

An Empirical Study on the Growth of Self-Help Groups in six regions of India

Abstract

As per NABARD report, India has the largest microfinance programme in the world with 17.80 crores of household through more than 144 lakh SHGs with deposit of Rs. 65, 089 crores, Rs. 2,09,286 crores as annual loan offtake and Rs. 2, 59, 664 crores as outstanding loan with an average of Rs. 3.35 lakh per SHG. With this background, this present study has been carried to study the performance of SHGs for the period from 2009-10 to 2023-24. The compound annual growth rate has revealed that the overall growth of loan amount availed by SHGs (19.93 per cent) has the greatest growth rate, when compared to saving amount and outstanding amount. The Cuddy Delle Valle Instability index has revealed that the saving amount and outstanding loan against SHGs has low instability. This shows that the SHG-BLP is progressing among the rural people through National Rural Livelihoods Mission and National Urban Livelihoods Mission. The financial literacy and capacity building has been increasing by means of mobilisation of money.

Keywords: Self help groups, loan amount, savings, outstanding loan, growth rate, Cuddy Delle Valle Instability index

1. Introduction

The Self-Help Group Bank Linkage Programme has been initiated by NABARD in 1995. Later, it was organised through Swarnajayati Gram Swarozgar (1999) by identifying their beneficiaries from BPL list. Their main objective was to provide financial assistance through bank credit and government subsidy to alleviate poverty within three years. In 2011, SGSY was replaced by National Rural Livelihoods Mission, a restructured model for promoting poverty reduction through building strong institutions for the poor, especially for women. The difference was, NRLM has adopted 'Demand drive' strategy and repayment with interest approach, but SGSY had 'Capital subsidy' strategy. NRLM was renamed as DAY-NRLM (Deendayal Antyodaya Yojana - National Rural Livelihoods Mission) in 2016. The Self-Help Group Bank Linkage Programme help women for empowerment and socio-economic transformation of rural India. Over the last three decades, it has successfully mobilised millions of rural women at the bottom of the pyramid, to actively participate towards their financial inclusion and empowerment [9,10]. Through a combination of financial inclusion, capacity building, livelihood promotion and social mobilization, SHG-BLP has emerged as an effective movement for inclusive growth and sustainable development in the rural areas of the country. As per NABARD report, SHG-BLP is the largest microfinance programme in the world with 17.80 crores of household through more than 144 lakh SHGs with deposit of Rs. 65, 089 crores,

Rs. 2,09,286 crores as annual loan offtake and Rs. 2, 59, 664 crores as outstanding loan with an average of Rs. 3.35 lakh per SHG. With this background, this present study has been carried to study the performance of SHGs. The specific objective was to analyse the growth trend and instability in number of SHGs, savings amount, loan disbursement amount and outstanding loan against SHGs in India.

2. Methodology

2.1 Data Collection

This study is based only on secondary data which were collected from NABARD report – ‘A Statues of Micro Finance in India’. The region wise and bank wise annual data for the period from 2009 to 2023 has been used to analyse the growth trend and stability in number of SHGs with savings account, savings amount, number of SHGs who availed loans, loan disbursement amount, number of SHGs with outstanding loan and outstanding loan against SHGs.

2.2 Tools of Analysis

2.2.1 Compound Growth Rate Analysis

The growth rate in number of SHGs, savings amount, loan disbursement amount and outstanding loan against SHGs in India were estimated to capture the changes in the trend values. Exponential function of following form was used to estimate the growth rates

$$Y = a b^t$$

$$\log y = \log a + t \log b$$

$$Y = A+B t$$

Where,

$$Y = \log y$$

$$A = \log a$$

$$B = \log b$$

Y = number of SHGs, savings amount (Rs.), loan disbursement amount (Rs.) and outstanding loan against SHGs (Rs.)

t = Time elements which takes the value 1, 2...n for various years

B = Regression co-efficient

Compound Growth Rate ‘r’ = (Antilog of B-1) x 100.

2.2.2 Cuddy Della Valle Index

Cuddy Della Valle Instability Index (Cuddy and Della Valle, 1978) is a modification of coefficient of variation to accommodate trend present in the data, which is commonly present in economic time series data which was calculated as follows:

$$CDVI = C.V \times \sqrt{1 - Ad R^2}$$

Where, CV is coefficient of variation, and Ad R² is adjusted coefficient of determination. The ranges of CDVI as given by Rakesh Sihmar, (2014) were followed: Low instability (between 0 and 15); Medium instability (greater than 15 and lower than 30); and High instability (greater than 30).

3. Results and Discussion

Currently, the total savings of SHGs with banks was Rs. 65,089 crores deposited by 144 lakhs of SHGs. However, the total loan disbursed to SHGs by banks was Rs. 2,09, 286 crores to 54 lakhs of SHGs. As a result of delayed repayment, the total outstanding bank loan against SHGs was Rs. 2,59, 664 with 77 lakhs of SHGs. Considering the objective of this present study, the results of the study are presented in the following sections.

3.1 Trends in Savings Amount deposited by SHGs in India

The compound growth rate was estimated to understand the trends in the number of SHGs with savings account and savings amount of SHGs in India during the period from 2009-10 to 2023-24 and are presented in Table 1 and 2.

Table. 1 Growth Rate of Number of SHGs with Savings Account in India, 2009-2023.

Region	Commercial Bank	Regional Rural Bank	Cooperative Bank	Overall
Northern	6.55***	9.07***	2.63***	6.34***
North Eastern	8.14***	8.79***	4.06**	8.19***
Eastern	10.56***	8.88***	0.84 ^{NS}	8.75***
Central	9.15***	5.83***	0.25 ^{NS}	7.09***
Western	8.11***	3.71***	2.97***	5.97***
Southern	0.78**	3.25***	2.56***	1.53***
India	5.18***	6.29***	2.32***	5.10***

Note: ***, ** and * denotes significance at 1 per cent, 5 per cent and 10 per cent, respectively.

From Table 1, it could be inferred that the growth rate of number of self help groups with savings account in commercial bank was positively significant at one per cent level for Northern, North Eastern, Eastern, Central and Western region and five per cent level of significance for Southern region. The contribution of Eastern region (10.56 per cent) was the highest in number of SHG, followed by Central (9.15 per cent), North Eastern (8.14 per cent), Western (8.11 per cent), Northern (6.55 per cent) and Southern region (0.78 per cent). In case

of regional rural bank, the growth rate of SHGs was positively significant at one per cent level for all regions. The highest growth rate was reported by Northern region (9.07 per cent), followed by Eastern (8.88 per cent), North Eastern (8.79 per cent), Central (5.83 per cent), Western (3.71 per cent) and Southern region (3.25 per cent). Whereas, the growth rate of SHG in Co-operative bank was positively significant at one per cent for Northern region, Western region and Southern region and five per cent level for North Eastern region. The contribution of North Eastern region is the highest with 4.06 per cent, followed by Western (2.97 per cent), Northern (2.63 per cent) and Southern region (2.56 per cent). In terms of region, the overall performance of SHGs was the highest in Eastern region (8.75 per cent), followed by North Eastern (8.19 per cent), Central (7.09 per cent), Northern (6.34 per cent), Western (5.97 per cent) and Southern region (1.53 per cent). Based on agencies in India, the number of SHG with savings account especially in Regional rural bank (6.29 per cent) has the highest growth rate, followed by commercial bank (5.18 per cent) and co-operative bank (2.32 per cent).

Table. 2 Growth Rate of Savings Amount of SHGs in India, 2009-2023.

Region	Commercial Bank	Regional Rural Bank	Cooperative Bank	Overall
Northern	16.67***	15.82***	6.45***	15.18***
North Eastern	21.86***	24.31***	17.51**	22.81***
Eastern	28.78***	24.96***	13.56***	25.23***
Central	19.62***	17.17***	8.93**	17.97***
Western	15.67***	19.51***	11.28***	15.04***
Southern	17.44***	26.85***	9.75***	18.37***
India	19.38***	24.13***	11.17***	19.52***

Note: ***, ** and * denotes significance at 1 per cent, 5 per cent and 10 per cent, respectively.

Table 2 infers that the growth rate of savings amount in commercial bank was increasing and positively significant at one per cent for all regions in India. Among them, the Eastern region (28.78 per cent) has the highest growth rate for saving amount by SHGs, followed by North Eastern (21.86 per cent), Central (19.62 per cent), Southern (17.44 per cent), Northern (16.67 per cent) and Western region (15.67 per cent). In case of regional rural bank, the savings amount was increasing rate and positively significant at one per cent level for all regions. Further, Southern region (26.85 per cent) has the highest growth rate for SHG's savings amount, followed by Eastern (24.96 per cent), North Eastern (24.31 per cent), Western (19.51 per cent), Central (17.17 per cent) and Northern region (15.82 per cent). For Co-operative bank, the growth rate was positive and statistically significant at one per cent for Northern, Eastern, Western and Southern region and five per cent for North Eastern and Central region. The growth rate of savings amount in North Eastern (17.51 per cent) was the highest among all

regions, followed by Eastern region (13.56 per cent), Western region (11.28 per cent), Southern region (9.75 per cent), Central region (8.93 per cent) and Northern region (6.45 per cent). In terms of region wise, the overall growth rate of SHG's saving amount by Eastern region (25.23 per cent) was the highest, followed by North Eastern (22.81 per cent), Southern (18.37 per cent), Central (17.97 per cent), Northern (15.18 per cent) and Western region (15.04 per cent). Moreover, the savings amount of SHGs in Regional rural bank (24.13 per cent) has the highest growth rate, followed by commercial bank (19.38 per cent) and co-operative bank (11.17 per cent). Therefore, the growth rate of SHGs with savings account and their savings amount in India was 5.10 per cent and 19.52 per cent, respectively.

3.2 Trends in Loan Disbursement Amount to SHGs in India

The compound growth rate was estimated to understand the trends in the Number of SHGs who availed loan and Loan Disbursement amount to SHGs in India during the Period from 2009-10 to 2023-24 and are presented in Table 3 and 4.

Table. 3 Growth Rate of Number of SHGs with Loan Disbursed in India, 2009-2023

Region	Commercial Bank	Regional Rural Bank	Cooperative Bank	Overall
Northern	15.36***	10.86***	-10.18*	9.73***
North Eastern	14.16***	8.47**	0.15 ^{NS}	9.45**
Eastern	19.76***	25.28***	2.46 ^{NS}	19.27***
Central	13.16***	11.58***	1.59 ^{NS}	11.80***
Western	12.31***	4.36***	0.35 ^{NS}	8.45***
Southern	7.69***	7.98***	0.21 ^{NS}	7.09***
India	10.99***	14.69***	0.29 ^{NS}	10.89***

Note: ***, ** and * denotes significance at 1 per cent, 5 per cent and 10 per cent, respectively.

From Table 3, it could be inferred that the growth rate of number of loan borrowers in commercial bank was positively increasing and statistically significant at one per cent level for all regions. Whereas, the growth rate of borrowers was the highest in Eastern region (19.76 per cent), followed by Northern (15.36 per cent), North Eastern (14.16 per cent), Central (13.16 per cent), Western (12.31 per cent) and Southern region (7.69 per cent). Regarding regional rural bank, the growth rate of loan borrower was positively significant at one per cent level for Northern, Eastern, Central, Western and Southern region and at five per cent for North Eastern region. The highest growth rate in loan borrower was contributed by Eastern region (25.28 per cent), followed by Central (11.58 per cent), Northern (10.86 per cent), North Eastern (8.47 per cent), Southern (7.98 per cent) and Western (4.36 per cent). With respect to co-operative bank, the growth rate of loan borrower was negatively significant at 10 per cent for Northern region

(-10.18 per cent). In terms of region, the overall performance of loan borrower was positive and statistically significant at one per cent and five per cent level of probability. Among the region, the Eastern region (19.27 per cent) has the highest growth rate for number of loan borrower, followed by Central (11.80 per cent), Northern (9.73 per cent), North Eastern (9.45 per cent), Western (8.45 per cent) and Southern region (7.09 per cent). The overall growth rate for number of loan borrowers in terms of bank agency, was the highest in regional rural bank with 14.69 per cent, followed by commercial bank (10.99 per cent).

Table. 4 Growth Rate of Loan Disbursed of SHGs in India, 2009-2023

Region	Commercial Bank	Regional Rural Bank	Cooperative Bank	Overall
Northern	19.89***	16.59***	-3.18 ^{NS}	15.79***
North Eastern	21.74***	23.13***	6.18 ^{NS}	21.40***
Eastern	30.37***	35.43***	21.32***	31.77***
Central	14.33***	14.81***	8.49 ^{NS}	14.09***
Western	22.95***	16.00***	8.35***	19.63***
Southern	17.61***	19.07***	15.92***	17.88***
India	19.16***	22.69***	15.23***	19.93***

Note: ***, ** and * denotes significance at 1 per cent, 5 per cent and 10 per cent, respectively.

From Table 4, it could be referred that the growth rate of loan disbursement amount in commercial bank was positively significant at one per cent level for all regions in India. Among them, the growth rate of Eastern region was the highest with 30.37 per cent, followed by Western (22.95 per cent), North Eastern (21.74 per cent), Northern (19.89 per cent), Southern (17.61 per cent) and Central region (14.33 per cent). In case of regional rural bank, the growth rate of loan disbursement amount was positively significant at one per cent level for all regions in India. Out of these regions, the highest growth rate in loan disbursement amount was recorded in Eastern region with (35.43 per cent), followed by North Eastern (23.13 per cent), Southern (19.07 per cent), Northern (16.59 per cent), Western (16.00 per cent) and Central region (14.81 per cent). Regarding co-operative bank, the growth rate of loan disbursement amount was positive and statistically significant at one per cent only for Eastern, Western and Southern region. In which, Eastern region (21.32 per cent) has the highest growth rate, followed by Southern (15.92 per cent) and Western region (8.35 per cent). Therefore, the overall growth rate of loan disbursement in terms of region was assessed and revealed that Eastern region has the highest growth rate with 31.77 per cent, followed by North Eastern region (21.40 per cent), Western (19.63 per cent), Southern (17.88 per cent), Northern (15.79 per cent) and Central region (14.09 per cent). Moreover, the overall growth rate for loan disbursement amount was the highest in regional rural bank with 22.69 per cent, followed by commercial bank (19.16 per

cent) and co-operative bank (15.23 per cent). Therefore, the growth rate for number of SHGs as loan borrowers and loan disbursement amount in India was 10.89 per cent and 19.93 per cent, respectively each significant at one per cent level of probability.

3.3 Trends in Outstanding Loan against SHGs in India

The compound growth rate was estimated to understand the trends in the Number of SHGs with Outstanding Loan and Outstanding Loan against SHGs in India during the Period from 2009-10 to 2023-24 and are presented in Table 5 and 6.

Table. 5 Growth Rate of Number of SHGs with Outstanding Loan in India, 2009-2023.

Region	Commercial Bank	Regional Rural Bank	Cooperative Bank	Overall
Northern	1.04 ^{NS}	1.92*	-8.72***	-0.56 ^{NS}
North Eastern	1.82 ^{NS}	7.62***	-2.88 ^{NS}	4.41***
Eastern	8.74***	3.60 ^{NS}	1.68 ^{NS}	8.35***
Central	0.60 ^{NS}	2.55*	-0.86 ^{NS}	1.32 ^{NS}
Western	3.38*	1.58*	-6.05***	1.66 ^{NS}
Southern	1.49*	2.12***	3.61***	1.83***
India	3.27***	5.36***	0.92 ^{NS}	3.63***

Note: ***, ** and * denotes significance at 1 per cent, 5 per cent and 10 per cent, respectively.

From Table 5, it could be seen that the growth rate for number of SHGs with outstanding loan in commercial bank was increasing positively and statistically significant at one per cent level for Eastern region and ten per cent level of significant for Western and Southern region. The highest growth rate was recorded in Eastern region (8.74 per cent), followed by Western region (3.48 per cent) and Southern region (1.49 per cent). In case of regional rural bank, the growth rate for number of SHGs with outstanding loan was positively significant at one per cent for North Eastern and South region at ten per cent for Northern, Central and Western region. The highest growth rate was recorded by North Eastern region with 7.62 per cent, followed by Central (2.55 per cent), Southern (2.12 per cent), Northern (1.92 per cent) and Western region (1.58 per cent). Regarding co-operative banks, the growth rate for number of SHGs with outstanding loan was positively significant at one per cent level for Southern region (3.61 per cent) and negative significant at one per cent level for Northern region (-8.72 per cent) and Western region (-6.05 per cent). The overall performance of SHGs, with respect to region was positively significant at one per cent for North Eastern, Eastern and Southern region only. In which, the highest growth rate was recorded in Eastern region (8.35 per cent), followed by North Eastern region (4.41 per cent) and Southern region (1.83 per cent). In terms of bank

agency, the total growth rate for number of SHGs with outstanding loan was the highest in regional rural bank with 5.36 per cent, followed by commercial bank (3.27 per cent).

Table. 6 Growth Rate of Outstanding Loan against SHGs in India, 2009-2023

Region	Commercial Bank	Regional Rural Bank	Cooperative Bank	Overall
Northern	6.46**	7.89***	-1.49 ^{NS}	5.79***
North Eastern	9.43**	18.50***	-0.06 ^{NS}	13.01***
Eastern	21.32***	24.31***	18.32***	22.22***
Central	3.14 ^{NS}	7.11***	2.89 ^{NS}	4.72**
Western	15.16***	10.32***	6.26***	13.74***
Southern	15.32***	16.15***	18.09***	15.70***
India	15.40***	17.34***	15.75***	15.95***

Note: ***, ** and * denotes significance at 1 per cent, 5 per cent and 10 per cent, respectively.

From Table 6, it infers that the growth rate for outstanding loan amount against SHGs in commercial bank was positively significant at one per cent level for Eastern, Western and Southern region and at five per cent level for Northern and North Eastern region. Among them, the highest growth rate was made by Eastern region with 21.32 per cent, followed by Southern (15.32 per cent), Western (15.16 per cent), North Eastern (9.43 per cent) and Northern region (6.46 per cent). With respect to RRB, the growth rate for outstanding loan amount against SHGs was positively significant at one per cent for all regions in India. Out of these regions, Eastern region (24.31 per cent) has the highest growth rate in outstanding loan, followed by North Eastern region (18.50 per cent), Southern region (16.15 per cent), Western region (10.32 per cent), Northern region (7.89 per cent) and Central region (7.11 per cent). In case of co-operative bank, the growth rate was positively significant at one per cent for Eastern, Western and Southern region. From these regions, Eastern region has the highest growth rate (18.32 per cent), followed by Southern region (18.09 per cent) and Western region (6.26 per cent). Therefore, the overall growth rate for outstanding loan was the highest in Eastern region (22.22 per cent), followed by Southern region (15.70 per cent), Western region (13.74 per cent), North Eastern region (13.01 per cent), Northern region (5.79 per cent) and Central region (4.72 per cent). The total growth rate for outstanding loan against SHGs was the highest in regional rural bank (17.34 per cent), followed by co-operative bank (15.75 per cent) and commercial bank (15.40 per cent). Therefore, the overall growth rate for number of SHGs with outstanding loan and outstanding loan amount against SHGs in India was 3.63 per cent and 15.95 per cent, respectively each one was significant at one per cent level of probability.

Figure 1. Growth Trend of Number of SHGs with Savings Account in India, (2009-2023)

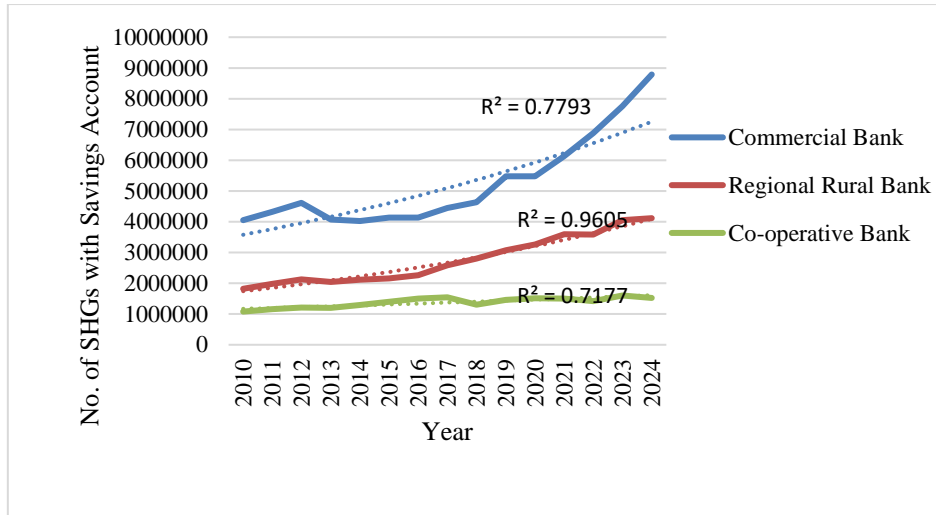


Figure. 2 Growth Trend of Savings Amount of SHGs in India (2009-2023)

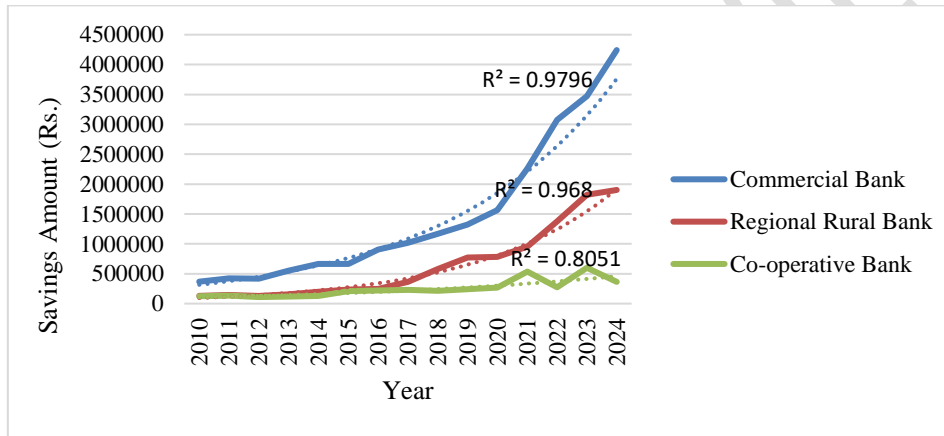


Figure. 3 Growth Trend of Number of SHGs with Loan Disbursed in India, (2009-2023)

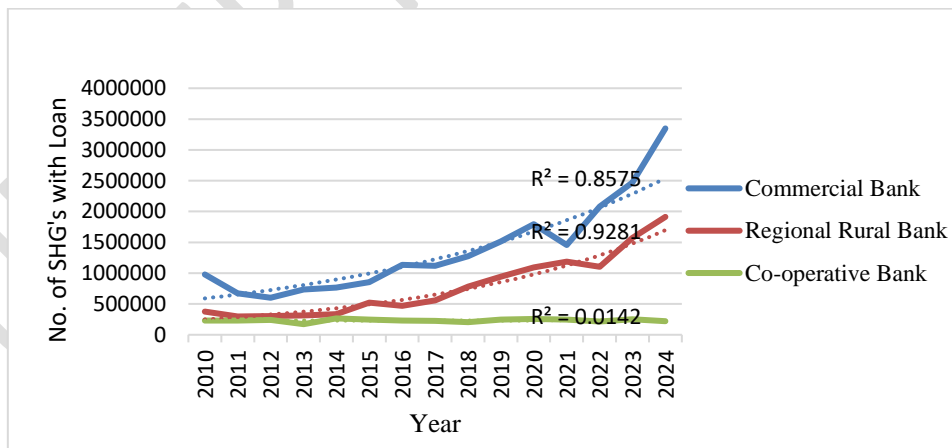


Figure. 4 Growth Trend of Loan Disbursed of SHGs in India, (2009-2023)

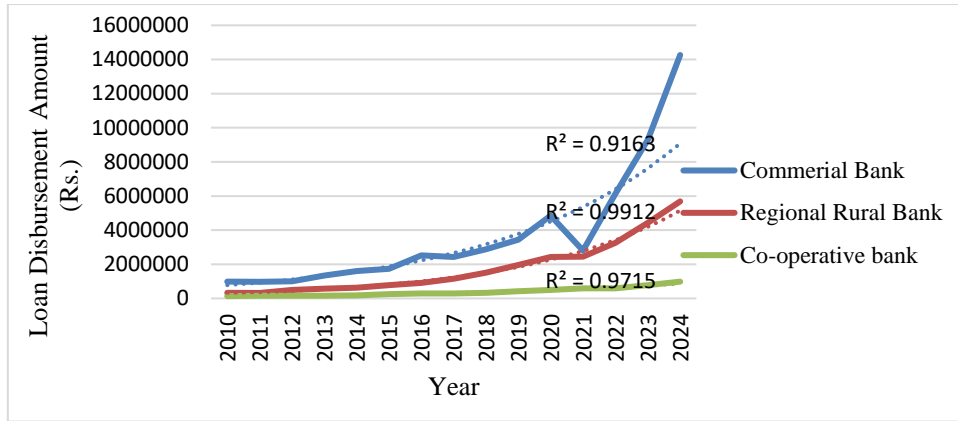


Figure 5. Growth Trend of Number of SHGs with Outstanding Loan in India, 2009-2023

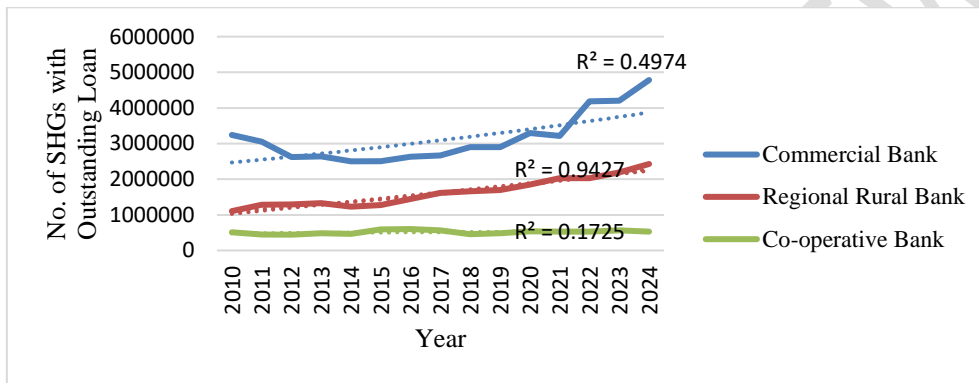
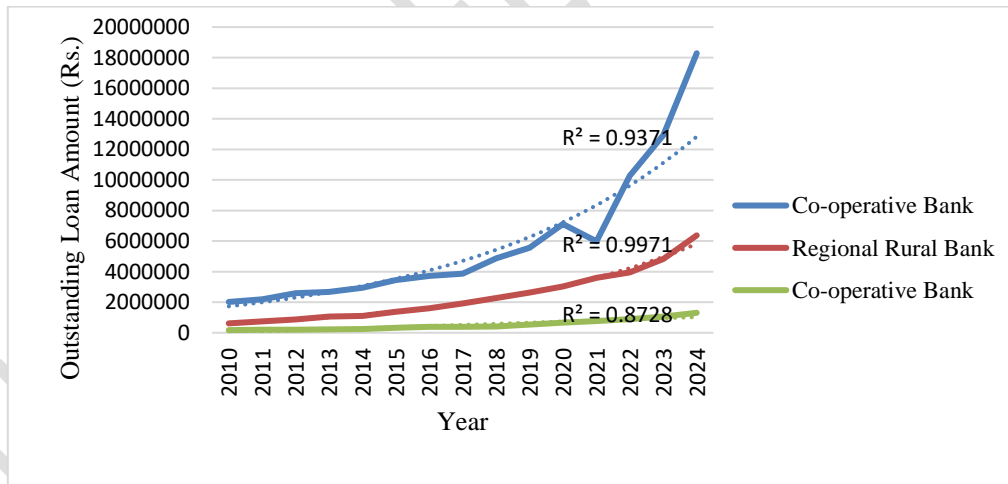


Figure. 6 Growth Trend of Outstanding Loan against SHGs in India, 2009-2023.



3.4 Instability in Savings Amount of SHGs in India

The fluctuation or instability in the savings amount deposited by SHGs from India has been analysed and Cuddy Della Valle Instability Index in terms of region-wise and bank-wise are presented in Table 7.

Table 7. Estimates of Instability Index for Number of SHGs with Saving Amount

Region	Commercial Bank		Regional Rural Bank		Cooperative Bank		Overall	
	No. of SHGs	Savings Amount	No. of SHGs	Savings Amount	No. of SHGs	Savings Amount	No. of SHGs	Savings Amount
Northern	20.51	64.04	10.05	18.08	9.09	16.77	11.22	40.46
North Eastern	32.57	47.92	8.02	35.27	35.50	113.13	11.04	37.29
Eastern	25.06	27.47	14.68	30.58	29.98	30.59	12.52	21.06
Central	32.19	44.12	11.37	34.00	14.02	45.16	17.87	35.46
Western	23.87	35.48	8.64	31.04	7.37	75.68	11.98	28.05
Southern	5.63	11.89	5.71	21.10	5.18	24.22	3.70	7.18
India	13.94	11.78	5.69	18.80	6.50	26.95	8.32	11.63

From Table 7, it could be inferred that the number of SHGs having saving account in commercial bank has shown high instability for North Eastern and Central region with 32.57 per cent and 32.19 per cent, respectively. Whereas there was medium instability for Northern, Eastern and Western region with 20.51 per cent, 25.06 per cent and 23.87 per cent, respectively. Only Southern region has low instability with 5.63 per cent. For regional rural bank, all the region has low instability in number of SHGs having saving account, since the index were less than 15 per cent for all regions. On the other hand, the SHG count in co-operative bank has depicted high instability in North Eastern region and medium instability in Eastern region. Whereas, Northern, Central, Western and Southern region has low instability with 9.09 per cent, 14.02 per cent, 7.37 per cent and 5.18 per cent, respectively. As per region wise analysis, the CDVI for SHGs with savings account has medium instability in Central region (17.87 per cent) and low instability in Northern, North Eastern, Eastern, Western and Southern region (below 15 per cent). According to bank wise also, commercial bank, regional rural bank and co-operative bank in India has low instability index.

It could be also seen that the savings amount in commercial bank has high instability index in Northern, North Eastern, Central and Western region with 64.04 per cent, 47.92 per cent, 44.12 per cent and 35.48 per cent, respectively. Whereas, Eastern region has medium instability (27.47 per cent) and Southern region has low instability (11.89 per cent). In all over India, saving amount deposited in commercial bank (11.78 per cent) has low instability. Regarding regional rural bank, North Eastern, Western, Central and Eastern region has high instability with 35.27 per cent, 31.04 per cent, 34.00 per cent and 30.58 per cent, respectively. Then Northern and Southern region has medium instability with 18.08 per cent and 21.10 per cent, respectively. Overall savings amount in regional rural bank at national level has medium instability (18.80 per cent). For co-operative, major regions *viz.*, North Eastern, Western,

Central and Eastern region has high instability index with 113.13 per cent, 75.68 per cent, 45.16 per cent and 30.59 per cent, respectively. However, Northern (16.77 per cent) and Southern region (24.22 per cent) has medium instability. Overall instability of savings amount in co-operative bank has medium instability with 26.95 per cent. As per the region, Northern, North Eastern and Central region has high instability with 40.46 per cent, 37.29 per cent and 35.46 per cent, respectively. Then, Western region (28.05 per cent) and Eastern region (21.06 per cent) has medium instability and Southern region (7.18 per cent) has low instability. Moreover, the savings amount has low instability index with 11.63 per cent, both by region wise and bank wise in India.

3.5 Instability in Loan Disbursement Amount availed to SHGs in India

The fluctuation or instability in the loan disbursement amount availed to SHGs from India has been analysed and Cuddy Della Valle Instability Index in terms of region wise and bank wise are presented in Table 8.

Table 8. Estimates of Instability Index for Number of SHGs with Loan Disbursement

Region	Commercial Bank		Regional Rural Bank		Cooperative Bank		Overall	
	No. of SHGs	Loan Disbursed	No. of SHGs	Loan Disbursed	No. of SHGs	Loan Disbursed	No. of SHGs	Loan Disbursed
Northern	26.59	33.61	44.02	62.39	45.56	32.73	26.88	39.49
North Eastern	79.90	122.65	56.13	79.76	108.32	109.11	68.68	96.36
Eastern	34.85	46.90	29.37	28.55	33.43	26.62	23.08	29.34
Central	41.23	88.24	59.39	97.02	50.49	84.91	43.52	84.73
Western	33.86	42.31	24.06	27.59	44.87	34.71	29.66	35.46
Southern	18.82	29.36	18.22	12.33	18.37	14.71	12.86	18.44
India	21.42	29.55	18.17	8.96	10.37	11.41	17.42	18.59

From Table 8, it indicates that the number of SHGs who availed loan from commercial bank has high instability index in North Eastern, Central, Eastern and Western region with 79.90 per cent, 41.23 per cent, 34.85 per cent and 33.86 per cent, respectively and has medium instability in Northern and Southern region with 26.59 per cent and 18.82 per cent, respectively. Meanwhile, regional rural bank has high instability in Northern, North Eastern and Central region with 44.02 per cent, 56.13 per cent and 59.39 per cent, respectively and has medium instability in Eastern, Western and Southern region with 29.37 per cent, 24.06 per cent and 18.22 per cent, respectively. On the other hand, co-operative bank has high instability for low borrowers in major regions viz., North Eastern (108.32 per cent), Central (50.49 per cent), Northern (45.56 per cent), Western (44.87 per cent) and Eastern (33.43 per cent) region and

only Southern region has medium instability with 18.37 per cent. The overall instability for region wise has revealed that North Eastern (68.68 per cent) and Central region (43.52 per cent) has high instability, whereas Western (29.66 per cent), Northern (26.88 per cent) and Eastern region (23.08 per cent) has medium instability and Southern region (12.86 per cent) has low instability in India. The overall instability for bank wise has revealed that commercial bank (21.42 per cent) and regional rural bank (18.17 per cent) has medium instability and co-operative bank (10.37 per cent) has low instability. Moreover, the instability index for loan borrower in both region wise and bank wise has medium instability with 17.42 per cent.

The instability for loan disbursement amount in commercial bank was high instability in major regions *viz.*, Northern, North Eastern, Eastern, Central and Western region with 33.61 per cent, 122.65 per cent, 46.90 per cent, 88.24 per cent and 42.31 per cent, respectively. Yet, Southern region has medium instability in loan disbursement with 29.36 per cent. With respect to regional rural bank, the loan disbursement amount has high instability in Northern, North Eastern and Central with 62.39 per cent, 79.76 per cent and 97.02 per cent, respectively and has medium instability in Eastern region (28.55 per cent) and Western region (27.59 per cent). Then, Southern region has low instability with 12.33 per cent. Regarding co-operative bank, it has high instability in Northern (32.73 per cent), North Eastern (109.11 per cent), Central (84.91 per cent) and Western region (35.46 per cent) and medium instability in Eastern region (26.62 per cent) and low instability in Southern region (14.71 per cent). As a result in region wise study, the instability of loan disbursement has high instability in Northern (39.49), North Eastern (96.36 per cent), Central (84.73 per cent) and Western region (35.46 per cent). Whereas, medium instability in Eastern (26.34 per cent) and Southern region (18.44 per cent). In terms of bank agency, the overall instability for loan disbursement amount has medium instability in commercial bank (29.55) and low instability in co-operative bank (11.41 per cent) and regional rural bank (8.96 per cent). Moreover, all over India the CDVI for loan disbursement amount availed in both region-wise and bank-wise was medium instability with 18.59 per cent.

3.6 Instability in Outstanding Loan against SHGs in India

The fluctuation in the Outstanding Loan amount against SHGs from India has been analysed and Cuddy Della Valle Instability Index in terms of region-wise and bank-wise are presented in Table 9.

Table 9. Estimates of Instability Index for Number of SHGs and Outstanding Loan

Region	Commercial Bank		Regional Rural Bank		Cooperative Bank		Overall	
	No. of SHGs	Outstanding Loan	No. of SHGs	Outstanding Loan	No. of SHGs	Outstanding Loan	No. of SHGs	Outstanding Loan
Northern	27.98	43.68	16.61	33.64	20.37	14.86	18.06	35.22
North Eastern	43.62	84.71	16.59	47.63	50.28	75.95	28.73	65.46
Eastern	25.47	39.63	82.40	12.83	34.12	22.38	13.83	21.48
Central	33.52	56.37	20.93	45.04	37.79	42.25	20.46	50.67
Western	34.34	37.70	13.58	15.53	16.42	18.07	23.82	30.16
Southern	12.00	17.20	6.34	6.47	14.30	10.96	8.47	11.19
India	16.33	20.73	6.03	7.02	9.31	9.58	10.80	12.99

From Table 9, it could be revealed that the number of SHGs with outstanding loan in commercial bank has high instability in North Eastern, Central and Western region with 43.62 per cent, 33.52 per cent and 34.34 per cent, respectively. Whereas, Northern (27.98 per cent) and Eastern region (25.47 per cent) has medium instability and Southern region (12.00 per cent) has low instability. On the other hand, regional rural bank has high instability only in Eastern region (82.40 per cent), medium instability in Northern (16.61 per cent), North Eastern (16.59 per cent) and Central region (20.93 per cent) and low instability in Western (13.58 per cent) and Southern region (6.34 per cent). For co-operative, it has high instability in North Eastern, Eastern and Central region with 50.28 per cent, 34.12 per cent and 37.79 per cent, respectively. Then, Northern (20.37 per cent) and Western region (16.42 per cent) has medium instability and Southern region (14.30 per cent) has low instability in SHGs with outstanding loan during 2009-2023. As a result, the instability of SHG with outstanding loan in region-wise has revealed that it has medium instability in Northern (18.06 per cent), North Eastern (28.73 per cent), Central (20.46 per cent) and Western region (23.82 per cent). Then, it has low instability in Eastern (13.83 per cent) and Southern region (8.47 per cent). In terms of bank agency in India, the CDVI of SHGs with outstanding loan was medium instability in commercial bank (16.33 per cent) and low instability in co-operative bank (9.31 per cent) and regional rural bank (6.03 per cent). Overall CDVI in both region wise and bank wise for number of SHGs with outstanding loan was 10.80 per cent, which was inferred as low instability index. The instability of outstanding loan against SHGs in commercial bank has high instability in major region namely Northern (43.68 per cent), North Eastern (84.71 per cent), Eastern (39.63 per cent), Central (56.37 per cent) and Western region (37.70 per cent). Then, it has medium instability only in Southern region (17.20 per cent). For regional rural bank, the outstanding loan over year has high instability in Northern (33.64 per cent), North Eastern (47.63 per cent) and Central region (45.04 per cent), while there is medium instability in

Western region (15.53 per cent) and low instability in Eastern region (12.83 per cent) and Southern region (6.47 per cent). Regarding co-operative bank, it has high instability in North Eastern (75.95 per cent) and Central region (42.25 per cent), medium instability in Eastern (22.38 per cent) and Western region (18.07 per cent) and low instability in Northern (14.86 per cent) and Southern region (10.96 per cent). As a result, the overall CDVI for region wise has high instability in Northern (35.22 per cent), North Eastern (65.46 per cent), Central (50.67 per cent) and Western region (30.16 per cent). Then, medium instability in Eastern region (21.18 per cent) and low instability in Southern region (11.19 per cent). On the other hand, the CDVI for outstanding loan amount in bank wise study revealed that the commercial bank (20.73 per cent) has medium instability and co-operative bank (9.58 per cent) and regional rural bank (7.02 per cent) has low instability. Finally, as result from both region wise and bank wise the CDVI for outstanding loan against SHGs in India has low instability index with 12.99 per cent.

Conclusion

This present study has attempted to analyse the growth trend of saving amount deposited by SHGs, loan disbursement amount to SHGs and outstanding loan against SHGs for the period from 2009-10 to 2023-24 and compared among bank-wise and region-wise. The compound annual growth rate has revealed that the overall growth of loan amount availed by SHGs (19.93 per cent) has the greatest growth rate, when compared to saving amount and outstanding amount. This shows that the SHG-BLP is progressing among the rural people through National Rural Livelihoods Mission and National Urban Livelihoods Mission. The financial literacy and capacity building has been increasing by means of mobilisation of money. The Cuddy Delle Valle Instability index has revealed that the saving amount and outstanding loan against SHGs, both region-wise and bank-wise has low instability. This might be due to minimum fluctuation in the overall trend. However, the loan disbursement amount has medium instability. So, there might be fluctuation in terms of region and bank agencies in overall period. This would have helped for increasing the growth rate. The minimum rate of outstanding loan shows that the repayment of loan and interest was properly managed by the loanee. Therefore, there is a scope for the government to reduce the problem of unemployment and poverty alleviation through the Self Help Groups – Bank Linkage Programme.

Disclaimer (Artificial intelligence)

Author(s) hereby declare that NO generative AI technologies such as Large Language Models (ChatGPT, COPILOT, etc.) and text-to-image generators have been used during the writing or editing of this manuscript.

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