implemented to provide self-employment to the rural population by establishing Self-Help Group. ‘The Integrated Rural Development Programme’ was restructured into the SGSY program. It was flagged off by the Ministry of Rural Development, Government of India. The drawbacks of SGSY were mitigated in a new program named the National Rural Livelihood Mission (NRLM) in 2011. NRLM was later reformed into Deen Dayal Antyodaya Yojana (DAY-NRLM) in 2015.

While in Assam, NRLM was implemented by the Assam State Rural Livelihood Mission Society (ASRLMS) with the objectives of social and economic empowerment of rural Assam. ASRLMS is an independent and autonomous body under the Society Registration Act XXI of 1860. ASLRM, under the Panchayat & Rural Development department, the Government of Assam is proposed to be a nodal agency and state mission director in Assam. ASRLMS implemented DAY-NRLM in November 2011.

The program's objective is poverty reduction through promoting self-employment and skilled employment. Its first step is to form a self-help group at the village level. The resource person

from the program would train the group on the five principles known as Panchasutra. These are regular meetings, savings, internal lending, timely repayment, and updated bookkeeping (Kochar et al., 2022). SHG received Rs. 10,000 from the Revolving fund, and another Rs. 15,000 would release to SHG, which maintains Panchasutra. The SHG are trained to such capacity, after which they are introduced to financial inclusion, involving linkage with banks or association with other financial associations. The program's funding mechanism is that funding for NRLM is shared between the central government and state government. The center and state share are 75:25. In the case of special states, which include Assam, their share is 90:10, i.e., the central government will provide 90 percent of funds to the special state for NRLM. The state government would provide 10 percent of the funds to the program (NRLM, Manual for District-Level Functionaries, 2017).

Under ASRLMS, there are many programs. Kanaklata Mahila Sabalakaran Yojana is a village-level women's SHG program that has the highest coverage in Assam. It aims to reduce poverty through self-help, mutual benefits, and self-reliance. It also focuses on micro-industry initiatives and encourages investment. In 2020, this scheme was implemented as Vistarita Kanaklata Mahila Sabalakaran Yojana. The funds for the scheme will be met from the State plan.

4.8.2 Presence of SHG in Assam

Assam has a total of 3,38,376 SHGs with membership of 37,78,516 under NRLM in Assam. Out of 3 38,376 SHGs, 20384 SHGs with membership of 228405 are in Kamrup district, the second highest number of SHGs in Assam. There are 2942 SHGs with membership of 32082 in Kamrup metropolitan districts. The Presence of SHG in Kamrup district and Kamrup Metropolitan district signifies a stronghold of SHG in the studied area.

As we know, Bank-linked SHGs are the second most common source of borrowing in rural Assam. We aim to examine the pattern of linkage with different types of banks. Our observation shows that commercial bank branches have the highest linkage with SHGs in Assam under NRLM. There are 1495 commercial bank branches linked with SHGs, and the number of SHGs linked with commercial banks in Assam is 173310.

Out of 1,495 commercial bank branches linked to SHGs, 111 are reported in Kamrup district, with a total of 13,537 SHGs linked to these commercial bank branches. Kamrup district has the highest number of commercial bank branches linked with SHGs among all the districts in Assam.

In Kamrup metropolitan district, there are reported of 29 commercial bank branches linked to SHGs, with the number of SHGs linked with commercial bank branches being 1526.

The linkage of commercial bank branches with SHGs is followed by Regional rural bank branches linked with SHGs reported to be 683 in Assam, with the number of SHGs linked with regional rural banks being 159975.

Out of 683 regional rural bank branches linked to SHG, 31 are reported in Kamrup district, with the number of SHGs linked with regional rural banks being 6467. In Kamrup metropolitan districts, the regional rural bank branches linked to SHG are reported to be 6, with the number of SHG-linked regional rural banks is 1446.

The linkage between cooperative banks branches and SHG in Assam is the lowest, accounted for only 78. Out of 78 cooperative bank branches linked to SHG, four are reported in Kamrup district, with number of SHG linked with cooperative banks being 682 and 0 in Kamrup metropolitan districts.

Thus, it indicates that under the initiative of NRLM, a state-sponsored program in Assam, commercial banks play a significant role in covering and financing SHG, followed by regional rural banks, with the cooperative banks playing the most negligible role. Hence, commercial banks dominate the number of bank branches linked with SHG, particularly in the study area, Kamrup district. Kamrup district recorded the highest out of all districts in Assam in both cases, i.e., the number of bank branches linked to SHGs and the number of SHGs. Under NRLM, cooperative banks' role is minimal in covering and financing SHGs in Assam.

The idea of microfinance is to reduce poverty through budding entrepreneurs, who can access formal financial services, enabling them to pull out of poverty. Such ideas were accepted and spawned in developing countries. Based on these ideas, policy makers, politicians, and money philanthropists have grown in the last three decades (Dichter & Harper, 2007).

Microcredit is a subset of microfinance that involves only credit activities, i.e., lending a small loan at low interest to people that motivated them to become self-employed. Based on these concepts of microcredit and bank-linked SHG, we analyze the performances of the volume of microcredit through different types of banks. In this regard, the study aims to examine cooperative societies' credit activities and microcredit's credit activities in credit supply to rural Assam.

Table 4.9 Saving of SHG with different types of banks in Assam in 2021

<i>Different types of Banks</i>	<i>No. of SHG</i>	<i>Amount of savings (Rupees In Lakhs)</i>
Regional Rural Banks	296269	30253.20
Public Banks	162103	20958.59
Cooperatives Banks	26499	287.35
Private Banks	8098	925.47

Source: Status of Microfinance in India 2020-21, published by NABARD

Table 4.10 Loans Outstanding of SHG in different types of banks in Assam in 2021

<i>Types of Banks</i>	<i>No. of SHG</i>	<i>Amount of Loans (Rupees In lakhs)</i>
Regional Rural Banks	73035	67941.00
Public Banks	50461	38648.89
Cooperatives Banks	0	0
Private Banks	1034	1131.0

Source: Status of Microfinance in India 2020-21, published by NABARD

Table 4.11 Value of NPA of SHG possessed by different types of banks in Assam in 2021

<i>Types of banks</i>	<i>Amount of NPA (Rupees in Lakhs)</i>	<i>NPA % to total loan outstanding</i>
Regional Rural Banks	15444.61	22.73
Public Banks	7359.73	19.04
Cooperatives Banks	0	0
Private Banks	132.81	11.74

Source: Status of Microfinance in India 2020-21, published by NABARD

From Tables 4.9, 4.10, and 4.11, we observed that regarding savings and lending (in the form of outstanding credit) by SHGs, Regional Rural Banks play significant roles in Assam, followed by public banks, cooperative banks, and private banks. Cooperative banks play no role in lending to SHG in Assam (referring to Table 4.10).

From Chapter 2, we observed that public banks have played a significant role in agriculture lending in Assam over the last ten years (2010-2020). The study also observed the rise of private banks in agriculture lending in the last ten years in Assam, surpassing regional rural banks. The cooperative banks seemed almost negligible in agriculture lending compared to public, private, and regional rural banks.

However, in the case of credit activities of SHG (including saving and lending), we observed that regional rural banks are the primary banking source in Assam, followed by public and

private banks. In this case, cooperative banks played a negligible role in the credit activities of SHG in Assam. The limited role of cooperative banks in agriculture lending can be the reason for limited lending to farmers through cooperative societies in Assam, which we have already explained in this chapter. The limited role of cooperative banks in the credit activities of SHG can be the reason for crowding out of cooperative societies by limiting their credit activities and the growth of microcredit. Also, the demand for credit has shifted to consumption purposes (for example, housing, as reported in AIDIS 2019). Therefore, accessing to microcredit have become vital for rural Assam. Although the state government has played the primary role in establishing GPSS-PACS and microfinance in Assam, the state involvement in carrying out the cooperative and microfinance movements is still distinct. The state government currently looks after the administration and regulation of cooperative societies. In contrast, the state government looks after regulating and funding of SHGs in Assam. Funding of cooperative societies by the state government is absent.

The Economic Survey of Assam⁵⁵ (2014) mentioned bringing microfinance as backward and forward linkage with PACS. Research Studies on the linkage of PACS and SHG in Assam are almost absent. Furthermore, only 6 GPSS-PACS mentioned their willingness to bring a women SHG in the near future in the study area. During the field study, only one GPSS-PACS provided loans to SHG. The GPSS-PACS, who lend credit to SHG, has deposit mobilization in 2019. Therefore, the lending is done through deposit mobilization. On a contrary note, the authorization of SHG impacted the GPSS-PACS due to the low interest rate (5-10%), as stated by one of the GPSS-PACS. This suggests that the interest rate is crucial to lending competition between lenders or formal institutions. The low volume of credit supply through GPSS-PACS

⁵⁵ An annual report published by Directorate of Economics and Statistics under the department of Transformation and Development, Government of Assam

can be attributed to their preference for earned from PDS supply rather than engaging in credit activities.

Research studies in other states show that states like West Bengal and Odisha are the leading examples of such linkage (SHG and cooperative societies). West Bengal has the most significant linkages between cooperative societies and SHG (Misra R., 2008). Odisha's legislation act on such linkage is called "Orissa Self Help Cooperative Acts 2001". Harper (2005) mentioned the advantages to SHG and Cooperative societies from such linkage. Following are the advantageous –

It provides a model of individual liability as well as joint liability.

- 1 The Members feel more ownership. Hence, there is greater assurance of credit returns.
- 2 It minimized the transaction cost of individual loans of cooperative societies through group lending.

Harper (2005) explained that most cooperative credits are farm credits, demanded mainly by men, while SHGs are primarily for consumption credits, which women mainly demand. The linkage could provide both kinds of loans, which can bring an opportunity to uplift from rural poverty to rural mass. The Presence of such linkage needs further studies. However, such linkage is absent in the study area. The recent development in this regard is that village organizations and producer collectives, which are promoted under ASRLMS, are directed to be registered under the Assam Cooperative Societies Act 2007 in 2016. The reason behind this was to accentuate the broader objectives of the cooperation, which are providing management and guidance, strengthening shareholders of SHG, and establishing liaison between the government, banks, and shareholders of SHGs. The Assam government is leaning towards this amalgamation of microfinance and cooperatives, which might be executed in the future.

Regarding funding, GPSS-PACS credit activities by state (Assam) is absent, unlike funding SHG in Assam.

However, in the future, the amalgamation of SHG and the cooperative would carry the spirit of the cooperative forward. Thus, while the cooperative may have suffered limitations at times, the cooperative philosophy embodied by SHGs can succeed (Satyasai & Badatya, 2000).

4.9 Conclusion

This chapter focused on the functioning of GPSS-PACS in Kamrup and Kamrup Metropolitan districts of Assam with the aim of assessing the type and volume of credit supply as well as their viability. Understanding what hinders the accessibility to credit from a supply-side point of view is the crux of this chapter. First, the hierarchy of cooperative structure in Assam is different from rest of the Indian States. Unlike a three-tier system in other states, Assam does not have a district level cooperative bank that connects GPSS-PACS functioning at the village level with the State level cooperative bank known as the Assam Cooperative Apex Bank or ACAB.

One of the most striking findings from the field study is that although all the 40 GPSS-PACS are registered as PACS under the Assam Cooperative Societies Act and are thus by definition meant to engage in credit business in the rural areas; 28 percent of them have given up on credit related activities. In other words, they no longer identify themselves as credit disbursing institutions and have no confidence in continuing in the business.

An important development in the rural credit sector with respect to PACS is the disconnect that they are facing with the Assam Cooperative Apex Bank, which was the largest supplier of credit. Due to non-repayment of loan overdue by the borrowers, and the subsequent delinquency faced by the GPSS-PACS, and with not much assistance forthcoming to resolve the deadlock, the credit supply from the cooperative system within the State has dried up. The

GPSS-PACS, in their own capacities, have continued with their credit businesses by borrowing from commercial banks and in many cases personal borrowings.

Many GPSS-PACS stopped their credit activities due to delinquent loans and the unavailability of proper loan schemes. Additionally, the highest number of GPSS-PACS discontinued their credit activities when implementing the interest subvention scheme and the 2000s most extensive debt waiver (Agriculture Debt Waiver and Debt Relief Scheme). The central government implemented such policies and was put forth for the farmers and peasants in distress. However, such policies have impacted the credit supply of GPSS-PACS by making lending less financially viable and promoting impunity among borrowers. This also directs us to understand why and how farmers in Assam cannot repay their loans. The inability to repay farmers' loans indicates the chances of lesser capital formation through agriculture, which may be due to the minimum application of modern techniques and agriculture inputs. Thus, it is also necessary to look at long-term agriculture credit. Long-term agriculture credit includes credit for agricultural land development and the buying of tractors and agricultural types of machinery.

With the roll out of the National Food Security Act 2013, the GPSS-PACS in Assam have found themselves engaged in bank transactions with commercial banks but mostly on account of distribution of essential commodities meant for public distribution system. We elaborate on this in the next chapter.

Notwithstanding the poor performance of GPSS-PACS in credit businesses, our field study shows that there are a few of them who have excelled in credit businesses due to innovative practices such as mini banks, and other deposit mobilization schemes. However, the numbers of such GPSS-PACS are very few.

The AIDIS Survey of 2019 shows that Kamrup (and Kamrup Metro) has one of the highest incidences of microcredit activities through SHG bank linkage programmes. There is reason to believe that the rural credit space in Assam has been taken over by microcredit institutions with very little space and scope for PACS. The supply of credit through GPSS-PACS is limited, and the deplorable state of rural credit flow in Assam has led the rural mass to come closer to bank-linked SHGs. There is a strong presence of bank-linked SHGs in the study area. Bank Linked SHG, an epitome of microfinance, is one form of cooperatives as the establishment of SHGs run on cooperative principles (Satyasai & Badatya, 2000). "Self-Help" was also promoted as a principle of the school of Schulze cooperatives (Madan, 2007). The reach of cooperatives cannot be altered with SHG, as SHG tends to be more homogenous than cooperative societies. However, cooperation cannot succeed unless it is promoted, nurtured, and self-sustaining. It is to be noted here that both cooperative movement and microfinance are patronages of central and state governments. However, the structure of institutions in bringing them up is quite distinct.

The 40 studied GPSS-PACS reflected an abysmal state of the five subsystems—governance structure, critical linkage, microenvironment, patronage system, and operating structure—as discussed in Chapter One. The following failures of these five systems are:

- i. The lack of a governance structure in providing equitable distribution of loans among its members in the studied area. We observed that GPSS-PACS engaged in credit activities often provide loans to their fair price shop dealers rather than farmers. Moreover, lending capacity under deposit mobilization depends on the saving capacity of its members. Hence, it will exclude the members who are not able to save. Therefore, members are discriminated in providing loans.

- ii. The absence of critical linkages between the 40 studied GPSS-PACS and state-level cooperative banks impacts credit facilities to its members in the studied area. The two-tier credit structure—state-level cooperative banks forming the upper tier and GPSS-PACS forming the bottom tier—is not efficiently operative. Consequently, the number of GPSS-PACS engaged in credit activities is decreasing, and the number of GPSS-PACS discontinuing their credit activities has been increasing post-2000s.
- iii. The inconducive microenvironment, i.e., the persistence of delinquent loans, embezzlement, and court cases, has been a major contributing factor for halting credit activities in the studied area.
- iv. The lack of selective insularity, i.e., the GPSS-PACS are unable to selectively receive beneficial influences and also unable to exclude disruptive ones from their environment, resulting in the diminishing role of cooperative credit and the rise of microcredit in the studied area.

All these factors indicate that the GPSS-PACS are not able to have centrality in the studied area. This emphasizes that the studied GPSS-PACS are CDU, as they are not able to determine their own credit-related objectives.

Chapter 5 GPSS-PACS and Supply Management of PDS in Assam

As we discussed in Chapter 1, the GPSS-PACS in Assam also perform non-credit activities. One of their primary engagements is supply of essential commodities for public distribution system. Food and foodgrains price policing are Union government responsibility, agriculture belong to state responsibility and Public Distribution System food grain is the responsibility of both central and state government (Mooij, 1999; Swaminathan, 2009). In Assam, right from the 1960s, cooperative institutions were also involved in procurement of foodgrains meant for public distribution (Das, 1989). The procured foodgrains were however supplied by the cooperative societies/farmer service societies to fair price shops. In this chapter, we focus on supply management of essential commodities meant for PDS in Assam with particular reference to the GPSS-PACS. To understand the overall failure of GPSS-PACS in Assam, it is necessary to focus on their non-credit activities as bulk of their businesses are being derived out of it.

Section 5.1 discusses the National Food Security Act and implementation of targeted PDS in Assam. Section 5.2 provides an overview of stakeholders involved in supply of PDS items in Assam. Section 5.3 explores the scale of supply management undertaken by the GPSS-PACS. Section 5.4 discusses transportation costs borne by the GPSS-PACS and why commissions received on account of transportation costs have significance for their viability. Section 5.5 examines other non-credit activities of the GPSS-PACS. In the final section of this chapter, we discuss whether GPSS-PACS should continue with PDS supply management commodities in Assam.

5.1 NFSA and Targeted PDS in Assam

India's rights-based food security act, the National Food Security Act was implemented in 2013. It aimed at providing food and nutritional security to the citizens of India by ensuring

accessibility to adequate amounts of quality and quantity food at an affordable rate. The expanding access to food through streamlining PDS got statutory backing when the government of India passed the National Food Security Act in 2013. Under this legislation, PDS was able to expand among the rural population, pregnant and lactating mothers (through monetary and nutritional support under the program Integrated Child Development Service guided by the Act), and provision of cooked meals to children aged from 6 months to 14 years (through Mid-day meal Schemes also guided by the Act) (George & McKay, 2019). The endeavour to broaden access to food under PDS aligns with the core objectives of NFSA;

“An act to provide for food and nutritional security in human life cycle approach, by ensuring access to adequate quantity of quality food at affordable prices to people to live a life with dignity and for matters connected therewith or incidental thereto” -National Food Security Act, September 10th, 2013

The Act provides a person with food entitlement or command over food. A person's command over food depends upon his/her "exchange entitlement"⁵⁶ in the market economy. Economic, political, social, and legal issues alter the "exchange entitlement" (Sen, 1982). Thus, the legislation is fundamental in paving the way for food security in India.

The NFSA provides a statutory backing to implementing the targeted PDS in India. Chapters V, VIII, IX, and X of NFSA mentions the possibility of engaging local level institutions such as cooperatives in distribution of PDS items. The NFSA allocates the responsibility of doorstep delivery of food grains to both central and state governments. The central government must transport food grains to the central depot in each state. It must also provide financial assistance to the state government for intra-state movement and margin to fair price shopkeepers. The

⁵⁶ As defined by Sen (1982), exchange entitlement is the ability of a person to exchange what the person owns for the person's acquirement. The person can exchange his labour, or trade of produce or assets. See Sen, Poverty and Famine, 1982

NFSA obligates the state government to operate efficiently and strengthen the capacities of food and civil supplies corporations and designated agencies. Additionally, Targeted Public Distribution System (TPDS) is administered by Public Distribution System (Control) Order 2015 in supersession of Public Distribution System (Control) Order 2001. Essential Commodities Act of 1955 conferred power to central government to make Public Distribution System (Control) Orders.

In Assam, the GPSS-PACS and erstwhile farmer service societies have a long history of engagement in distribution of essential commodities. The GPSS-PACS is the designated agency for PDS distribution.

GPSS-PACS were restructured in 1973 to provide credit for production and consumption, distribute essential and consumer commodities, procure foodgrains, and supply input fertilizers to village people. GPSS-PACS, being a rural consumer cooperative, needed to link with agricultural and processing cooperatives to meet the demand and supply. Assam State Cooperative Marketing and Consumer's Federation LTD, known as STATFED, was incorporated in 1975 as an agency to intervene in the market through procurement and movement of foodgrains and distribution of essential commodities. STATFED was instrumental in linking rural consumer cooperatives (GPSS-PACS in our case) with agricultural and processing cooperatives. However, in 2006, STATFED dissolved as it was a loss-making enterprise for a long time. Since then, FCI is the only procuring agency in Assam.

In India, Assam and Lakshadweep are the only regions where cooperative societies organize the delivery of allocated quantities at the doorstep of fair price shops. In Assam, GPSS, women GPSS wholesale consumer cooperatives societies and large area multipurpose societies

handled 90 percent of doorstep delivery, while 10 percent of the doorstep delivery is handled by private transporters selecting through tenders⁵⁷.

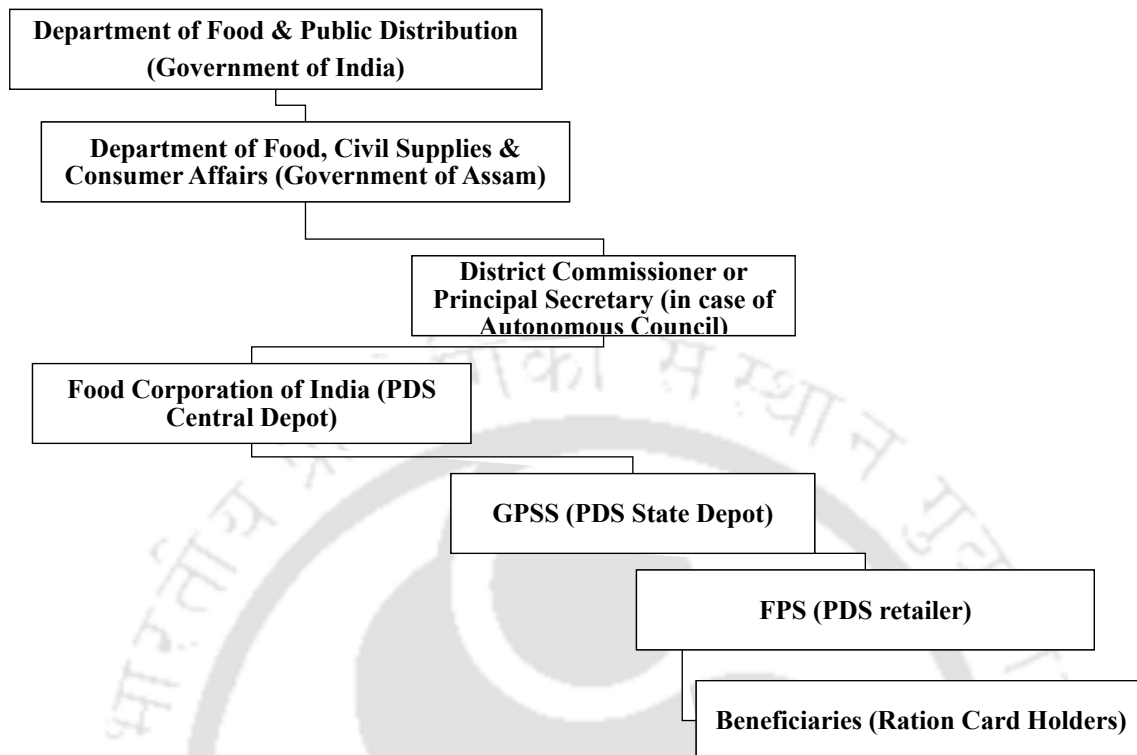
5.2 Stakeholders in Supply Management of PDS in rural and urban Kamrup

In Assam, the Department of Food, Civil Supplies & Consumer Affairs is the highest policy-making and governing body. The District Commissioners and Principal Secretaries are implementing authorities in Assam. In many other states of India, there are state-level Food and Civil Supply Corporations between the Department of Food and Civil Supplies and implementing bodies at the district level. Assam established a Food and Civil Supplies Corporation in 2014, however, it is yet not operational in implementing distribution of PDS foodgrains in the State. Therefore, the responsibility of implementing PDS lies solely on the Food, Civil Supplies and Consumer Affairs department (as depicted in Figure 5.1).

There are various stakeholders in the operation of PDS in Assam. It starts with FCI, the central government agency, and Assam's central depot of PDS food grains. GPSS-PACS acts as a state agency and state depot at the state level. GPSS-PACS are solely responsible for transporting PDS items from FCI godowns to GPSS-PACS godowns; and then from GPSS-PACS godowns to the respective fair price shops (FPS). The beneficiaries of ration card holders then collect their entitlements from FPS.

⁵⁷ The statement detailed about different state agencies in supply of PDS foodgrains in different states was published by Press Information Bureau Government of India. The statement was delivered by Shri C.R. Chaudhary, MoS, Ministry of Consumer affairs, Food and Public distribution as a written reply to Lok Sabha on 31st July of 2018. Retrieved from website <http://pib.gov.in/PressReleasePage.aspx>

Figure 5.1 Stakeholders in Supply Management of PDS in Assam



Source: Author's adaption based on field work (2021)

There are two designated central government depots for Kamrup and Kamrup Metropolitan areas. They are the FCI godowns in Changsari and New Guwahati⁵⁸. The Department of Food, Civil Supplies, and Consumer Affairs releases an Order for Allocation of Food Grains to the General Manager of the FCI and District Commissioners (DC) and Principal Secretary (in case of autonomous council areas). So, at the first level, the state government gives orders to the head of the central government's depot and the district's head. The DC or Principal Secretary releases allotment orders for each doorstep delivery agency. Such orders are called Release Orders which means, at the second level, the district head gives the order of “lifting of PDS items” to the GPSS-PACS. With the Release order in hand, all the 40 GPSS-PACS in Kamrup

⁵⁸ Changsari is a town in North Guwahati subdivision of Kamrup district of Assam, on the Brahmaputra River's north bank and New Guwahati is located in the Guwahati city of Kamrup Metropolitan District on the south of the Brahmaputra River.

and Kamrup Metropolitan area procure foodgrains from FCI Godowns in Changsari and New Guwahati to the respective GPSS-PACS godowns, and thereafter to the FPS.

From 2020 onwards till the present year (2021), rice has been the sole PDS foodgrain distributed under TPDS in the study area, in contrast to some other districts in Assam where rice and wheat are distributed. Rice was provided free of cost in 2021 in the study area. One of the respondents claimed that rice had been distributed for free since 2018.

Before the implementation of NFSA, there were four types of ration cards: AAY card, BPL card, MMAY card, and APL card⁵⁹. After implementing NFSA, BPL households, and APL households merged into Priority Households (PH cards). The study area has two ration cards- PH card holders and AAY card holders. AAY Card holders received 35kg per household per month, and PH cards received 5kg per member of households per month. As per NFSA, the price of foodgrains can be at most Rs. 3 per kg for rice, Rs. 2 per kg for wheat, and Rs.1 for coarse grains. These prices were fixed for three years starting from the Act's implementation. NFSA empowered the central government to fix the price, ensuring they do not exceed the minimum support price for wheat and coarse grains while establishing the price of rice derived from the minimum support price. Until 2021, the price of rice, wheat, and coarse grains have been Rs 3 per kg, Rs.2 per kg, and Rs.1 per kg, respectively. The central government has not changed the price of foodgrains for the beneficiaries.

From 2017 to 2021, the central government's cost of procuring rice and wheat was Rs. 32.64 per kg and Rs. 24.09 per kg. The subsidies provided by the central government for rice and wheat under Targeted PDS were Rs. 29.64 per Kg and Rs. 22.09 per Kg. During the same

⁵⁹ MMASY or Mukhya Mantri Anna Suraksha yojana (in maiden meaning chief minister food security scheme) was introduced by the Assam government to provide food entitlement to the poor households apart from BPL households, which the Assam government selects. Antyodaya Anna Yojana (AAY), a provision of foodgrain scheme to the poorest of poor, was introduced in 2002

period, the SIP of AAY rice and PH rice have been the same and remained unchanged (Rs.3 per Kg). In this regard, the central government subsidized PDS foodgrains largely. Additionally, the central government asked the state government to display the subsidy provided by the central government and state government at FPS for public awareness. Public awareness was crucial among beneficiaries to know their entitlement. Public awareness has empowered beneficiaries in the study area to assert their rights.

“People know their entitlement; they abuse us if they do not get their allotted PDS food grains. This all happened after NFSA.” – Secretary of a GPSS

5.3 Scale of Supply Management undertaken by the GPSS-PACS

In this section, we examine the scale and expenditure incurred by the GPSS-PACS in transporting PDS foodgrains from FCI to FPS as well as the different schools under mid-day meal programmes.

5.3.1 Huge scale of distribution across various welfare schemes

All the GPSS-PACS in both the rural and urban districts of Kamrup cater to 43,130 Antyodaya Anna Yojana (AAY) cards and 1,83,072 AAY population; 2,65,687 Priority Households (PH) Cards and 11,04,261 PH population under TPDS. Altogether they account for 6.4 percent of total AAY cards, encompassing 8.8 percent of the AAY population in Assam and 4.8 percent PH cards serving 6.47 percent PH population⁶⁰.

In Assam, there are 34,171 FPS. Out of the total FPS, 69.46 percent of FPS are owned by individuals, cooperative societies own 11.08 percent, 19.22 percent are owned by others, and SHG owns 3 percent⁶¹. The 40 Kamrup GPSS-PACS' distribute rice to 1741 Fair price shop dealers that accounts to 5 percent of the total FPS in Assam. Out of 1741 FPS, 27 belong to the

⁶⁰ The total number of AAY and PH cards and population was calculated. Retrieved from <https://nfsa.gov.in>

⁶¹ Data has been taken from website: <https://www.indiastat.com>

Hilly category, and 107 belong to Riverine areas. The rest are in the Plains areas. In Kamrup, as per NFSA allocations, 35kg per household per month is allotted to AAY ration card holders, and 5kg per member of a household per month has been allotted to PH ration card holders.

All the GPSS-PACS taken together transported around 14,916 quintals of rice for AAY ration card holders and 45,581 quintals for PH ration card holders in a month. Tables 5.1 and 5.2 depict that riverine areas reflect higher transportation costs. Blocks comprised of riverine areas are Hajo, Goraimari, and Nagarbera. Table 5.3 depicts that urban areas reflect low transportation costs, i.e., Dimoria block. Tables 5.4, 5.5, and 5.6 present approximate quantities of PDS foodgrains transported by the GPSS-PACS for schools under the Mid-Day Meal Scheme.

For 1,723 lower primary schools and 570 upper primary schools, the 40 GPSS-PACS transported 4739.17 and 4015.72 quintals of rice respectively. Unlike PDS items, allocation of Mid-day Meals is not allocated monthly but once in two months or three months.

5.3.2 Responsibility of food distribution on GPSS-PACS during COVID-19 Pandemic

During COVID 19 pandemic in 2020, Pradhan Mantri Garib Kalyan Anna Yojana (PMGKAY), an ad hoc scheme, was introduced and implemented to combat the crisis during the nationwide 'lockdown'. The following tables, 5.7, 5.8, and 5.9, provide information on PMGKAY allocation by GPSS-PACS sub-division-wise and block-wise.

Pradhan Mantri Garib Kalyan Anna Yojana (PMGKAY) is an additional allocation of food grains distributed to all the beneficiaries under TPDS. PMGKAY allotted 5 kg of rice per person per month to all the beneficiaries, including AAY and PH cardholders. During the COVID-19 pandemic in 2020, pulses were distributed under PMGKAY. The quantities of pulses were 1kg per household. Similarly boot dal (chickpeas) were distributed five times, and masoor dal (red lentils) were distributed thrice in the same year. Under PMGKAY, GPSS-PACS transported

7902.82 quintals of rice monthly for AAY ration card holders. Regarding PH households, GPSS-PACS transported 42047.02 quintals of rice monthly.

During the COVID-19 pandemic in 2021, in addition to the distribution of PMGKAY foodgrains, foodgrains were also distributed to the people with no ration cards. However, this distribution was carried out by a few GPSS-PACS, where the panchayat office could not facilitate it.



Table 5.1 TPDS allocation under NFSA of Kamrup Sadar division block wise

Sl. No.	Name of block	No. of GPSS	No. AAY ration cards	No. of AAY population	Amount of rice lifting under AAY category (In quintal)	No. of PH ration no cards	No. of PH population	Amount of rice lifting under PH category (In quintal)	No. of fair price shop	Cost of transportation per month (In Rupees)
1	Bongaon	1	1650	7051	585.85	8771	37383	1887.160	60	295000
2	Bezera	2	1502	6116	525.7	10852	41846	2084.19	94	230000
3	Boko	3	2932	12318	1017.8	19170	79806	3961.4	93	686000
4	Chaygaon	2	2298	9924	804.3	13097	54957	2747.574.25	70	390000
5	Chayani Barduar	3	3376	14199	1181.6	15192	61386	3069.1	119	540000
6	Chamaria	3	2304	7461	802.9	22957	102185	4946.61	123	764000
7	Hajo	5	5946	27570	2105.38.72	34307	120668	5852.54.200	271	990000
8	Sualkuchi*	2	1856	7489	294.54*	10241	42696	948.55*	52	100000*
9	Rani	1	1675	6930	585.2	6306	25089	1254.5	46	150000
10	Rampur	3	2884	11691	1006.25	16390	67301	3332.45	147	582000
11	Goroimari	2	2920	17510	1022	18908	93278	4348.75	78	766000

Source: Field data (2021).

Note * One GPSS in Sualkuchi block could not provide data due to the secretary's absence.

Table 5.2 TPDS allocation under NFSA of Rangia division block wise

Sl. No.	Name of block	No. of GPSS	No. AAY ration cards	No. of AAY population	Amount of rice lifting under AAY category (In quintal)	No. of PH ration cards	No. of PH population	Amount of rice lifting under PH category (In quintal)	No. of fair price shop	Cost of transportation per month (In Rupees)
1	Kamalpur	3	3239	11040	728.15	10605	60248	3012.18.525	129	268000
2	Rangia	3	2987	11802	1052.45	20680	77565	3873.29.375	126	356997
3	Bihdia Jajikona	2	2056	7308	1572.3	14020	43076	1300.96	98	390000

Source: Field data (2021).

Table 5.3 TPDS allocation under NFSA of Kamrup Metropolitan Sadar Sub-Division block wise

Sl. No.	Name of block	No. of GPSS	No. AAY ration cards	No. of AAY population	Amount of rice lifting under AAY category (In quintal)	No. of PH ration cards	No. of PH population	Amount of rice lifting under PH category (In quintal)	No. of fair price shop	Cost of transportation per month (In Rupees)
1	Dimoria	3	3237	14003	1132.95	26222	112847	5643.83	84	126600
2	Rani	1	1097	4254	383.95	6749	24803	1240.15	48	120000

Source: Field data (2021)

Table 5.4 MDM Allocation of Kamrup Sadar Kamrup division

Sl. no.	Name of block	Number of LP Schools	Total weight lifted for LP Schools	Number of UP Schools	Total weight lifted for UP Schools	Cost of transportation cost per month (In Rupees)
1	Bongaon	89	188.04	19	102.9	87000
2	Bezera	3	4.9	5	26	7000
3	Boko	202	387.66	43	319.11	111000
4	Chaygaon	117	215.34	24	181.17	68000
5	Chayani Barduar	130	266.3	41	207.3	41300
6	Chamaria	188	459.54	75	730.41	209900
7	Hajo	55	349.06	18	399.85	36400
8	Sualkuchi*	0	21.2	3	0	0
9	Rani	71	109.99	12	83.58	17000
10	Rampur	95	291.59	30	239.78	50000
11	Goroimari	167	797.74	60	511.8	182000

Source: Field data (2021)

Note * one of GPSS in Sualkuchi block could not provide data due to absence of secretary.

LP-Lower Primary School, UP-Upper Primary School

Table 5.5 MDM allocation of Rangia division

<i>Sl. no.</i>	<i>Name of block</i>	<i>Number of LP Schools</i>	<i>Total weight lifted for LP Schools</i>	<i>Number of UP Schools</i>	<i>Total weight lifted for UP Schools</i>	<i>Cost of transportation cost per month (In Rupees)</i>
1	Kamalpur	84	285.94	45	42	50616
2	Rangia	169	338.83	68	367.06	15000
3	Bihdia Jajikona	116	308.65	50	263.84	42000

Source: Field data (2021).

LP-Lower Primary School, UP-Upper Primary School

Table 5.6 MDM allocation of Kamrup Metropolitan Sadar Sub-Division

<i>Sl no.</i>	<i>Name of block</i>	<i>Number of LP School</i>	<i>Total weight lifted for LP School</i>	<i>Number of UP School</i>	<i>Total weight lifted for UP School</i>	<i>Cost of transportation cost per month (In Rupees)</i>
1	Dimoria	182	526.91	51	376.94	930000
2	Rani	0	4	5	47.85.585	9500

Source: Field data (2021)

LP-Lower Primary School, UP-Upper Primary School

Table 5.7 PMGKAY allocation of Kamrup Sadar division

Sl. no.	Name of block	No. of GPSS	No. of AAY ration cards	No. of AAY population	Amount of rice lifting under AAY category (In quintal)	No. of PH ration cards	No. of PH population	Amount of rice lifting under PH category (In quintal)	Cost of transportation per month (rupees)
1	Bongaon	1	1650	7051	355	8771	37383	1887.1	295000
2	Bezera	2	1502	6116	305.8	10852	41846	2026.59	250000
3	Boko	3	2932	12318	615.55	19170	79806	3961.55	656000
4	Chaygaon	2	2298	9924	496.2	13097	54957	2747.72	140000
5	Chayani Barduar	3	3376	14199	664.95	15192	61386	2469.2	525000
6	Chamaria	3	2304	7461	518.35	22957	102185	5045.06	764000
7	Hajo	5	5946	27570	1079.5	34307	120668	5947.44	2575000
8	Sualkuchi*	2	1856	7489	184.3	10241	42696	119.05	100000
9	Rani	1	1675	6930	346.5	6306	25089	1254.5	150000
10	Rampur	3	2884	11691	582.75	16390	67301	3332.45	460000
11	Goroimari	2	2920	17510	639.9	18908	93278	4348.75	689000

Source: Field data (2021)

Note * one of GPSS in Sualkuchi block could not provide data due to absence of secretary.

Table 5.8 PMGKAY allocation of Rangia division

Sl. no.	Name of block	No. of GPSS	No. AAY ration cards	No. of AAY population	Amount of rice lifting under AAY category (In quintal)	No. of PH ration cards	No. of PH population	Amount of rice lifting under PH category (In quintal)	Cost of transportation per month (rupees)
1	Kamalpur	3	3239	11040	207.15	10605	60248	1247.42.52	141000
2	Rangia	3	2987	11802	490.15	20680	77565	2431.9	347998
3	Bihdia Jajikona	2	2056	7308	187.7	14020	43076	222.36	260000

Source: Field data (2021)

Table 5.9 PMGKAY allocation of Kamrup Metropolitan Sadar Sub-Division

Sl. no.	Name of block	No. of GPSS	No. AAY ration cards	No. of AAY population	Amount of rice lifting under AAY category (In quintal)	No. of PH ration cards	No. of PH population	Amount of rice lifting under PH category (In quintal)	Cost of transportation per month (rupees)
1	Dimoria	3	3237	14003	700.45	26222	112847	2835.608	48600
2	Rani	1	1097	4254	191.75	6749	24803	1870	0

Source: Field data (2021)

Table 5.10 List of GPSS with monthly expenditure and non-payment of Transportation cost& commission

Sl. no.	Name of the GPSS	Monthly expenditure on lifting NFSA foodgrains (Rupees)	Monthly expenditure on lifting PMGKAY foodgrains (Rupees)	Monthly expenditure on lifting Midday meal foodgrains (Rupees)	Total monthly expenditures on PDS foodgrains (Rupees)	Payments yet to be received to GPSS (Rupees)
1	Madhukuchi GPSS Ltd	124997	124998	0	249995	9000000
2	Baidyagarh GPSS	112000	118000	0	230000	8000000
3	Dakhin Chayani GPSS Ltd	150000	145000	12300	307300	5500000
4	Ranibhologaon GPSS Ltd	150000	150000	17000	317000	7500000
5	Borduar GPSS	260000	260000	14000	534000	8300000
6	Chaygaon Pantan	140000	140000	38000	318000	8000000
7	Champak Nagar GPSS Ltd	250000	0	30000	280000	10000000
8	Dakhin Rampur GPSS Ltd	112000	0	14000	126000	6500000
9	Uttar Chayani	130000	120000	15000	265000	4500000
10	Dakhin Saru Bongshar	200000	190000	16000	406000	6000000
11	No. 2 Hajo GPSS	200000	200000	0	400000	8700000
12	No.1 Hajo GPSS	200000	180000	0	380000	6400000
13	Pati Darrang	170000	160000	32000	362000	8800000
14	No.2 Ramdia GPSS Ltd	280000	275000	8000	563000	10000000
15	No.1 Ramdia GPSS	190000	190000	20400	400400	7200000
16	Karara GPSS Ltd	220000	100000	10000	330000	8200000
17	Puthimara GPSS	100000	0	36800	136800	5200000
18	Borigog GPSS	120000	105000	15000	238000	4000000
19	Paschim Bongshar GPSS	120000	110000	8000	238000	7600000
20	No1. Pub Bongshar* GPSS	0	0	0	0	6000000
21	No.2 Pub Bongshar GPSS	100000	0	0	100000	
22	BorBongshar GPSS	120000	120000	7000	247000	2600000
23	Bangaon GPSS	295000	295000	87000	677000	10900000
24	Ramcharani GPSS	120000	120000	9500	249500	3000000

25	Saraighat GPSS	110000	130000		240000	6500000
26	Uttar Rampur GPSS	270000	270000	20000	560000	6964000
27	Modartola GPSS	158000	141000	13816	185916	7500000
28	Kamalpur GPSS	100000	0	0	100000	
29	Tupamari GPSS	291000	291000	80000	662000	8669000
30	Nagarbera GPSS	283000	283000	9900	575900	13055000
31	Borkhat Panbari GPSS	0	0	10000	10000	6000000
32	Boko GPSS Ltd	206000	206000	20000	432000	8000000
33	Pub Samaria GPSS	216000	189000	72000	412200	11137677
34	Goraimari GPSS	550000	500000	110000	1160000	16300000
35	Santoli GPSS	120000	120000	120000	360000	13300000
36	Sonapur GPSS	48600	48600	92000	106400	7000000
37	Dimoria GPSS	0	0	0	0	3500000
38	Luki GPSS	270000	250000	55000	575000	6700000
39	Bekali GPSS	210000	200000	36000	446000	6000000
40	Chamaria satra GPSS	190000	190000	32000	412000	9600000

Source: Field data (2021)

Note * No available data due to the absence of the secretary.

5.4 Cost of Transportation Borne by the GPSS-PACS in Rural and Urban Kamrup

A major component of PDS supply is that of transportation cost borne by the GPSS-PACS. In rural areas, the entire burden of transportation is borne by the GPSS-PACS – from FCI godowns to fair price shops. In urban areas, i.e., in Kamrup Metropolitan area, the GPSS-PACS do not bear any transportation cost due to the involvement of private contractors. The private contractors are selected through tendering who are awarded contracts of transporting foodgrains from FCI depots to fair price shops. The modality of transportation is directly linked to the amount of transport commission received by the GPSS-PACS. Given the huge scale of foodgrains distribution, the transport commission contributes significantly to the monthly and annual incomes of the GPSS-PACS.

For distribution of PDS commodities within a State, there is central assistance and state assistance. Cash assistance provided by the Central government is referred to as central assistance and likewise in the case of state governments. States are put under General and Special category for this purpose. States under general category receive 50 percent central assistance and those under special category receive 75 percent central assistance. Assam is a special category state. For Assam, central assistance for intra-state movement handling is to the tune of Rs. 243 per quintal; of which Rs. 143 is the margin specified for fair price shops. Similarly, in general category states, the fair price shop margin is specified as Rs. 70 per quintal. An additional payment of Rs. 17 per quintal is also assigned for fair price shops that use point-of-sale device for sale of commodities through Aadhaar Biometric authentication. Table 5.11 summarises the central assistance to states for intrastate movement and handling of food items.

Table 5.11 Central assistance to State (Intrastate Movement & Handling) in Rupees per quintal

State Category	Intra-state movement and Handling provided to State governments (Per quintal)	Fair Price shop Margin (Per quintal)		Central share (in %)
		Basic	Additional margin for sale through point-of-sale device	
General	65	70	17	50
Special	100	143	17	75

Source: The Food Security (Assistance to State Government) Rules 2015, Department of Food and Public Distribution, Ministry of Consumer affairs, Food and Public distribution, Government of India

Note: General states are –Andhra Pradesh, Bihar, Chhattisgarh, Goa, Gujarat, Haryana, Jharkhand, Karnataka, Kerala, Madhya Pradesh, Maharashtra, Odisha, Punjab, Rajasthan, Tamil Nadu, Telangana, Uttar Pradesh, West Bengal, Chandigarh, Dadra & Nagar Haveli, Daman & Diu, Delhi, Puducherry. States under special category are – Arunachal Pradesh, Assam, Himachal Pradesh, Jammu & Kashmir, Manipur, Meghalaya, Mizoram, Nagaland, Sikkim, Tripura, Uttarakhand, Andaman & Nicobar Island, Lakshadweep.

Activities included under intrastate movement and handling are transportation of food grains from the central depot to intermediate godowns and from the intermediate godowns to FPS. Loading and unloading of foodgrains at the central depot and intermediate godowns are classified as *handling*. Thus, expenditures incurred from activities involving intrastate movement and handling are eligible for central assistance. However, if the loading and unloading of food grain are carried by FCI hired personnel, where the state has not incurred expenditures, the states are not eligible for central assistance. The expenditures incurred from godowns rent and storage, transit cost, taxes and cess, preservation, and fumigation of foodgrains, bank interest, wholesale dealers margin, and any overlapping with other schemes' transportation cost will be considered as intrastate movement and handling charge by the central government⁶².

⁶² States categorized as special states witnessed an increase in central assistance for intrastate movement and handling, rising from Rs.100 per quintal in 2015 to Rs.105 per quintal in 2022. Similarly, the central assistance

5.4.1 Differences in Transport costs in Riverine, Hills and Plains Areas of Assam

Transportation cost Post NFSA implementation

While the central assistance for Assam is as highlighted above, there are differences in actual operations. In Assam, the intrastate movement and handling charge of Rs. 100 is assigned to the GPSS-PACS who transport foodgrains from FCI godowns to FPS. While transporting foodgrains to fair price shops, there is often a delay of few days during which the GPSS-PACS store the foodgrains in their own storage spaces. In such cases, the FPS margin amount of Rs. 143 is shared between the GPSS-PACS and the FPS in the ratio of Rs. 42.90: Rs. 101.10.

A GPSS-PACS operating in plain areas receive Rs. 136 per quintal; of which Rs. 100 is central and Rs. 36 is state assistance. A GPSS-PACS located in riverine and hilly areas receives Rs 150; of which Rs. 100 is central assistance and Rs. 50 is state assistance (refer to Table 5.12). Let us examine the margin calculation for a GPSS-PACS in Plains and Riverine/Hilly area as follows.

GPSS-PACS in Plains area: Rs. 100 (central assistance) + Rs. 36 (state assistance) + Rs. 42.90 (from the FPS margin) = Rs. 178.90 per quintal

GPSS-PACS in Riverine/Hilly area: Rs. 100 (central assistance) + Rs. 50 (state assistance) + Rs. 42.90 (from the FPS margin) = Rs. 192.90 per quintal.

The Rs. 42.90 received by the GPSS-PACS from the FPS' margin money is referred to as the commission by our respondents in the field study and Civil Supplies officials in the state. Respondents from the field study informed that the Rs. 42.90 shared between the FPS and GPSS-PACS is based on a negotiation carried on since the implementation of NFSA. Thus, the state government does not provide subsidy towards FPS margin. Instead, it extends financial

for margin for FPS increased from Rs. 143 per quintal in 2015 to Rs. 180 per quintal in 2022. As the fieldwork took place in 2021, the rule set in 2015 will be considered.

assistance exclusively for intrastate movement and handling or transportation (refer to Table 5.12). In case of schemes such as the Midday Meal Scheme, there are no commissions as distribution is made at the doorsteps of schools.

Table 5.12 Transportation Cost and Commission received by GPSS-PACS from state government in study area

<i>Scheme</i>	<i>Transportation cost</i>		<i>Commission</i>
	<i>Plain areas per quintal</i>	<i>Riverine/ Hilly area per quintal</i>	<i>Any terrain per quintal</i>
TPDS	Rs 136	Rs 150	Rs 42.90
PMGKAY	Rs 136	Rs 150	Rs 42.90
ICDS	Rs 136	Rs 150	Not given
MDM	Rs 136	Rs 150	Not given

Source: Field data (2021)

Transportation cost Pre NFSA implementation

In Assam, as in all other states, distribution of foodgrains to priority households (or households below poverty line or BPL) is the most extensively implemented welfare programme. Scholars (Rahman, 2017 and Bedamatta & Rahman, 2020) have documented that from 1997 to 2013, Assam was an exceptional state for fixing different state issue prices (SIP)⁶³ for rice distribution by geographical location and by distance slab. For PDS, the geographical location specification for Assam is mainly of three types- plains areas, riverine areas and hilly areas. Distance slab means the transportation cost incurred by the supplier for covering the distance from food

⁶³ Ministry of Consumer Affairs, Food and Public Distribution looked after PDS at the national level. Under this ministry, the Food Corporation of India has three functions. These are procurement, storage, and distribution. Each function has its cost. This cost is summed to be economic cost which is the Central Issue Price (CIP).

Department of Food, Civil Supplies, and Consumer Affairs under Ministry of Food, Civil Supplies, and Consumer Affairs under the government of Assam have civil supply offices at the state and district levels. The department fixed State Issued Price (SIP). The SIP includes transportation cost profit margin for GPSS (act as state depot) and FPS (act as PDS retailer).

storage godowns to fair price shops. The supplier in question here are the GPSS-PACS. The studies cited above have highlighted that the distance between GPSS-PACS and FPS, were categorized as 0-5 Km, 5-10 Km, 10-30 Km, 30-50 Km, 50 Km, and above. Thus, the final retail price to be charged from the consumers (or beneficiaries) varied by location. As such, different SIPs can even be found within one district (Bedamatta & Rahman, 2020). Such calculations thus complicate matters for suppliers such as the GPSS-PACS. This chapter provides another dimension to the study carried out by the above authors by focusing on the stakeholders involved in supply of PDS items.

It was evident from Bedamatta & Rahman (2020) that SIP for BPL was above the limitation set by the central government, which was Rs.0.50, i.e., the Price of BPL entitlement was made equal to CIP plus SIP (which was more than Rs. 0.50). Thus, the burden of economic cost in the form of SIP was pushed towards the end consumers, i.e., the beneficiaries.

Based on narrations from our GPSS-PACS respondents during field study, we gathered to know that the government of Assam commissioned Rs. 30 per quintal for transportation costs to GPSS during pre-NFSA. As commissioned by the Government of Assam, the transportation cost followed the Government of India order dated 18th December 2001. The government of Assam allotted Rs 30 per quintal for transportation costs. Of Rs 30 per quintal, Rs 23 per quintal would be allotted to GPSS or wholesale cooperatives, and Rs. 7 per quintal was allotted to FPS (Comptroller & Auditor General of India, 2010). This commission applied only to the transportation of AAY foodgrains.

Based on the interviews with GPSS-PACS, the government of Assam delayed releasing the commission from 2008. 27 GPSS-PACS in Kamrup district filed a case against the state government at Gauhati High Court, and the verdict was delivered in favour GPSS-PACS 's behalf. Performance Audit Report on PDS in Assam, published by the Comptroller and Auditor

General of India (C&AG) also reported that during the period from 2005 to 2010, there was no release of a substantial amount of funds for transportation cost of PDS foodgrains by state government. According to the report, the State Government reimbursed around half of the transportation cost of AAY rice. Rs. 22.37 crore was only released towards transportation costs out of the total budget allocation of Rs.40.07 crore (Comptroller & Auditor General of India, 2010). After the court case, from 2011 to 2015, GPSS-PACS initiated to levying charges ranging from Rs. 0.50 per quintal to Rs.2.50 per quintal for the distribution of PDS foodgrains rather than waiting for commission release. This indicates there was no regulation in maintaining the profit margin.

It was during the pre-NFSA period when agents or dealers of fair price shops used to collect their allocation from GPSS storage. The dealers of Fair Price Shop used to manage their costs in transporting and distribution. Public Distribution System (Control) Order 2001, directed dealers of Fair Price Shops to collect PDS foodgrains from state depot. However, with the implementation of NFSA, the doorstep delivery approach was implemented, and thereby, GPSS-PACS began to transport and distribute PDS foodgrains to FPS from FCI.

Thus, during TPDS or pre NFSA period, Assam performance was deplorable and the role of GPSS in targeted PDS was dismayed in providing food security to the rural mass, especially vulnerable population. The role of state government in regulating SIP and transportation cost was the major factors for the worst performance of Assam in providing food entitlement to vulnerable section of the population under TPDS. Application of commission (Rs. 30 per quintal) only to AAY foodgrains, not to other cards (BPL, MMASY, and APL) was not effective in bearing economic cost of supplying PDS foodgrain by state government, hence poorest of the poor section of population (AAY card holders) suffered due to this delay in releasing the

commission. Although, the GPSS respondents approved of having better status in profit in pre-NFSA due to the presence of profit margin.

5.5 Importance of Commissions & Viability of GPSS-PACS in meeting Non-credit

Businesses

All our GPSS-PACS respondents emphasized that the viability of their society depends on the commission they receive. The commission received by GPSS-PACS is instrumental in the sustenance of societies. The commission facilitates providing salaries to their members, covering maintenance for works and other ventures. The commission is imperative for the profit of the societies. During the pre-NFSA period, other than CIP and SIP, the profit margin was borne by customers who were the beneficiaries. This non-uniform profit margin led to indiscriminate pricing of PDS foodgrains borne by the beneficiaries.

Consequently, there were leakages (diversion of food grains from FPS) and loss of food entitlement in the form of higher prices and lower quantity at FPS. The loss was profound for AAY population and beneficiaries living in the riverine areas of Assam. However, GPSS-PACS could run their societies without compromising its financial stability during this period. Earlier the burden of payment was thus borne by the PDS consumers.

The non-uniformity of profit margins and indiscriminate pricing of PDS foodgrains were curbed post NFSA implementation. The central and state governments bear transportation costs and FPS margin under the provision of NFSA. However, due to the delay in payment of transportation costs and profit margins to GPSS-PACS and FPS, the GPSS-PACS have been impacted in terms of loss of viability. Consequently, GPSS-PACS either have to borrow money from informal credit agencies to distribute PDS allocations or skip the PDS allocations which ultimately negatively impacts the final consumers. The burden of loss is undeniably more on vulnerable sections of the population living in difficult terrains, i.e., riverine and hilly areas.

Private contractors in urban areas also suffer from the delay in payment. Thus, post NFSA, while discriminative pricing of PDS commodities have been controlled, inefficiencies of the state mechanism in releasing handling charges and FPS margins has led to loss of food entitlement to PDS beneficiaries on the one hand, and loss of profitability for GPSS-PACS on the other.

5.6 Recent change in transportation cost and commissions

All GPSS-PACS reported that the commission would be reduced to Rs. 25.36 from April 2021. During the Assam finance budget meeting in June 2021, the Chief Minister of Assam announced to cut the commission received by GPSS-PACS. The reduced commission would be redirected to FPS, increasing their commission to Rs. 143 per quintal. In return, GPSS-PACS would receive five lakhs per year instead of commission. However, due to the ongoing resistance of GPSS-PACS in Kamrup district, the decision is yet to be implemented in the study area. All of the studied GPSS-PACS were distressed by the announcement.

“If commission is cut, we will face trouble. The promise of Rs 5 lakhs is a promise, how can we trust, when there is irregularity.” -Secretary of a GPSS

“With Rs.42.90 as commission, yearly we get Rs.20 lakh. So, 5 Lakhs per annum is not justified”. - Another secretary of a GPSS

There was also a change in transportation costs. The central government increased payment for an interstate movement in 2022. However, the thesis could not assess this change as the fieldwork was carried out in 2021.

Nevertheless, it is imperative to understand that the economic gain to GPSS-PACS partially depends on increased transportation costs. Instead, the regularity of government payments could bring economic gains to GPSS-PACS and the efficient function of GPSS-PACS as a cooperative institute at the village level.

5.7 Irregular payments for meeting transportation costs and challenges

Table 5.10 tabulated huge outstanding payments to GPSS-PACS by the state government. The table also reflected monthly expenditures associated with the procurement and distribution of PDS foodgrains.

One of the primary challenges faced by the GPSS-PACS' in rural Kamrup is irregular payments of transportation costs and commission for all the Schemes (NFSA, Mid-day meals, and PMGKAY) by the state government. The delay and irregular payment to GPSS-PACS started in 2015. To date, an outstanding amount averaging Rs 76,87,517 remains unpaid to the 39 GPSS-PACS (with one GPSS-PACS unable to provide that data). There are 7 GPSS-PACS who owed payments exceedingly more than ten million.

A GPSS in the riverine block of Kamrup district has the highest outstanding payment from the State government, amounting to one hundred sixty-three million. It is noteworthy that this GPSS-PACS also incurs the highest monthly expenditure on transporting PDS food grains which means that it is in a difficult terrain and experiences more vulnerability. A GPSS-PACS located in metropolitan area has the lowest outstanding payment from the state government, amounting to rupees 3 million.

In this study, the total outstanding payment to the 39 GPSS-PACS amounts to approximately Rs. 29,21,25,677 from the state government.

The consequences of such substantial outstanding payments have adversely impacted all the GPSS-PACS. To facilitate the transportation of PDS foodgrains, GPSS-PACS resort to borrowings from personal sources. Being a formal credit institution, GPSS-PACS seek loans from informal sources, exposing them to arbitrary interest rates charged by informal sources. For example, two GPSS-PACS had borrowed 12 million and 81 million respectively from personal sources.

At times, the deadline for procurement is limited, which leads to chaotic queuing of secretaries and trucks at the FCI godowns. This results in queuing for 1-2 days and working till dawn. Sometimes, server malfunction exacerbates the queuing process. Many of our respondents expressed the view that procurement procedure from FCI godowns are lengthy and worrisome. Thus, the GPSS-PACS' financial stability is subject to volatility. Often, the societies cannot pay staff salaries. The implementation of PMGKAY with additional foodgrain has deepened the pressures on GPSS-PACS without commensurate compensation.

“Due to double quota, two schemes, less financial aid, cost of transportation is high, we did not do lifting of NFSA (which meant TPDS), we did PMGKAY lifting.”- secretary of a GPSS-PACS

GPSS-PACS are entrusted with the responsibilities of managing four schemes. Among these, the PMGKAY were introduced in 2020 as an ad hoc in response to COVID-19 Pandemic. In 2021 Assam government expanded GPSS-PACS responsibilities by including Integrated Child Development Services Scheme (ICDS) rice delivery to GPSS-PACS.

Another example was in 2019, when the Food, Civil Supplies & Consumer Affairs department under Government of Assam ordered the GPSS-PACS to distribute onion and potatoes due to sudden high prices of onion and potatoes in the market.

It is to note that despite facing irregular transportation payments from the state government, GPSS-PACS continued to facilitate the distribution of food grains under PDS over an extended period apart from additional responsibilities entrusted during emergencies.

5.8 Bargaining and Negotiations between GPSS-PACS and FPS

In the pre-NFSA period, FPS used to collect their allotted PDS foodgrains from GPSS-PACS. Despite this, GPSS-PACS obtained a larger commission share (Rs. 28 out of Rs.30 per quintal) than FPS and service charge. However, the arrangement of sharing changed with the

introduction of the Doorstep Delivery approach under the framework of NFSA. GPSS-PACS, as a state agency, is now mandated to lift from FCI and deliver it at FPS. GPSS-PACS obtained only a lesser commission share (Rs. 42.90 out of Rs. 143) than FPS in the NFSA period. In this regard, the respondents expressed that their commission is small due to the limited days they store PDS foodgrains.

“We (GPSS) keep PDS foodgrain for 4-5 days, and FPS keep it for around 1 month, therefore they (FPS) think they should obtain large share of the commission than us. But we do all transportation, and distribution, and they all do sitting and distributing.”- secretary of a GPSS

The smaller share of commission for GPSS-PACS can be justified on the grounds that they received transportation costs (for intrastate movement and handling) from both the central government and the state government. However, the distress of GPSS-PACS have intensified due to increasing transportation costs and delay in payment from government.

“There is loss incurred in the route from FCI-GPSS-FPS. So, if there is commission, there is profit. We cannot operate with only transportation cost.”-secretary of a GPSS-PACS

The economic cost of distribution varies among different GPSS-PACS primarily due to the varying distance between FCI and GPSS-PACS. Transportation costs and commission (government payments) are based on per quintal and geographical terrain. GPSS-PACS located in plain areas and near FCI godowns (for example, two GPSS-PACS located within 10 KM distance) will incur less economic cost than the GPSS-PACS in plain areas located around 80km away from FCI godowns. The governments allocate financial assistance for transportation and handling expenses per quintal, ultimately depending on the population of ration card holders.

“That GPSS-PACS is nearer to Changsari (referring 5 km from central depot) will bear how much cost. They will bear lesser transportation cost than us. But they receive same amount like

us. So, they will earn more than us. Do you think this is correct?" – secretary of a GPSS located 70km away from central depot

In cases within the study area, GPSS-PACS also owns FPS outlets. Consequently, in such instances, GPSS-PACS received the entire margin for FPS. Sharing profit margin between GPSS-PACS and FPS creates the relationship between creditors and borrowers in the study area discussed in Chapter 4.

5.9 Other Non-Credit Activities

Non-credit activities are categorized into two main groups- agriculture-related and non-agricultural. The non-agricultural activities are further classified under the term "consumer business" because they involve business activities that cater directly to consumers. Out of 40 interviewed GPSS-PACS, 3 GPSS-PACS stated that they are running in losses, whereas 1 GPSS-PACS is incurring neither loss nor making any profit. A total of 36 GPSS-PACS reported a profit in their business. A list of GPSS-PACS having profit or incurring loss from 2015-2020 in study area is on Appendix A5.

While considering agricultural activities, it is imperative to understand the physiography of the area. The study area comprises plain, hills, and riverine physiographic areas, and the studied GPSS-PACS are distributed across these three types of physiographic areas. The type of agricultural production varies depending on the area's different physiography. For example, in the study area, riverine areas consistently produce rice, jute, and chilly. In contrast, hilly areas become significant suppliers of pineapples and ginger to nearby cities or towns in the study area.

Table 5.13 Details of GPSS-PACS performing non-credit activities in rural and urban Kamrup

Sl. no.	Name of GPSS (Column I)	Types of agriculture and its related business (Column II)	Types of consumer business (Column III)
1	Madhukuchi GPSS Ltd	Traders of tea	PDS, Rent
2	Baidyagarh GPSS		PDS, Rent
3	Dakhin Chayani GPSS Ltd	Trader of Fertilisers, Mustard oil traders	PDS, Godown, Rent, Shop,
4	Ranibhologaon GPSS Ltd		PDS, Rent
5	Borduar GPSS		PDS, House Rent 8 shop Rents
6	Chaygaon Pantan	Betel nut traders	PDS, Grocery Shop, Complex Rent, Premise Rented
7	Champak Nagar GPSS Ltd	Traders of tea	PDS, Rents
8	Dakhin Rampur GPSS Ltd		PDS, Rents
9	Uttar Chayani		PDS, Rents
10	Dakhin Bongshar* Saru		PDS, Rents
11	No. 2 Hajo GPSS		PDS
12	No.1 Hajo GPSS		PDS,
13	Pati Darrang		PDS, Rent, Fisheries
14	No.2 Ramdia GPSS Ltd	Trader of Fertilisers	PDS, Amul Distribution, House Rent Reliance tower
15	No.1 Ramdia GPSS	Trader of Jute	PDS, Rents
16	Karara GPSS Ltd		PDS
17	Puthimara GPSS		
18	Borigog GPSS	Production of Coconut	PDS
19	Paschim Bongshar GPSS		PDS,
20	No1. Pub Bongshar GPSS		PDS, Grocery Shop
21	No.2 Pub Bongshar GPSS		PDS, Rent of Complex,
22	BorBongshar GPSS	Distribution of Potato in 2019	PDS, Rent
23	Bangaon GPSS	Trader of salt, mustard oil in 2012-13	PDS, Rents
24	Ramcharani GPSS	Distribution of Onion, Traders of tea in 2017-19	PDS, Complex Rent
25	Saraighat GPSS		PDS
26	Uttar Rampur GPSS	Traders of tea	PDS, Rents
27	Modartola GPSS	Trader of mustard oil	PDS Rent, Building and Shop Rent
28	Kamalpur GPSS		PDS
29	Tupamari GPSS		PDS
30	Nagarbera GPSS	Traders of tea	PDS, Rent
31	Borkhat Panbari GPSS	Distribution of Onion	PDS, Grocery Shop, Rents
32	Boko GPSS Ltd	Traders of tea, Mustard oil, Salt	PDS, Complex Rent

33	Pub Samaria GPSS	Production of Jute in 1995	PDS, One Truck
34	Goraimari GPSS		PDS, Shop Rented
35	Santoli GPSS		PDS, Complex Rent
36	Sonapur GPSS		PDS, House Renting
37	Dimoria GPSS		PDS, Truck, Rent, Dairy Farm.
38	Luki GPSS		PDS, Shops Rental
39	Bekali GPSS		PDS Rent
40	Chamaria satra GPSS		PDS

Source: Field data (2021)

The study observed that GPSS-PACS are not involved in agriculture production. There is no presence of cooperative farming among them. Instead, they function as traders of agricultural produce often serving as procurers, distributors, or both for the final agricultural products. They treat the agricultural produce as the final product of the production. The agriculture products they trade include mustard oil, mustard seeds, jute, fertilizers, betel nut, coconut, and onion. It is important to note that this trading activity was more active in the preceding years. However, in 2020, no activities related to agricultural products were reported due to the COVID-19 lockdown measures. The Economic Survey of Assam (2021) also reported less production in 2020 than in 2021.

Tridip Suhrud (2003), explained the case of credit activities of cooperatives societies. He mentioned that over the time, the dominant caste led cooperatives disassociated from the production of wealth. Such society have turned themselves as manager of wealth of cooperatives rather than producer of wealth which they used to be. According to him, cooperatives face obstacles when entering the modern production system, resulting in stagnant growth. This finding aligns with our study. In the study area, farmers who are also cooperative members are largely absent from participating in agricultural activities and production. Instead, the committee members make decisions and engage in agriculture business activities. Furthermore, in the case of Assam, where small landholdings are prevalent and modern agricultural technology is lacking, many farmers often face challenges in producing for markets

(Saikia & Bora, 1975; Goswami, 2016). When the market is highly competitive in the current scenario due to the development of high-technology inputs, credit supply, and improved Agri-related inputs, farmers associated with cooperatives, despite their desire for modern techniques, often encounter barriers to enter into the modern mode of production. As a result, over time, GPSS-PACS have become primarily involved in trading agricultural produce with the volume of such activities remaining very limited.

Regarding fertilizers, the GPSS-PACS has formal partnerships with the Indian Farmers' Fertiliser Cooperative (IFFCO), a cooperative institute that deals in fertilizers. Partnering with IFFCO grants GPSS-PACS a license to deal with fertilizers, as reported by the respondents. GPSS-PACS also holds shares in IFFCO, meaning GPSS-PACS becomes an IFFCO member. Among the 40 GPSS-PACS interviewed, 5 GPSS-PACS mentioned their involvement in fertilizer dealings with IFFCO. However, during the study period, no fertilizer trading took place. This was attributed to the inefficiency in the allocation of fertilizers from IFFCO or the mismatch between potential profit and increasing factor prices in the agriculture business.

Similarly, GPSS-PACS are not producers of mustard oil or own oil mills. Instead, GPSS-PACS deals with companies like Nivaz Oil. Nivaz mustard oil is a local product of Eastern Agro Processing & Tea Warehousing Cooperative Society Ltd in Assam. The respondent was reluctant to trade with mustard oil, as customers prefer other brand's oil.

GPSS-PACS found an advantageous position to conduct business by acquiring shares in other cooperative-run businesses. Among the 40 studied GPSS-PACS, 10 GPSS-PACS mentioned their involvement in businesses operated by cooperatives producing tea, mustard oil, and fertilizers. Thus, GPSS-PACS are interconnected with the producer's cooperative society, reflecting the interlinkage of rural consumer cooperatives with producer cooperatives, which aligns with the recommendation of the R. Saraiya Committee in 1945.

Other items like jute, betel nut, mustard seeds, and coconut are the other items procured from cultivators and sold in the market. 4 GPSS-PACS deals with such items respectively. Out of 40 GPSS-PACS, one GPSS-PACS procured paddy and sold in the market in 2008.

Procurement of rice from farmers or through cooperative farming by GPSS-PACS is absent in the study area. When asked about this absence despite rice being highly cultivated in the study area, the respondent explained that

“The Minimum Support Price (MSP) set by the government for procurement by FCI is not accepted by FCI. As a result, we cannot engage in paddy procurement. Such discussion continues in every meeting, and FCI presents numerous agency or commission issues”- a secretary of a GPSS

Thus, there is a disagreement regarding rice pricing between FCI and GPSS-PACS for rice procurement.

“The MSP and market price is not same. Moreover, we cannot buy rice without paying farmers in such bad financial condition.”- Secretary of a GPSS

However, a significant number of GPSS-PACS have affirmed the potential for investing in or trading agricultural products. For example, in Chamaria Block, a riverine area, the secretary of a GPSS-PACS mentioned the abundant production of jute, mustard, paddy, potato, sugarcane, and chilly. In fact, chilly and sugarcane from the Village in Chamaria block are sold in Siliguri (located in West Bengal) market. Another example from Boko Block, the office assistant of Boko GPSS-PACS, mentioned the abundance of oranges and pineapples in their area. Due to the hilly terrain, the production of such fruits is very suitable. However, both GPSS-PACS arrived at the same conclusion that they cannot proceed with their plans or procurement and distribution due to insufficient capital.

Out of 40 interviewed GPSS-PACS, 16 GPSS-PACS expressed interest and discussed the potential of agriculture or related activities in their respective area. Out of 16 GPSS-PACS, 6 GPSS-PACS belonging to the riverine area were more eager and confident about their area's agriculture production. However, their willingness to take on more risk in investing in agriculture or related activities makes them reluctant. Their volatile financial conditions further amplified their hesitation from irregular transportation costs and commission payments. Few GPSS-PACS primarily deal with the agriculture business and serve as the intermediary between the company (cooperative's firm) and customer or between cash crop cultivators and buyers. GPSS-PACS are not commonly viewed as a platform or facilitator between cultivators and markets.

In addition to their agriculture-related and PDS activities, GPSS-PACS generate income by leasing their land, offering it for rent for various businesses. This leasing extends from renting out individual shops, bank spaces, or entire shopping complexes.

Of 40 interviewed GPSS-PACS, 39 GPSS-PACS own land on which their office is located. Among these, 28 GPSS-PACS relied on rental as their income sources. Renting land is considered a reliable and secure way to generate income, given that all 28 GPSS-PACS possess significant landholding in the commercialized area of their respective villages, where the society's office is established. Apart from renting, there are 7 GPSS-PACS solely dependent on PDS business. Overall, all interviewed GPSS-PACS engage in and rely on various other activities alongside their PDS activities. These additional activities are fisheries, dairy farming, truck service, distribution of Amul products, and renting space to Reliance mobile tower.

5.10 Should GPSS-PACS continue Non-Credit Activities in Assam?

GPSS-PACS is a cooperative society; for these societies to thrive, their business must survive.

GPSS-PACS are multipurpose societies, and to ensure their sustainability, GPSS-PACS need

to generate profit from their operation so that societies can function smoothly. The profit made from the sale of the products by the societies needs to be shared with the members of the society. Such profit is often referred as bonuses in France or dividends in England (Gide, 1922, p. 79). The profits are used to provide salaries to certain members of the societies, cover maintenance costs of societies, and serve as capital for the next investment. Out of 40 interviewed GPSS-PACS, 3 GPSS-PACS stated that they are running at a loss, whereas 1 GPSS-PACS has neither loss nor profit. In total, 36 GPSS-PACS are profitable in their business. In this context, it is crucial to recognize that the profit reported by 36 GPSS-PACS are "assumed" profit. These assumed profits are documented in their balance sheets, which are formally sent to the Cooperative department under the government of Assam. However, in their internal balance sheet or standard calculation, they suffer loss and debt due to non-payment of transportation costs and commission by the state government for PDS foodgrains distribution.

Every GPSS-PACS suffered from repercussions and effects of such irregularity and non-payment of huge bills, creating challenges for GPSS-PACS to invest in or venture into agriculture and allied activities. The most vulnerable GPSS-PACS are in the riverine area. Riverine GPSS-PACS suffer due to floods and longer distances from the central depot, further augmented by the irregularity of payments by the state government. Due to delays in releasing transportation costs and commissions, salaries often go pending for several months.

The accounting of government subsidy or assistance as profit within cooperatives is a matter of debate. Such profit from government subsidies ties societies solely to the government support system, which completely deviates from cooperative principles. The practice has also resulted in GPSS-PACS narrowing their activities to merely PDS activities and renting of premises.

The involvement of GPSS-PACS in the supply management of PDS is over 43 years. With the introduction of TPDS, the profit margin of GPSS-PACS is obtained through the cost imposed above the limits of PDS foodgrains, which resulted in a loss in beneficiaries' entitlement.

The implementation of NFSA 2013 introduced the modalities aimed at safeguarding food entitlement, involving both the central government and state government. However, the reoccurrence of irregularity of financial assistance for transportation has adversely affected the economic viability of studied GPSS-PACS and resulted in the loss of food entitlement of ration card beneficiaries.

Through the study of 40 GPSS-PACS in the study area, it is evident that GPSS-PACS are undoubtedly a grassroots institution with the capability and willingness to stand out in emergencies such as famines, floods, pandemics, or the failure of banks. During the COVID-19 pandemic, GPSS-PACS demonstrated their resilience by continuing to transport PDS foodgrains, including special distribution carried out under PMGKAY, despite facing transportation hurdles due to mounting costs. The GPSS-PACS members felt duty-bound to distribute essential commodities during public health emergencies. GPSS-PACS are the rightful agency to transport foodgrains under PDS. At this juncture, ensuring regular and consistent release of financial assistance for intrastate movement and handling of PDS food grains is paramount to reviving the spirit of GPSS-PACS in the study area. Timely release of financial assistance from the state government would boost their PDS supplies and support various activities of GPSS-PACS.

Chapter 6 Summary and Conclusion

This chapter summarizes the inferences drawn from findings of the thesis. Section 6.1 is a summary of the cooperative movement in India before independence. Section 6.2 summarizes the cooperative movement and flow of rural credit in India after independence. Section 6.3 sums up the role of credit cooperatives, including PACS, after economic reforms of the 1990s. Section 6.4 summarizes the role of PACS in rural credit flow and supply management in the post-2000s. Section 6.5 summarizes the functioning of GPSS-PACS with respect to rural credit and supply management of PDS in Assam. In the final section, section 6.7, we provide concluding remarks on the status of GPSS-PACS in Assam.

6.1 Cooperative Movement in India before Independence

The recurrence of famines, and riots due to indebtedness in India in the 1800s prompted the British government to initiate and intensify cooperative movement in India in lines of the cooperative movement in other parts of the western world. The British government recognized the importance of rural credit through cooperatives as an essential measure to mitigate famines and indebtedness in rural India. In India, the cooperative movement was marked by the passing the first legislation in 1904.

The impact of wars gave rise to non-credit cooperatives, especially consumer cooperatives, addressing the rationing of foodgrains, and other items. The movement that initially aimed to provide affordable credit supply to rural masses and the elimination of money lenders also began to expand in non-credit activities. The statutory backing for non-credit cooperatives was obtained after passing of the Cooperative Societies Act of 1912.

However, the cooperative movement did not appear successful due to the presence of overdue and inefficient supply of credit to those in need. For instance, while credit cooperatives were expanding in Assam, credit cooperative institutions continued to be heavily administered by

the state. Thereby, credit cooperatives were majorly seen as banks in this period. The accumulation of massive debt led to the slow progress of the cooperative movement in Assam. Slow progress was also attributed to the absence of a cooperative mindset among its members (Dawson, 1930). In Bengal, the pre-colonial period witnessed the growth of the landed elite involved in cooperative movements, which resulted in the distancing of people in need of credit from cooperatives (Iqbal, 2017). Overall, the state-patronized cooperative movement could not reach its goals in India during this period.

6.2 Cooperative Movement in India after Independence

After independence, the central government continued to support cooperatives as a primary formal credit institution for the rural population. Consequently, credit cooperatives were expanded to reach the vast rural population of India, which was facing challenges with low credit supplies and the presence of informal credit institutions.

Over time, the supply of credit through PACS continued, and as reforms progressed, institutions like nationalized banks and RRBs began to supply rural credit. Later, such institutions became significant sources of rural credit supply, although rural credit supply through PACS started declining.

The declining share of PACS in rural credit supply can be attributed to several factors. Each state's political economy shaped the institutionalized PACS in India from the 1950s onwards. These reasons vary from biased membership, corruption, delinquent loans, the state's role, and deviation from cooperative principles. This is also closely connected to the growth of capitalist agriculture following the Green Revolution. For example, in Haryana, PACS are established by big and middle landowners (Jodhka, 1995), while in Maharashtra, non-credit societies like sugar cooperatives along with PACS were influenced by the political economy of land tenure and caste dominance (Chavan, 2015).

After India's independence, and for a large part of the 1970s and 1980s, credit policies and reforms in India were successful in combating informal credit agencies, resulting in a decrease in the volume of non-institutional loans. However, the pattern of cooperative institutions being unsuccessful in meeting the objective of credit supply as witnessed in the colonial times reappeared in the post-independence period. The reappearance of slow growth due to unrecovered loans from debtors and reluctance of credit disbursement indicated that credit cooperatives could not progress much.

In Assam, there had been a demand for loans by farmers, but there was also lesser availability of credit through credit cooperatives or PACS (Deka, 1984). Assam also recorded the highest overdue of PACS in the 1970s (Reserve Bank of India, 1978). During this period, Assam restructured its GPSS in the line of Farmer Services Societies (FSS) based on the recommendations of the National Commission on Agriculture. The restructuring aimed to address the credit supply issues at the village level in Assam. After restructuring, roles of GPSS in Assam were diversified to include distribution of essential commodities apart from conducting credit businesses at the village level. The involvement of GPSS in the distribution of essential commodities was a primary response to providing social security due to natural disasters like floods (Dutta, 1991; Sarma, 2003).

6.3 Rural credit flow in India after the 1990s and the Role of PACS

Implementing the Structural Adjustment Programme led to a decrease in rural banking intensity. This decline was attributed to the recommendations laid by the Narasimham Committee (1991). Following recommendations, banks were asked to choose profitability over increasing expenditures on rural branch expansion (Ramachandran & Swaminathan, 2002). In this period, data on PACS in India indicated that profit-making PACS had offset loss-making PACS. Cooperative banks showed appreciable growth in this period. However, the lending

pattern of cooperative bank altered due to rural credit sector reforms. Consequently, the objectives of cooperative sector which are rooted in providing credit to rural and credit-deprived sections deviated (Sonker, 2019).

6.4 Rural Credit Flow and Cooperatives in the 2000s

When the central government introduced the Comprehensive Credit Policy of 2004, the volume of agriculture credit increased in post-2000s in India (Ramakumar & Chavan, 2007; Mohan, 2006). However, the increased volume of agriculture credit had already begun before the policy implementation (Chavan & Ramakumar, 2014). Thus, there was an increase in agricultural credit at the beginning of the 2000s following the economic reforms of the 1990s. However, the increased agriculture credit at the national level did not necessarily mean that it is equitably distributed. Studies showed fewer beneficiaries from marginal and small farmer categories (Ramakumar & Chavan, 2007) and regional disparity (Mohan, 2006).

The regional disparity in the numbers of PACS and the volume of loans issued through PACS in India is evident in Tables 1.3 and 1.4. The tables also reveal that between 2010 and 2020, the numbers of PACS and volume of loans issued through PACS have been the lowest in the northeastern region compared to the rest of the country.

Regarding rural credit, we observed that in post 2000s, short-term institutional credit supply in Assam has been very low compared to the rest of the country (Khan et al., 2007). Assam has shown negative credit elasticity of agriculture GDP, which indicates that agriculture credit has not been effective (Narayana, 2016). In Assam, agriculture refinance disbursement registered a negative growth rate compared to that in the NER, resulting in a need for more investments in agricultural inputs (Borbora & Sarma, 2017). Thus, it is drawn from here that Assam has been performing poorly in rural credit supply, and PACS in Assam are in a deplorable state.

Chapter 2 of the thesis provided an overview of the rural credit scenario in Assam. It revealed that over time, rural indebtedness has increased. Furthermore, we observed low credit supply, particularly through GPSS, as evident in Table 4.2. AIDIS (2019) revealed that rural Assam households borrow most from public banks, followed by bank-linked SHG and microfinance institutions. Bank-linked SHG and microfinance institutions, as formal credit institutions, have become closer to the rural population in Assam. Also, personal friends and relatives have played a significant role in providing credit to rural households. Rural households have reduced their borrowing from cooperative societies and cooperative banks. To explore these trends further, we studied outstanding agriculture credit through different types of banks from 2010-2020.

We found that the public banks have the highest outstanding agriculture credit in Assam, followed by private banks, RRBs, and cooperative banks. However, the share of outstanding agriculture credit of public banks is decreasing while the share of outstanding credit of private banks rose. The share of private banks remains higher than that of RRB and cooperative banks. Cooperative banks had a nominal share of outstanding credit for agriculture. It is also observed that the number of accounts held for agriculture lending was highest for private banks in 2017. The share of accounts held for agriculture lending by private banks rose between 2011 and 2020, whereas the share of accounts for agriculture lending by public banks and RRB decreased.

The private banks entered India in 1992. From 2011 to 2020, the private banks increased agriculture lending in Assam significantly. Since state cooperative banks at the top tier of short-term credit supply in Assam are ineffective in supplying agriculture credit to GPSS-PACS at the bottom, it would be desirable if public banks supplied credit to rural masses through GPSS-PACS. It has been observed that private banks primarily provide indirect credit to agriculture

in Assam, which means private banks supply credit to big farmers, corporate farmers, and agri-businesses. In such cases, the fundamental role of PACS, which is to facilitate small transactions, may need to be more effectively met by private banks.

6.5 GPSS-PACS at Present

In Assam, activities performed by GPSS-PACS can be categorized into mainly two activities – credit and non-credit. In our study we tried to understand how GPSS-PACS as a rural credit cooperative institution have evolved in Assam. In a study on the cooperative sector in Maharashtra, it was elucidated that the cooperative sector exhibits positive growth, with better finance at the district level than at the village level (Shah, 2007). However, Assam has a two-tier structure (State Apex cooperative bank at the top tier and GPSS-PACS at the bottom). District-level cooperative banks are absent. Also, GPSS-PACS in Assam are involved in the supply management of PDS items. Unlike many states, the state food civil supply corporation does not take responsibility of the transportation of PDS foodgrains in Assam. GPSS-PACS transport PDS foodgrain from FCI to FPS. Therefore, the study of credit supply and the role of PDS supply by GPSS-PACS was carried out in an attempt to understand the economic viability of these two activities.

GPSS-PACS are democratic institutions with elections held every five years to elect their management committee. The management committee serves as the decision-maker of the society. The management is guided by rules and regulations set by GPSS-PACS's bye-laws. According to the bye-laws, GPSS-PACS includes the provision of reservation for the vulnerable shareholders in electing as well as being a member of the management committee. Studies have reported exclusive membership in many PACS across India, while GPSS-PACS, in contrast, has achieved equitable membership. GPSS-PACS promotes inclusivity through bye-laws that reserve marginal and small farmers in voting rights and membership of females

and ensure representation of scheduled tribes and scheduled castes in the managing committee. For example, Table 3.3 reflects the female membership of GPSS-PACS in the study area.

GPSS-PACS operates in plain areas of Assam, covering more than two Gaon Panchayat. The studied GPSS-PACS covered 44.5 percent of rural households in Kamrup. Majority of the GPSS-PACS are situated in the rural areas and few in urban areas. The different needs of rural and urban areas allocate different activities to GPSS-PACS. They are also situated in different terrains -hilly, riverine, and plains. The different terrain has influenced transportation guidelines for public distribution. Consequently, GPSS-PACS have been established based on bye-laws that can cater to the needs of different environments and communities at the village level. This adaptability makes GPSS-PACS a better platform for addressing the constraints of rural development.

6.5.1 Supply of Rural Credit through GPSS-PACS at Present

As we have seen, Assam has one of the lowest supplies of agriculture credit at the national level. There is slow growth of short-term and medium-term credit supply. Only a few GPSS-PACS responded that they are actively engaged in the credit supply. Out of 40 GPSS-PACS, 12 GPSS-PACS supplied credit to rural households. These 12 GPSS-PACS offered two types of credit- agriculture loans and loans through deposit mobilization. The supply of agriculture loans is the conventional type supplied by GPSS-PACS. The agriculture loan is either disbursed through an institutional (bank) loan scheme or without.

Within the institutional loan disbursement scheme framework, GPSS-PACS primarily provides loans under the interest subvention scheme at a 7 percent interest rate. Borrowers in the study area are genuine farmers. No other form of loan product was available to the farmers apart from interest subvention scheme.

Agriculture loans without institutional loan disbursement scheme charged 2 percent to 12 percent interest rate. From the GPSS-PACS point of view, such loans have more economic gain than those disbursed with the support of the institutional loan scheme. This economic gain is because of the following:

1. GPSS-PACS provide loans independently, based on their budget and management. They are not dependent on banks or go through requisite bank formalities. Often, the requirement of bank formalities for availing loans causes hindrance to loan release (also see Pathari, 2017).
2. Since disbursement of credit depends on their budget and management, the societies tend to generate more economic gain, thereby expanding their activities.
3. Bhanot et al. (2021) have studied how government intervention can impact the rural credit market. The study explores the impact of the interest subvention scheme and its significant correlation with delinquent loans. Such observation was consistent with our study. Therefore, GPSS-PACS prefer loans disbursement without interest subvention, which accounts for lesser economic loss than a loan with interest subvention.
4. Also, such loans are not dependent on collateral. Instead, they are dependent on the borrower's creditworthiness. Hence, the tendency to repayment is more in the case of loan disbursement by GPSS-PACS without interest subvention.

However, the cons of such loans are from the borrowers' point of view. The interest rate can be charged higher than the institutional interest rate. In addition, as the loan is provided on creditworthiness, the selection of borrowers can be biased. In the study area, we observed that GPSS-PACS lend to borrowers who are FPS dealers. Such borrowing reflects that the FPS dealer's creditworthiness is based on the profit margin received from the Targeted Public

Distribution System. GPSS-PACS and FPS are involved in the supply management of PDS items distribution and share the profit margin (Rs. 143 per quintal). FPS received a larger amount of profit margin (Rs.101.10). Also, GPSS-PACS own some of the FPS in the study area. Therefore, there is an established creditor-debtor relationship between FPS and GPSS-PACS.

The second type of loan is deposit mobilization, which is more cost-effective than an agriculture loan. Deposit mobilization relies on deposits and shareholders' savings, providing a lending source. Different rates of interest are rewarded to saving accounts for different time periods. The saving interest rate is around 6 percent, and the lending interest rate is around 7 percent to 15 percent. Although deposit mobilization is profitable, it has the disadvantage of excluding borrowers who cannot save money and, thus, remain without access to credit. As a rural cooperative, GPSS-PACS must cater to the needs of impoverished shareholders with limited access to credit and savings. The obstacles associated with obtaining a loan from a bank due to the requisite formalities might spawn in deposit mobilization since GPSS-PACS have claimed that deposit mobilization works as a "mini bank." In pursuit of a "mini bank," the GPSS-PACS hired employees and opened accounts to operate deposit mobilization.

The GPSS-PACS, supplying agriculture credit under the Interest Subvention Scheme, struggles to gain economic benefits. The GPSS-PACS, supplying agriculture credit without the bank loan scheme, are gaining economic benefits, similar to the GPSS-PACS engaged in deposit mobilization. However, the economic benefits gained by GPSS-PACS through credit activities are nowhere near the economic benefits accrued from transportation costs and commission for PDS distribution in a year.

A GPSS-PACS in Hajo Block stated that they earned around two lakhs per year as a profit from lending agriculture credit. However, the majority of earnings of the society is from the

involvement in the supply management of PDS. Another GPSS-PACS in Bongaon Block stated that with the commission from TPDS alone, they earned Rs. 20 Lakhs in a year.

In the study area, 21 GPSS-PACS were able to inform the year when they ceased their credit supply. The number of GPSS-PACS halting credit supply is more than that of GPSS-PACS supplying credit. The primary reason for halting their credit supply was borrowers' inability to repay. The GPSS-PACS stated that the loan repayment process is cumbersome. Furthermore, the borrowers often cannot distinguish between cooperative and government loans. The farmers or borrowers persistently hope for future government loan waivers. Post-2000s, the central government waived agriculture loans under the Agriculture Debt Waiver and Relief Scheme in 2008, and in 2018, the Assam government waived the Rs. 60,000 lakhs loan of farmers (up to Rs.25000 limit of KCC loan). Waiving such loans can influence the repayment behaviours of borrowers, as evident from earlier studies by Gine & Kanz, (2018) and Jain & Raju, (2011).

The second most cited reason was the unavailability of state government loans. From 1950-1980, Assam government loans had declined (Deka, 1984). There was an absence of state government loans in the study area, but loan-waiver schemes, interest subsidies, and crop insurance were available. Besides undue loans from borrowers, we also observed instances of embezzlement leading to court cases. Corruption within the management committee led to deactivation of two societies in the study area.

One of the distressing observations was that GPSS-PACS borrow money from informal credit agencies. Such borrowings take place at high interest rates. The irony is that GPSS-PACS are village-level formal credit institutions. However, such informal borrowings are usually taken to meet the cost of transporting PDS foodgrains due to delay in receipt of funds from the State government. GPSS-PACS do not avail loans from banks as banks are reluctant to provide such

loans. Different types of banks play different roles in supporting GPSS-PACS credit supply. We observed that public banks are the most active in transactions with GPSS-PACS, followed by RRBs. Public bank transactions with GPSS-PACS are mostly in the form of receipt of funds from PDS supply management under the NFSA.

In Assam, increased outstanding credit through GPSS-PACS (refer Table 4.2) indicates need for credit, but the inability to repay often resulted in a reluctant supply of credit by GPSS-PACS. This ultimately reflects as low supply of credit in the study area. Chapter 2 also shows that the number of accounts in private banks for agriculture lending is higher than public banks and RRB from 2018 onwards. There is a diversion of demand for credit to different agencies. AIDIS (2019) shows that microfinance institutions and bank-linked SHGs have become one of the major formal credit sources in rural Assam. The success of bank-linked SHG in Assam is due to the cohort government program. In fact, RRBs are the major source of supply of microcredit in Assam.

In our study locations, we also observed that private and small finance banks are disbursing more rural credit. They have the highest Rural Credit Deposit Ratio (CDR) than public banks or RRBs. Cooperative banks, on other hand, have the lowest (9% around) rural CDR in Kamrup district. The second highest number of SHGs in Assam is in the study area. There is a stronghold of SHGs in the study area, and commercial banks linked to SHGs are the highest. The microcredit boom in the study area reflects that rural credit demand is met through microcredit rather than cooperative-issued credit.

6.5.2 Supply Management of PDS and other Non-credit Activities through GPSS-PACS

With respect to the supply management of PDS, the source of income for GPSS-PACS arises out of transport margins received under NFSA and the profit margins are shared between the

FPS and GPSS. The transportation cost has geographical slabs depending upon the terrain – plains, hilly, and riverine – where the GPSS-PACS provide services.

Our participants mentioned huge delays and lags in release of transport related expenditures and commissions from the state government, resulting in financial backlogs and losses. To mitigate losses, the GPSS-PACS resort to informal borrowings as they are duty bound to continue with PDS management. With the introduction of the door-step delivery approach, GPSS-PACS have to transport PDS foodgrains from FCI godowns to FPS. Additionally, three more schemes (PMGKAY, MDM, and ICDS) are added to distribution by GPSS-PACS, resulting in additional increased costs. Due to delays in release of funds, and the consequent volatile financial status of the GPSS-PACS, they have had to skip lifting PDS allocations leading to welfare losses for consumers and economic losses for themselves. Such losses are more prone in riverine areas, where around 80 percent of the population is living below the poverty line

Such delays in transportation payment and the exclusive involvement of GPSS-PACS in PDS have reduced their diverse activities, especially the volume of agriculture credit supply and allied activities. Although GPSS-PACS are minimally engaged in agriculture activities, our participants expressed their desire to explore agricultural activities.

In the study area, 36 GPSS-PACS have reported profits in the book of accounts for the last four years. However, the reported profits in the book of accounts do not translate to flow of cash in actuals due to delays in release of funds. However, the budget of these 36 GPSS-PACS is in deficit, and they do not have actual profit, which is not reflected in their official statement. This raises the question of whether government assistance or subsidies should be considered profit for GPSS-PACS.

6.5.3 Other Challenges faced by GPSS-PACS

Almost all interviewed GPSS-PACS were established during 1973-1974. The Studied GPSS-PACS underwent numerous agrarian reforms, credit reforms, and liberalization in the 1990s. Additionally, the GPSS-PACS witnessed the evolution of Information and Communication Technology (ICT) in Assam, particularly in the context of agriculture. Vaidyanathan's committee recommendation (2004) highlighted the need to strengthen PACS's accounting and monitoring system with substantial financial support, including technical assistance, special audits, accounting systems, and computerization, as well as training and capacity building. The central government initiated the computerization of PACS and developed the national cooperative database, indicating the commitment to technological advancement.

Despite these initiatives, most GPSS-PACS (of all 40 interviewed GPSS-PACS, 39 GPSS-PACS) continued to rely on handwritten methods for record keeping. Of these 39 GPSS-PACS, 11 GPSS-PACS used handwritten and computer, and 1 GPSS-PACS used only computer. This highlights that most studied GPSS-PACS are involved in the old method of keeping records and accounts. In this regard, one of the respondents stated that new staff who are proficient in computers might be required. There is a need for staff proficient in computer and management committee training. Furthermore, respondents stated that the GPSS-PACS will establish a Common Service Centre (CSC) at their offices. The CSC will provide services like bank account opening, TV recharge, computer education, and mobile recharge from one centre.

GPSS-PACS are moving towards technology integration; they have yet to fully embrace technology-driven record keeping and data management.

6.6 Conclusion

From Chapter One, the thesis focuses on understanding the historical evolution of village-level cooperatives in Assam. The historical evolution that led to the establishment of GPSS-PACS is

unique in its own way. Assam predominantly consists of small and marginal farmers, characterized by low capital-intensive agriculture. Moreover, Assam frequently experiences floods. Therefore, there was extensive state intervention in the establishment of GPSS-PACS. This aspect forms the domain centrality as discussed in our conceptual framework in Chapter One. Here, the actors—i.e., the secretary, vice president, government officials, and members—are governed by these evolutionary aspects of the domain within which the GPSS-PACS is embedded. Thus, the thesis seems to fit the narrative provided by scholars in the domain-context school, such as those forwarded by Attwood & Baviskar (1988), who have used a quasi-positivist research method to analyse cooperatives in India. Scholars such as Baviskar, writing in the 1960s to 1980s, have taken a balanced approach and studied successful cooperatives while also stressing the politics of cooperatives in India. The study of 40 village-level cooperative credit societies in Kamrup and Kamrup Metropolitan districts of Assam can be analysed in line with the quasi-positivist research method.

One of the significant conclusions of the thesis is the lack of cooperative spirit among the rural peasantry, the lack of dominance of middle peasantry in rural Assam, and the excessive interference of bureaucracy and politics in the affairs of cooperatives in Assam. The thesis aimed to study how primary agricultural credit cooperatives have thrived in Assam since the 1990s. The thesis tried to understand how the credit cooperatives have thrived amidst the neoliberal challenge of economic reforms. The downfall of the GPSS-PACS in the Kamrup and Kamrup Metropolitan districts emanates from three reasons:

- A. Increasing competition from alternative formal sources like commercial and regional rural banks, microfinance institutions, and the new Small Finance Bank.
- B. The fragile nature of underlying activities of the cooperatives due to agriculture's inherent risks, affecting not only the incomes but also the balance sheets of the cooperatives.

C. The additional activity of PDS resulting in high dues and working capital problems.

The thesis primarily focuses on two functions: credit activities and non-credit activities, along with certain challenges, to address why and how Primary Agricultural Credit Societies (PACS) in the study area are weakening at the operational level. The study identifies the studied GPSS-PACS as Captive Decision Units (CDU). The GPSS-PACS in the studied area are not able to attain salience as they are low in centrality, especially domain centrality and member centrality. GPSS-PACS have expressed their inability to realize their potential as sound economic enterprises. GPSS-PACS are struggling with engaging in credit activities, inability to diversify agri-related activities, and accumulating huge debt due to irregular payment of PDS transportation costs and commissions, leading GPSS-PACS into a waning state. Consequently, GPSS-PACS are not empowered and lack the freedom to choose their business ventures. Hence, GPSS are not salient and behave as CDU. Nonetheless, the study must highlight the presence of cooperative spirit during the COVID-19 pandemic, as the GPSS demonstrated resilience by timely delivering PDS and PMGKY food grains and providing other essential services. This proves that in spite of the challenges, GPSS-PACS have braced for rural life in times of crisis.

6.7 The Way Forward

GPSS-PACS have exhibited limited effectiveness in facilitating credit supply in the study area. In the study, those GPSS-PACS that engaged in credit supply without institutional loan schemes experienced economic gains than those with institutional loan schemes. However, it is essential to critically assess the lending practices of GPSS-PACS, which lends without institutional loan schemes. A study by Sonker (2019) highlights how cooperative banks altered their lending pattern with the growing emphasis on commercial viability. This shift in cooperative banks' lending pattern deviates from rural development objectives under neoliberalism. Our study also

observes the same pattern with lending without an institutional loan scheme and through deposit mobilization. GPSS-PACS lending shifted towards a commercial-oriented approach and deviated from rural development objectives. This transition can be further contextualized by the study conducted by Jain and Raju (2011). The study by Jain and Raju (2011) revealed that farmers could not avail loans from PACS after the debt waiver scheme of 2008. Facing challenges in availing loans even after the government waived the loan was due to reasons of landholdings and non-repayment records.

In our study, GPSS-PACS, who discontinued their credit supply, exhibited reluctance in credit supply due to the historical record of non-repayment of loans. This reluctance has become more frequent since the 2000s, coinciding with the implementation of numerous government policies and schemes on rural credit (refer to Table 4.6). This suggests that cooperative loans (loans without institutional loan schemes) are perceived differently from loans through institutional or government loans. Consequently, GPSS-PACS prioritized the viability of cooperative loans in the study area. This shift towards commercial viability is particularly significant in credit supplied without institutional loan schemes by GPSS-PACS.

The cooperative loans primarily target borrowers who are FPS dealers and, in certain GPSS-PACS, interest rates are as high as 10-12 percent, surpassing interest rates offered by interest subvention schemes, which typically stand at 7 percent for the short-term period.

Pursuing commercial viability through deposit mobilization relies solely on savings, necessitating the borrowers to save first. This approach exclusively excludes those individuals who cannot save and favours those who can save. This approach inherently leads to a form of financial exclusion.

Lending through institutional loan schemes has proven to be an effective means of reaching farmers needing credit. However, GPSS-PACS does not accrue economic gain from such

lending. Moreover, increasing bank formalities has posed challenges in providing interest subsidies to farmers through GPSS-PACS. In response to this challenge, a participant indicated that they continue to lend through institutional loan schemes primarily for the benefit of farmers. This indicates the cooperative spirit of GPSS-PACS in reaching farmers needing credit, even when there are no economic gains.

Consequently, effective lending through institutional loan schemes is crucial in meeting financial inclusion and improving overall rural development. Therefore, the release of transportation payments from the government can alleviate the financial distress of GPSS-PACS and facilitate the provision of credit to farmers in need. GPSS-PACS must diversify their agricultural and allied activities that complement their credit business in the long run. Expanding non-credit businesses, primarily agricultural and allied activities, instils community trust and confidence in the GPSS-PACS. GPSS-PACS must thrive for the betterment of their societies and community. Hence, loans without institutional loan schemes and deposit mobilization must continue for the societies. However, the lending procedures need to be financially inclusive in such GPSS-PACS. In the study, it is evident that credit and non-credit activities are co-dependent on each other regarding their financial and organizational viability.

Additionally, integrating GPSS-PACS and cooperative-linked SHGs can prove to facilitate credit for rural masses catering to diverse needs since there is a stronghold of the bank-linked SHG in the study area. Also, the government's existing structure and long-term efforts on GPSS-PACS and its ability to reach the masses can facilitate addressing the issues in demand, supply, and accessibility to credit in rural Assam.

Regarding non-credit activities, it is evident that GPSS-PACS are exclusively involved in distributing essential commodities under PDS. Such exclusivity has led to the shrinking of other non-credit activities. Also, the study elucidates the loss of food entitlement of

beneficiaries and the loss of economic opportunity of GPSS-PACS in the study area (referring to Chapter 5).

The PDS modalities under NFSA have primarily concentrated on allocating foodgrain quantities to be distributed. PDS modalities do not provide a comprehensive framework for monitoring and regulating the expenses associated with the state-level distribution process. Hence, there is a gap in regulating the distribution cost incurred by stakeholders involved in PDS, as observed in Assam's pre-NFSA and post-NFSA periods.

The question of whether GPSS-PACS should be a state agency to distribute PDS foodgrains is pertinent. There are compelling arguments in favour of GPSS-PACS as a state agency. As observed in the study by Drèze et al., (2018), the involvement of community-based institutions in handling PDS initiated by the state government has reduced leakage in PDS in Chhattisgarh. These community-based institutions are gram panchayat, cooperatives, and women's SHGs. In Assam, the GPSS-PACS are closely connected with the villagers. The vigilance of villagers in ensuring their entitlement is exercised by the GPSS-PACS. This has been instrumental in delivering the entitled amount of PDS foodgrains. For instance, during COVID-19, GPSS-PACS were critical in promptly distributing TPDS and PMGKAY foodgrains to alleviate the crisis. Some GPSS-PACS even distributed food grains for non-ration card holders (as directed by central and state governments) in the absence of Gaon panchayat. The challenge lies in the absence of monitoring the cost distribution incurred by the GPSS-PACS. Therefore, to ensure transparency, accountability, and cost-effectiveness of PDS, the modalities of PDS under NFSA need to focus on the allocation of foodgrain quantities, prices of PDS foodgrains, and monitoring of distribution costs incurred by stakeholders.

The question of whether GPSS-PACS should continue their engagement in PDS is a matter of debate. However, considering the economic viability of GPSS-PACS, relying solely on

government payments or subsidies is not sustainable as it reduces their engagement in agriculture and its allied activities and credit activities. Non supportive policies of the government and lack of a sustainable institutional mechanism in the supply management of PDS has created roadblocks for GPSS-PACS, dampening the spirit of cooperation.

6.8 Limitations of the Study

The study examined GPSS-PACS in Kamrup and Kamrup Metropolitan districts. The study examines credit and non-credit activities of GPSS-PACS. Credit activities involve mainly rural credit. The status of the credit supply through GPSS-PACS was examined. However, to comprehend the status of rural credit in the study area, it was necessary to assess the demand for rural credit and the sources of borrowings by the borrowers in the study location. Since the focus of this thesis was on exploring the supply of rural credit cooperatives, the demand side dynamics fell beyond the scope of the study, leaving us with many unanswered questions.

Similarly, assessing the loss of food entitlement by beneficiaries would require investigating at the household level, which was also beyond the scope of this study. However, the allocation of PDS foodgrains and the presence of skipping PDS foodgrain lifting by GPSS-PACS indicate a loss of food entitlement in the study area.

Appendix-A1.1

Interview with the President of Saraighat GPSS

13th March 2020

Saraighat GPSS is located in Changsari, beside National Highway 31 at Dhobartari Bazar area. The interview was conducted with the president of the society. The president has been presiding the society since 1992. The society covers 2 GP, which include 28 villages. The society was established in 1973. According to the president, the society was set up mainly for distribution of PDS essentials. The society has not dealt with credit related activities or any distribution of fertilizers or seeds or agriculture purposes. The society transports PDS rice from FCI godowns to FPS. The FCI godown is just 4 km away from the society. Presently (2020) the price of rice is Re. 1, which is the rate bought from FCI godown. The society brings rice by auto. The cost of auto or transportation is Rs.178 per quintal, which is provided by government of Assam. The GPSS godown was constructed in 1973. According to President, there isn't much cost in storing PDS rice. The charge of auto is paid by the society. They bring around 1325.5 quintal of rice. The price of rice is paid from the capital of society. The capital of society was around Rs.1365000. This capital is accumulated after society paid to FCI accounts for month of April 2020. The profit is derived from PDS items only. Long ago, when the price of rice was Rs10 per kg, and the GPSS used to deal in soap and clothes, the president claimed more profit, even after corrupted members claimed some items. There is no profit in buying from FCI and selling to the FPS dealers. It is the transportation cost provided by the government, which is the profit. If we face any issue or problems, we report it to registrar of cooperative department or civil supply department under government of Assam. The president does not know about PACS, he claimed that his society is not PACS, and according to him, there is no PACS in Kamrup district.

Appendix-A1.2

Before conducting fieldwork, telephonic interviews were conducted across to understand different types of activities in November 2020. The snowball sampling method was conducted. Following the tables are the details of telephonic interviews and their analysis.

Table A1.2.1 Telephonic Interview with 6 GPSS in 6 different districts

Name of the GPSS	District	Designation of respondent	Year of establishment	Number of villages	No. of GP covered	Is it PACS ?	Years of last credit activities	Profit/loss	Any Government/NABARD assistance.
Sasoni Samabai Samiti	Dibrugarh	President	1972	100+	4	No	No	Loss	No
Morabazar GPSS	Sivasagar	President	1987	25	5	yes	5 years ago	Profit	No
Saraighat GPSS	Kamrup Rural	President	1973	28	2	no	no	Profit	No
Paschim sarukhetriSamabai samiti	Barpeta	Secretary	1973	35	2	no	1990s	Profit	loan from NABARD via Axis bank
Harsinga GPSS Ltd	Udalguri	Secretary	1973	42	9 VCDC	yes	probably this year	Profit	Previous year, PAC training.
Boitamari GPSS limited	Bongaigaon	Secretary	1973	22	4	no idea	did few years ago	Loss	Proposed cow rearing by NABARD

Table A1.2 2 Thematic analysis of Phone interviews with six GPSS in Assam

Theme: Failure of Credit delivery

Boitamari GPSS Ltd, Bongaigaon district

Secretary explained that long ago they used to give loans for agriculture purposes, but slowly they stopped giving loans. This is due to various interest rates. He told that whenever we asked for loans, we need to give 7% interest, it also includes 5% share money, they further add body insurance which all together sum around 16% of interest to be paid, which is a huge interest for the societies to pay back in time, thereby we stopped taking loans from Apex(ACAB) bank.

Sasoni Samabai Samitii, Dibrugarh district

Last Year, we did procurement of rice, we sought a loan from banks for storage facilities, but the bank declined. We could not sell it to the FCI, so we sold it to private businessmen. There is no scope for business by GPSS.

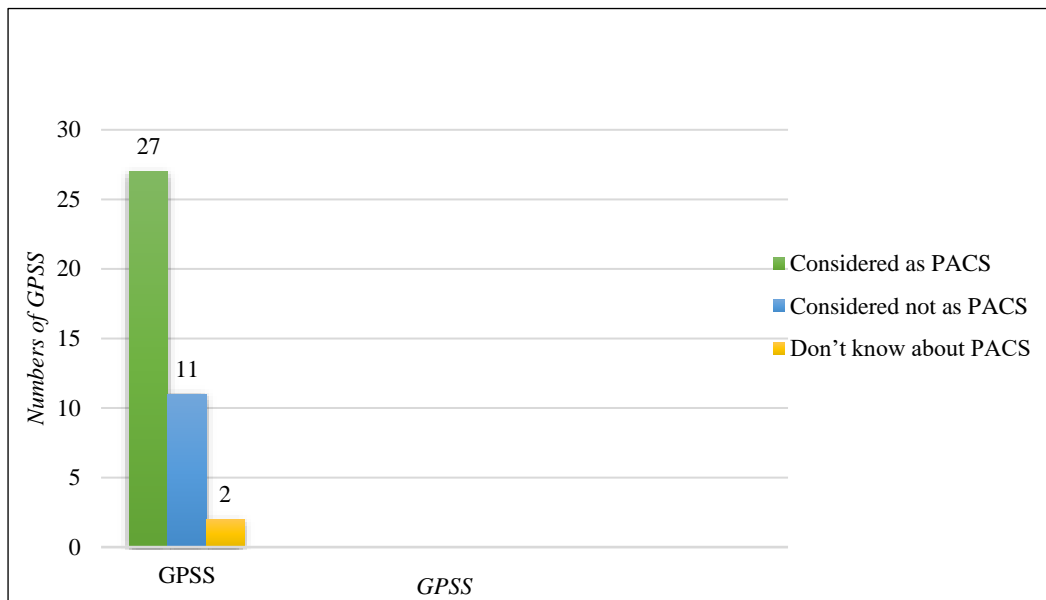
Morabazar GPSS, Sivasagar district

We could not recover our loans, shareholders and farmers could not pay back. Therefore, the bank does not support it. The society has stopped most of its activities and continued only the business of PDS.

Theme: Positive Growth

Harsinga GPSS Ltd, Udalguri district

This year Apex (referring to ACAB) bank adopted us and with NABARD support, deposit mobilization has been opened. We have two tractors as other non-credit activities from 2015. We are running at a profit and all loans were cleared in 2019.

Appendix-A4*Figure A4 Number of GPSS-PACS identified as PACS*

Source: Field data (2021)

Appendix-A5

Table A5 List of GPSS having profit from 2015-2020 in study area

On Asking each GPSS if they are having profit or not in the following years:

<i>Sl.no</i>	<i>Name of the GPSS</i>	<i>2015</i>	<i>2016</i>	<i>2017</i>	<i>2018</i>	<i>2019</i>	<i>2020</i>
1	Madhukuchi GPSS Ltd	Yes	Yes	Yes	Yes	Yes	Yes
2	Baidyagarh GPSS	Yes	Yes	Yes	Yes	Yes	Yes
3	Dakhin Chayani GPSS Ltd	Yes	Yes	Yes	Yes	Yes	Yes
4	Ranibhologaon GPSS Ltd	No	No	Yes	Yes	Yes	Yes
5	Borduar GPSS	Yes	Yes	Yes	Yes	Yes	Yes
6	Chaygaon Pantan	Yes	Yes	Yes	Yes	Yes	Yes
7	Champak Nagar GPSS Ltd	Yes	Yes	Yes	Yes	Yes	Yes
8	Dakhin Rampur GPSS Ltd	Yes	Yes	Yes	Yes	Yes	Yes
9	Uttar Chayani	Yes	Yes	Yes	Yes	Yes	Yes
10	Dakhin Saru Bongshar	No	No	No	No	No	No
11	No. 2 Hajo GPSS	Yes	Yes	Yes	Yes	Yes	Yes
12	No.1 Hajo GPSS	Yes	Yes	Yes	Yes	Yes	Yes
13	Pati Darrang	Yes	Yes	Yes	Yes	Yes	Yes
14	No.2 Ramdia GPSS Ltd	Yes	Yes	Yes	Yes	Yes	Yes
15	No.1 Ramdia GPSS	Yes	Yes	Yes	Yes	Yes	Yes
16	Karara GPSS Ltd	Yes	Yes	Yes	Yes	Yes	Yes
17	Puthimara GPSS	-	-	Yes	Yes	Yes	Yes
18	Borigog GPSS	Yes	Yes	Yes	Yes	Yes	Yes
19	Paschim Bongshar GPSS	Yes	Yes	Yes	Yes	Yes	Yes
20	No1. Pub Bongshar GPSS	Yes	Yes	Yes	Yes	Yes	Yes

21	No.2 Pub Bongshar GPSS	Yes	Yes	Yes	Yes	Yes	Yes
22	BorBongshar GPSS	Yes	Yes	Yes	Yes	Yes	Yes
23	Bangaon GPSS	No	No	No	No	No	No
24	Ramcharani GPSS	Yes	Yes	Yes	Yes	Yes	Yes
25	Saraighat GPSS	Yes	Yes	Yes	Yes	Yes	Yes
26	Uttar Rampur GPSS	Yes	Yes	Yes	Yes	Yes	Yes
27	Modartola GPSS	Yes	Yes	Yes	Yes	Yes	Yes
28	Kamalpur GPSS	Yes	Yes	Yes	Yes	Yes	Yes
29	Tupamari GPSS	Yes	Yes	Yes	Yes	Yes	Yes
30	Nagarbera GPSS	NPNL	NPNL	NPNL	NPNL	NPNL	NPNL
31	Borkhat Panbari GPSS	Yes	Yes	Yes	Yes	Yes	Yes
32	Boko GPSS Ltd	Yes	Yes	Yes	Yes	Yes	Yes
33	Pub Samaria GPSS	Yes	Yes	Yes	Yes	Yes	Yes
34	Goraimari GPSS	Yes	Yes	Yes	Yes	Yes	Yes
35	Santoli GPSS	Yes	Yes	Yes	Yes	Yes	Yes
36	Sonapur GPSS	Yes	Yes	Yes	Yes	Yes	Yes
37	Dimoria GPSS	Yes	Yes	Yes	Yes	Yes	Yes
38	Luki GPSS	Yes	Yes	Yes	Yes	Yes	Yes
39	Bekali GPSS	No	No	No	No	No	No
40	Chamaria satra GPSS	Yes	Yes	Yes	Yes	Yes	Yes

Source: Field data (2021)

Note- Neither Profit nor Loss

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