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Structure and Financial Performance of Primary Agricultural Credit Cooperative Societies in Mizoram

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Abstract

Agriculture is one of the most important sectors in the country as more than 55 percent of total workforce in India is engaged in the sector. Since the formulation of Indian Cooperative Societies Act in 1912, cooperative sector plays a major role in delivering credit to the masses. One of the main players of Rural Short-Term Cooperative Credit System (RSTCC) in the country as well as in Mizoram is Primary Agricultural Credit Cooperative Societies (PACS). The paper examines the structure and financial performance of 25 sample PACS using certain structure and financial parameters like – villages covered, membership, employment generation, working capital, total business, capital structure, CD ratio, debt-equity ratio, return on investment etc. And to draw inferences, statistical tools like CAGR, t-value of curve estimation, ratios and Pearson Correlation were used. While the village coverage is low, membership base has increased significantly. The sample PACS were able to utilise its membership base to increase its share capital. However, credit-deposit ratio and capital structure of the sample PACS do not have significant relationship on return on investment.

Keywords:agriculture, credit, cooperative, correlation, financial ratio, structure

1. Introduction

Providing adequate credit in far flung areas for small and marginal farmers is one of the most pressing challenges faced by agriculture sector in India [1]. Agriculture is one of the most important economic sectors in India as more than 55 percent of the total workforce in India is engaged directly or indirectly in this sector (Census of India, 2011). And the contribution towards India's GDP stood at around 16.14 per cent. Thus, Indian economy is a truly Agrarian Economy and majority of the population in rural as well as semi-urban areas depend on it. Many policy and legal reforms have been undertaken by Government of India through a number of agencies like RBI, NABARD etc. for better simulation of institutional credit in the form of Priority Sector Lending (PSL). Till the late 1950s, rural agriculturists depended mainly on non-institutional credit largely through private moneylenders. Among the institutions, it was the cooperative institutions that first bring about the active involvement of extending credit to agriculture sector. It was the formulation of All India Rural Credit Survey Committee (AIRCSC) that shape up the involvement of other formal

institutions in providing agricultural credit. Since then, the share of formal-institutions in total agricultural credit keeps on improving from 10 percent in 1951 to 72 percent in 2016 (NAFIS, 2015-16). As on March, 2017 the contribution of cooperative sector towards agricultural credit still stood at a significant share of more than 15 percent of total agricultural credit.

Short term credit delivery system of cooperative sector called The Rural Short-Term Cooperative Credit System (RSTCCS) is a century old credit delivery system in the country. Under the RSTCCS, there exists a three-tiered structure, comprising of State Cooperative Banks (StCBs) at the apex or state level, District Central Cooperative Banks (DCCBs) at the district or intermediate level and Primary Agricultural Credit Societies (PACS) at the village or grassroot level. While most of the state adopt the three-tier level, states in north-east and other small states including Mizoram adopt two level, comprising of State Cooperative Banks (StCBs) at the state or apex level and Primary Agricultural Credit Societies (PACS) at the grassroot or village level[2].

Mizoram is one of the tribal dominated state situated in north-eastern region of India. Among the total workers of the state, 55.76 percent are concentrated in agriculture sector. And about 80 percent of the population are directly or indirectly dependent on this sector. Due to absence of innovative mechanism in the agriculture sector, farmers in Mizoram adopted 'jhum' cultivation and due to that the agriculture production in the area is low [3]. Delivery of credit for agriculture is entrusted with formal institutions comprising of – commercial banks, regional rural banks and cooperative institutions. As on March, 2020 there are 27 commercial banks comprising of 24 scheduled commercial banks, 1 regional rural bank and 2 cooperative banks. RSTCCS of Mizoram comprises of Mizoram Cooperative Apex Bank Ltd. at the state level and 32 Primary Agricultural Credit Cooperative Societies (PACS) at the grass root level providing a range of credit for rural areas.

2. Data and Methodology

With a focus of analysing structure and financial performance, a sample of 25 Primary Agricultural Credit Cooperative Societies are selected which are monitored under PACS Development Cell. PACS Development Cell is an extension branch of Mizoram Cooperative Apex Bank Ltd., which works for upgradation and monitoring of PACS in Mizoram. The cell was constituted in collaboration with NABARD to fulfil the recommendation of Vaidyanathan committee on Revival Package for PACS in India. Data were directly obtained from respective PACS through field study and financial statement. In order to draw inferences from the data, percentage, mean, range, compound annual growth rate, t-test of curve estimation and Pearson correlation are used.

3. Results and Discussion
3.1 Structural Aspects of sample PACS

Primary Agricultural Credit Cooperative Societies (PACS) are formed and managed by a group of people with cooperative deed. They may cover only one village or particular area or a number of villages. Such variation may be seen from one PACS to another. As presented in Table 1, the average number of villages covered by sample PACS is 5 villages. Among them the least number of villages covered was 1 and the highest number of villages covered is 28. A total of 116 villages in Mizoram are covered by 25 sample PACS. One of the most important structure of PACS is the governing body, and field survey of the sample PACS showed that each PACS were governed by proper governing bodies formed to manage the affairs of the society. During 2019-20, the average number of governing body meeting held by sample PACS was 11 times and ranges from 1 to 32. This indicates that governing body of the sample PACS are actively involved in governing the business affairs of their society.

One of the important benefits offered by PACS is

employment generation. Even though business of PACS are small in terms of monetary value, they generate employment opportunities in rural areas by means of full-time secretaries, manager and other employees. A total of 13 PACS, out of 25 sample PACS were able to employ trained managerial personnel to manage the day to day affairs of the society. And as presented in Table 1, the total number of employees was 75, out of which 40 (53%) are male employees and 35 (47%) are female employees. Average number of male and female employees across sample PACS was 2. The number of male employees ranges from 1 to 7, compared to a range of 1 to 8 among female employees.

One of the main pillars on which cooperative credit movement in the country rests is members of the society[4]. Membership in PACS can be obtained by simply paying a fee of member subscription. Membership in a society can be broadly categorized into two groups based on borrowings – borrowing and non-borrowing members. The growth and efficiency of the society greatly depends on the number of borrowing members as it increases business. As presented in Table 2, total number of memberships increased from 3,295 in 2015-16 to 12,846 in 2019-20 recording significant CAGR of 46.7 percent (t=13.496). The trend is higher than national average of 0.80 percent during the same period. However, borrowing membership increased from 1,504 to only 2,080 during the same period recording insignificant CAGR of 4.5 percent (t=7.839). As on March, 2020 from a total of 12,846 members, only 16.19 percent are borrowers, whereas 83.81 percent are non-borrowers. Data compiled from field studies among 400 non-borrowing members suggests that being self-sufficient is the main reason of being a non-borrower, followed by unavailability of collateral for security. It will be crucial for sample PACS that they increase their membership base, especially borrowing members to become more successful in the coming years.

Table 1: Structural aspects of sample PACS

Parameters	Mean	Range	Total
Villages covered	5	1-28	116
Governing body meeting	11	1-32	-
Male employees	2	1-7	40
Female employees	2	1-8	35
Source: Field Study			

Table 2: Compound growth rate of membership of PACS

Membership	CAGR	't' value
Borrowers	4.5%	7.839
Total members	46.7%	13.496**
National Average	0.80%	

** Significant at 1 percent

Source: SPSS Output

3.2 Financial Aspects of sample PACS

The financial performance of the sample PACS is presented in Table 3 and 4. Share capital denotes the amount of owned funds in capital structure of the sample PACS. During the study period, the share capital of sample PACS increased from ⬜ 46.67 lakhs to ⬜ 82.5 lakhs, recording a CAGR of 15.5 percent. Whereas, deposits from members of the societies grew from ⬜ 496.03 lakhs to ⬜ 1,904.01 lakhs, recording a significant CAGR of 41 percent (t=99.821). At the same time, borrowings from external sources also increased from ⬜ 128 lakhs to ⬜ 258 lakhs recording a CAGR of 16.2 percent.

Working capital of an entity is a summation of share capital, deposit and borrowings. So, a perusal of Table 3 shows that working capital of sample PACS increased from ⬜ 670.7 lakhs to ⬜ 2,244.51 lakhs, recording a compound growth rate of 35.6 percent, and it is significant at 1 percent level of significance (t=38.123). The total business of credit institutions is made up of both deposits and loans which are advanced to the customers. Accordingly, loans and advances of sample PACS

grew at a significant compound rate of 37.2 percent (t=47.731) with a record of increased in the amount from □ 402.17 lakhs to □ 1,408.48 lakhs. Likewise, the total business of the sample PACS also increased from □ 898.2 lakhs to □ 3,312 lakhs during the last five years, recording significant CAGR of 39.3 percent (t=101.96).

Table 3: Trend of financial parameters of PACS

Parameters	CAGR	't'
Share Capital	15.5%	
Deposits	41.0%	99.821**
Borrowings	16.2%	
Working Capital	35.6%	38.123**
Loan & Advances	37.2%	47.731**
Total Business	39.3%	101.96**

*** significant at 1 percent*
Source: Primary Data

Table 4 presents the financial performance analysis of sample PACS in terms of key financial ratios. Credit Deposit ratio or CD ratio is the ratio between the amount of total deposits and the total loans and advances by credit institutions. It helps to understand the extent of deposits utilised in providing credit to the customers. As indicated in Table 4, average CD ratio of the sample PACS during the last financial year was 85.6 percent. However, it shows a declining trend as it decreases from recording 81.08 percent in 2015-16 to 73.97 percent in 2019-20. Debt-equity ratio measures the extent of debt capital in the capital structure as compared to share-capital. During the study period, average debt-equity ratio was 2.85 times, recording an increase from 2.74 times in 2015-16 to 31.13 times in 2019-20. This indicates that sample PACS are utilising more and more debt capital in their capital structure. The efficiency of financial performance of sample PACS can be understood by analysing the trend of return of investment or ROI. Return on investment is the percentage of operating profit generated from the total working capital. As indicated in Table4, return on investment shows a positive trend as it increased from 2.24 percent to 7.46 percent during the study period. The average ROI recorded by sample PACS was 3.69 percent

Table 4: Trend of financial performance of PACS

Year	CD ratio	Debt-equity ratio	ROI
2015-16	81.08	2.74	2.24
2016-17	91.84	3.26	0.45
2017-18	97.17	2.45	3.91
2018-19	83.96	2.66	4.42
2019-20	73.97	3.13	7.46
Average	**85.6**	**2.85**	**3.69**

Source: Primary Data

Further analysis of structure and financial performance of sample PACS is presented in Table 5 to understand the effect of number on employees on share capital, effect of CD ratio on ROI and debt-equity ratio on ROI, Pearson Correlation coefficient was run to measure co`rrelation coefficient between these variables.

Table 5: Correlation Analysis

Test parameters	Pearson correlation (r)	Sig. (2-tailed)
Between membership and share capital	.966**	.008
Between cd ratio and ROI	-.590	.395
Between debt-equity ratio and ROI	-.096	.878

*** significant at 0.01 level (2-tailed)*
**significant at 0.05 level (2-tailed)*
Source: Primary Data

As presented in Table 5 it can be concluded that:
- There is positive and significant correlation (r=.966) between membership base and amount of share capital (p=.008<0.05).

- There is a negative (r=-.590) and insignificant relationship between credit deposit ratio and return on investment (p=.395>0.05).
- There is a negative (r=-.096) and insignificant relationship between debt-equity ratio and return on investment (p=.878>0.05).

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Conclusions

The study analyses the structure and financial performance of 25 Primary Agricultural Credit Cooperative Societies (PACS) in Mizoram. Even though the structure of selected PACS are satisfactory, some financial indicators shows that there are some room for improvement. PACS in Mizoram needs to increase their membership base to increase their business as well as owned funds in order to improve their capital structure. Correlational analysis shows that CD ratio is not adequate to drive higher ROI and the capital structure needs to improve in order to yield higher return.

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