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   NEED/IMPORTANCE OF THE STUDY

   STATEMENT OF THE PROBLEM

   OBJECTIVES

   HYPOTHESES

   RESEARCH METHODOLOGY

   RESULTS & DISCUSSION

   FINDINGS

   RECOMMENDATIONS/SUGGESTIONS

   CONCLUSIONS

   SCOPE FOR FURTHER RESEARCH

   ACKNOWLEDGMENTS

   REFERENCES

   APPENDIX/ANNEXURE

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- Bowersox, Donald J., Closs, David J., (1996), "Logistical Management." Tata McGraw, Hill, New Delhi.
- Hunker, H.L. and A.J. Wright (1963), "Factors of Industrial Location in Ohio" Ohio State University, Nigeria.

CONTRIBUTIONS TO BOOKS

- Sharma T., Kwatra, G. (2008) Effectiveness of Social Advertising: A Study of Selected Campaigns, Corporate Social Responsibility, Edited by David Crowther & Nicholas Capaldi, Ashgate Research Companion to Corporate Social Responsibility, Chapter 15, pp 287-303.

JOURNAL AND OTHER ARTICLES

- Schemenner, R.W., Huber, J.C. and Cook, R.L. (1987), "Geographic Differences and the Location of New Manufacturing Facilities," Journal of Urban Economics, Vol. 21, No. 1, pp. 83-104.

CONFERENCE PAPERS

- Garg, Sambhav (2011): "Business Ethics" Paper presented at the Annual International Conference for the All India Management Association, New Delhi, India, 19–22 June.

UNPUBLISHED DISSERTATIONS AND THESES

- Kumar S. (2011): "Customer Value: A Comparative Study of Rural and Urban Customers," Thesis, Kurukshetra University, Kurukshetra.

ONLINE RESOURCES

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WEBSITES

- Garg, Bhavet (2011): Towards a New Natural Gas Policy, Political Weekly, Viewed on January 01, 2012 http://epw.in/user/viewabstract.jsp

QUALITY AND SUSTAINABILITY OF JOINT LIABILITY GROUPS AND MICROFINANCE INSTITUTIONS: A CASE STUDY OF CASHPOR MICROCREDIT SERVICES

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GANGTOK

ABSTRACT

The informal institutions that undertake microfinance services as their activity are generally referred as microfinance institutions (MFIs). The uniqueness of MFIs are social engineering and financial intermediation especially in the areas where banking network are not able to reach the poorest and financially excluded people. CASHPOR devotes its attention exclusively to provide micro-credit to the poorest of the poor, through its unique "targeting approach" which filters the poorest clients and lends to them. Presently it operates in 16 districts of Uttar Pradesh and Bihar, with 269 mini branches, 25768 centers, 417039 clients and loan portfolio of Rs.267.40 crore. Total cumulative disbursement of loan was Rs.1397.20 crore. The disbursement of loan during 2009-10 was Rs.471.87 crore. Total staff strength as on 31st March 2010 was 1458. The objective of the study to analyse the sustainability of microfinance inastituions as well as joint liability groups. the study revealed that Net income of CMC had marginally declined during 2008-09 as compared to year 2007-08. However, it had shown quantum jump of 833.82% during 2009-10 over 2007-08 due to steep increase in income. The CASHPOR Micro Credit had wiped out all accumulated loss of Rs.4.32 crore during 2009-10 and achieved sustainability. But CMC required increasing their capital base further for leveraging more fund from Banks for expansion. The return on performing assets and yield on portfolio ratio had increased during 2009-10. 3.31% return on assets and 33.32% yield on portfolio during 2009-2010 could be treated as impressive. This showed that the operation of CASHPOR Micro Credit was profitable. Operating self sufficiency ratio and financial self sufficiency ratio of CMC had shown good improvement during 2009-10. These ratios reflected the growing managerial and financial acumen of the CMC. It was suggested that CMC should develop the strategy to check high staff attrition rate, gradually computerize branches to improve MIS and for sustainability of JLGs, interest rate should be reduced by reducing cost of delivery, increasing business volume and use of technology. it needs to further increase the loan amount per borrower. More capital support and revolving fund to CASHPOR Micro Credit from apex institution like NABARD and SIDBI would help CASHPOR Micro Credit to improve its capital adequacy and thus leveraging the fund form various Banks for deepening the outreach. Capacity building of JLGs members, transfer of technical knowhow and marketing support to JLG were the areas where CASHPOR Micro Credit should also concentrate. Sustainability of JLGs should be given due weightage in planning and expanding business. Capacity building of staff in the field of assets quality, risk management, internal control system and MIS should be strengthen.

KEYWORDS
joint liability groups, microfinance institutions.

INTRODUCTION

The informal institutions that undertake microfinance services as their activity are generally referred as microfinance institutions (MFIs), which mainly belong into private sector in India. The uniqueness of MFIs are social engineering and financial intermediation especially in the areas where banking network are not able to reach the poorest and financially excluded people. The rapid progress achieved in SHG movement among women across the country enhanced foundation process for emergence of MFI in India.

Generally banks finance to MFIs in proportion of their capital. While State Bank of India finance to MFIs upto 5 times of their capital, Indian Bank finance upto 7 times of capital. Thus capacity of not-profit-MFIs to expand client outreach and portfolios is constrained by low net owned funds. Even higher leverage does not offset this constraint. Furthermore, higher leverage would be perceived as increased risk, and hence draw increased rates for funding. Therefore, many MFIs are looking for options of "transformation" towards for-profit-legal forms, usually in the form of Non-Banking Finance Companies (NBFCs). However, many of them are not able to transform in the near future due to various constraints like legal, financial, information technology (IT), human resource (HR) etc. Alternatively, capital should be infused into these MFIs particularly to not for profit MFIs. The option are (i) long term finance/quasi equity, which would have to come in innovative lending/investing approaches; and (ii) additional (equity) support from apex institutions like NABARD/SIDBI etc. to scale up their operations.

MFIs are charging comparatively high rate of interest (12% to 28% per annum). It is argued that too high rate of interest could adversely affect the social and economic impact on poor clients, and lower business volume. Again lower business volume and high transaction cost forces MFIs to charge high rate of interest.

NABARD as apex development financial institutions have started the experiment of providing capital/equity support and revolving fund assistance to MFIs for increasing the outreach by MFIs. It is envisaged that the provision of capital/equity support will enable MFIs to leverage the access of commercial loans from banks.

CASHPOR Financial and Technical Services (CFTS) was started in September 1996 as a financial Company. The purpose of this Company was to give access to financial services in the form of small amounts of credit, to poor rural women, as an alternative to the existing money lenders which were known for charging usurious rates of interest, as well as perpetuating a never ending cycle of debt. As the Company began to expand, it became necessary to move to a different legal form, and so CASHPOR Micro Credit (CMC) was started in Dec. 2002 as a subsidiary Section 25 company of CFTS. CASHPOR India has subsequently become known in the microfinance sector as a microfinance provider that devotes its attention exclusively to the provision of micro-credit to the poorest of the poor, through its unique "targeting approach" which filters the poorest clients and lends to them. In 2008, CASHPOR ranked 4th in world and 2nd in India by MIX global. As on 31st March, 2010 it has outreach of 417039 clients and loan portfolio of Rs. 267.40 crore.

CASHPOR Financial and Technical Services (CFTS) were started in September 1996 as a financial Company. The purpose of this Company was to give access to financial services in the form of small amounts of credit to poor rural women as an alternative to the existing money lenders which were known for charging usurious rates of interest, as well as perpetuating a never ending cycle of debt. CASHPOR India started its operations in mid 1997 by disbursing its first loan on 15th September in Mirzapur District of Uttar Pradesh. Its first six branches were set up in July 1997 to cover the southern part which was poorer part of Mirzapur District. Its next six branches were opened in October 1998 to cover rest of the District. Its original branches were finding it difficult to become financially viable because of little demand of loan, low population density and frequent casualties in the client's family leading to high portfolio at risk. The lack of market infrastructure limited the avenues of profitable enterprise for the poor.

As the Company began to expand, it became necessary to move to a different legal form, and so CASHPOR Micro Credit (CMC) was started in Dec. 2002 as a subsidiary Section 25 company of CFTS. CASHPOR Micro Credit has subsequently become known in the microfinance sector, as a microfinance provider that devotes its attention exclusively to provide micro-credit to the poorest of the poor, through its unique "targeting approach" which filters the poorest clients and lends to them. Presently it operates in 16 districts of Uttar Pradesh and Bihar, with 269 mini branches, 25768 centers, 417039 clients and loan portfolio of Rs.267.40 crore. Total cumulative disbursement of loan was Rs.1397.20 crore. The disbursement of loan during 2009-10 was Rs.471.87 crore. Total staff strength as on 31st March 2010 was 1458.

CASHPOR Micro Credit uses TR account for its management information system. It had computerization up to district level. Branch and center's level work are done manually. It has tied up with ATOM technology (service provider) to provide mobile services to its customers. This project was in pilot stage.

There was a robust client targeting system in place which is effectively monitored in the field, tracked as part of strategic planning and linked with staff incentives. An estimated seventy percent of CASHPOR Micro Credit clients were living below the international 'dollar a day' poverty line. Nearly all of them had no previous access to low-cost credit. By implementing a standardized model CASHPOR Micro Credit had reached large numbers of rural poor in one of the most backward northern areas of India where there are very few organizations offering microfinance services. It had managed to do this by using commercial loan funds and charging its clients an interest which is lower than the many for other MFIs in the country.

The objective of the study to analyse the sustainability of microfinance inastituions as well as joint liability groups.

METHODOLOGY

Secondary data were collected from Cashpor Microcredit on various parameters. the data was anaysed and various sustainability parameters were calculated.

RESULTS AND DISCUSSIONS

OUTREACH & BUSINESS DEVELOPMENT

Outreach measures the coverage of area, JLGs and clients under microfinance programme. The geographical outreach of the CASHPOR Micro Credit was in 11 Districts of Uttar Pradesh and 5 districts of Bihar. These districts were Mirzapur, Ballia, Deoria, Ghazipur, Jaunpur, Gorakhpur, Chandauli, Kushinagar, Varanasi, Sonebhadra, Azamgarh in Uttar Pradesh and Chapra, Siwan, Bhabua, Rohtas, Buxer in Bihar. CASHPOR Micro Credit was of the opinion that vertical outreach for inclusive growth could be better instead of horizontal growth by spreading the areas. The coverage of CASHPOR Micro Credit during the last 3 year is presented in table 1:

TABLE 1: COVERAGE OF CASHPOR MICRO CREDIT DURING LAST 3 YEARS

Particulars	2007-08	2008-09	2009-10	% Growth during 2009-10
No. of Branches	-	255	269	5.49%
No. of centers	23102	24840	25768	3.74%
No. of district covered	15	15	16	0.00%
No. of NGO finance	Nil	Nil	Nil	-
No. of federation formed	Nil	Nil	Nil	-
No. of JLG credit linked	Nil	Nil	Nil	-
Active loan clients	303245	314203	417038	32.72%

Source: Primary survey "Study of mFI (CASHPOR micro credit) supported by NABARD with capital assistance and revolving fund assistance".

It was evident from the above table that CASHPOR Micro Credit opened 14 new branches during 2009-10. Similarly 1738 new centres were added during 2008-09 and 928 new centres in 2009-10. There was increase of 102835 active loan clients during 2009-10. The growth rate was 32.72% which was a proof of increase in outreach during 2009-10.

FINANCING BY CASHPOR MICRO CREDIT DURING LAST THREE YEARS

As on 31st March 2010, outreach of CASHPOR Micro Credit was 417038 borrowers. The various parameters of outreach of CASHPOR Micro Credit is given below in table 2:

TABLE 2: FINANCING BY CASHPOR MICRO CREDIT DURING LAST THREE YEARS

Particulars	2007-08	2008-09	2009-10	% Change from 2008-09	Cumulative growth over 2007-08
No. of JLG financed (No.)	23102	24840	25768	3.74%	11.54%
No of clients cumulative (No.)	303245	314203	417038	32.73%	37.53%
No of new clients (No.)	101542	10958	102835	838.45%	1.27%
Total amount disbursed cumulative (Rs. Crore)	589.6	925.34	1397.2	50.99%	136.97%
Amount disbursed during the year(Rs. Crore)	258.61	335.8	471.87	40.52%	82.46%
Loan outstanding (in crore)	147.34	181.07	267.40	47.68%	81.49%
Average disbursement per loanee (in Rs.)	8528	10687	11315	5.88%	32.68%
Average disbursement per JLG (in Rs.)	111943	135185	183122	35.46%	63.59%
Average disbursement per branch (in core)	0.96	1.25	1.75	40.00%	82.29%
Average outstanding per clients (in Rs.)	4859	5763	6412	11.26%	31.96%
Average outstanding per JLG (In Rs.)	63778	72895	103772	42.36%	62.71%
Average outstanding per branch (in crore)	0.58	0.71	0.99	39.44%	70.69%
Average no of clients per center (No.)	13	16	12	-25.00%	-7.69%
Average no of clients per branch (No.)	1189	1550	1247	25.81%	30.36%

Source: Primary survey "Study of mFI (CASHPOR micro credit) supported by NABARD with capital assistance and revolving fund assistance".

The cumulative growth in total numbers of loanees after capital assistance was 37.53% as on 31st March 2010. Even the addition of new loanees was to the tune of 10958, during 2008-09, while in 2009-10 the addition was 102835 new lonees. Similarly disbursement of loan had increased from Rs.258.61 crore in 2007-08 to Rs.335.8 crore during 2008-09. The disbursement of loan during 2009-10 was Rs.471.87 crore. It meant that disbursement of loan had increased significantly in 2008-09 and 2009-10, registering a growth of 40.52% and 82.46% respectively.

Under outreach, both width of outreach (the scale or number) and the depth of outreach (the degree of reach of the poorest of the poor) were areas of importance. The loan size per JLG and per borrower was one of the proxy measures generally followed to estimate depth of outreach. The loan amount per JLG and per borrower had increased during 2008-09 and 2009-10. The average loan disbursement per JLG had increased from Rs.135185 in year 2008-09 to Rs.183122 registering a growth of 35.46%.

The average loan amount per borrower had also increased significantly from Rs.10687 in 2008-09 to Rs.11315 during the same period. The loan disbursement per borrower was higher than the national average of MFIs per capita loan of Rs.6519 during 2008-09. Average disbursement per branch also increased from Rs.1.25 crore to Rs.1.75 crore during 2009-10. Average outstanding per client was Rs. 4859 during 2007-08, which had increased to Rs.5763 and Rs.6412 during 2008-09 and 2009-10 respectively. It had registered the growth of 11.26 % during 2009-10 over 2008-09 and 31.96 % during 2009-10 over 2007-08.

Similarly average outstanding per JLG had registered a growth of 42.36% and 62.71% during 2009-10 with respect to 2008-09 and 2009-10 respectively. Average outstanding per branch had also increased which was about 99 lakh as on 31st March 2010. Average number of clients per JLG had reduced from 16 during 2008-09 to 12 during 2009-10. This was due to clients dropout.

DISTRICT WISE OUTREACH

District wise borrowers and loan outstanding of CASHPOR Microcredit as on 31st March, 2010 is given below in table 3:

TABLE 3: DISTRICT WISE ACTIVE LOAN CLIENT AND OUTSTANDING DURING 2009-10

Districts	Active Loan Client			Amount Outstanding		
	Business Plan Target	Achievement	% Achievement	Business Plan Target	Achievement	% Achievement
Mirzapur	47605	53703	112.81%	297475951	344890300	115.94%
Chandauli	25641	29147	113.67%	164029462	188660870	115.02%
Ghazipur	28410	32633	114.86%	184801882	216760650	117.29%
Balia	29956	35975	120.09%	189103375	226754183	119.91%
Buxar	20384	23713	116.33%	130764980	153142129	117.11%
Azamgarh	25647	29795	116.17%	149196417	184795911	123.86%
BhabhuaRohtas	25035	29352	117.24%	159336445	188169751	118.10%
Deoria	16282	19294	118.50%	97480872	122308104	125.47%
Saran	23794	29129	122.42%	150058236	185767095	123.80%
Jaunpur	26468	31028	117.23%	169189594	198204943	117.15%
Varanasi	29551	35963	121.70%	189254686	251706953	133.00%
Gorakhpur	19363	22792	117.71%	115906241	139578298	120.42%
Siwan	13041	17366	133.16%	79008989	109182312	138.19%
Sonebhadra	9847	13133	133.37%	55357582	77537208	140.07%
Kushinagar	10252	14015	136.71%	59279543	86523119	145.96%
Total	**351276**	**417038**	**118.72%**	**2190244255**	**2673981826**	**122.09%**

Source: Primary survey "Study of mFI (CASHPOR micro credit) supported by NABARD with capital assistance and revolving fund assistance".

All districts grew their outreach in terms of number of borrowers as well as loan outstanding during 2009-10. The highest outreach in term of borrowers was observed in Mirzapur followed by Ballia and Varanasi. The outreach of 3 district namely Siwan, Sonebhadra, Deoria and Kushinagar were less than 20000 borrowers, which needed more attention. The highest outreach in terms of loan outstanding was observed in Mirzapur followed by Varanasi, Ballia and Ghazipur district. Siwan, Sonebhadra and Kushinagar districts were lagging behind all districts and needed more attention.

The sector wise disbursement of loan of CASHPOR Micro Credit during last two years is depicted in the table 4:

TABLE 4: SECTOR WISE DISBURSEMENT OF LOAN DURING LAST TWO YEAR

Name of the sector	March- 2009	March- 2010
Trading	54%	44.30%
Animal husbandry	28%	32.80%
Production	7.0%	6.60%
Transportation	3%	4.80%
Agriculture	3%	6.00 %
Others	5%	5.50%
Total	100%	100%

Source: Primary survey "Study of mFI (CASHPOR micro credit) supported by NABARD with capital assistance and revolving fund assistance".

SECTOR WISE DISBURSEMENT OF LOAN DURING LAST TWO YEAR

FIGURE:3.3.1.4.A: SECTOR WISE DISBURSEMENT
March-2009

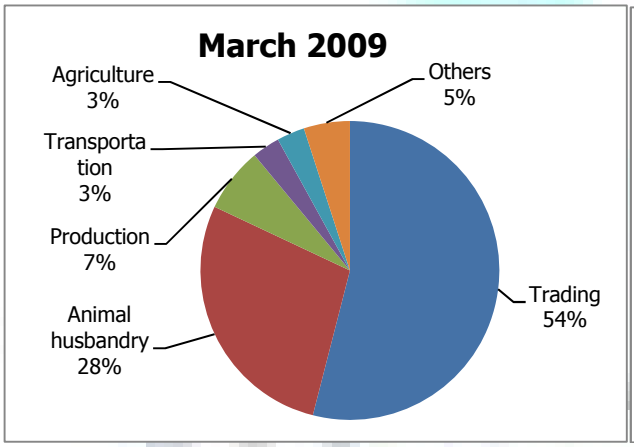
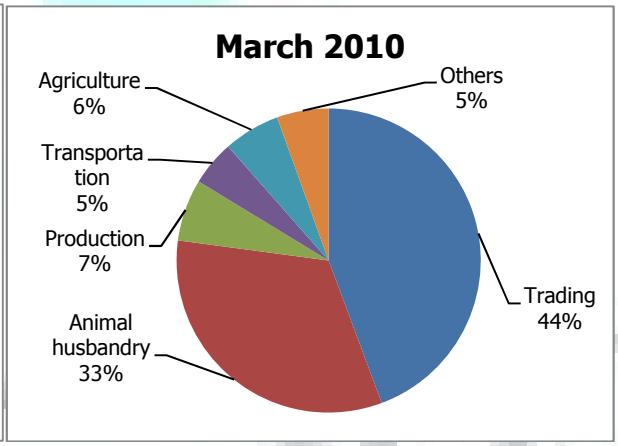


FIGURE:3.3.1.4.B: SECTOR WISE DISBURSEMENT
March-2010



It could be seen from above table that CASHPOR Micro Credit provided loan mostly for Trading, Animal Husbandry, Production, Transportation and Agriculture purposes. About half of loan of CASHPOR Micro Credit was given for petty trading. The second most common activity financed was animal husbandry. Production loan was extended mostly for weaving of saree and carpet. Agriculture loan was given for cultivation of leased land. Loan for Rikshaw, Thela and Auto were considered under transportation.

EXPANSION PLAN

During the current fiscal year 2009-10, CMC had over achieved its Business Plan Target of 351000 Active Loan Clients with a loan outstanding of Rs.267.4 Crore. Now in the next five years, CMC was planning to expand its outreach more than 1 million Active Loan Clients by 2014-15 with increase in the no of operational districts from 15 to 27. A revised detailed Business plan was under preparation in this connection. On-lending demand for portfolio expansion will be met out primarily by Bank Loan and by Off Balance Sheet support through portfolio buy out. For getting more Bank loan CMC would require capital infusion which should be supported by apex institution like NABARD and SIDBI. Apart of capital infusion would also be possible by ploughing back the profit in reserves.

LEVERAGING OF FUND

The capital support and revolving fund assistance from MEDEF of NABARD had helped CASHPOR Micro Credit to increase their capital base/net owned fund and thus attracted many financial institutions for providing loan to it. The loan sanctioned to CMC by various financial institutions during the last three years was as under:

TABLE: 6: LOAN SANCTIONED TO CASHPOR MICRO CREDIT DURING LAST THREE YEARS

SECURED LOAN						
Financial institutions	**Facilities**	**31st March-08**	**31st March-09**	**31st March-10**	**% change during March 2010, over March 2009**	**% change during 2010 over March 2008**
Union Bank of India	Term Loan	0	11.5	29.50	157%	
Corporation Bank	Term Loan	5.0	5.0	10.0	100%	100%
Dena Bank	Term Loan	5.0	10.0	10.0	0%	100%
Indian Overseas Bank	Term Loan	5.0	10.0	30.0	200%	500%
Allahabad Bank	Term Loan	0	0	7.0	-	-
SIDBI	Term Loan	15.00	15.00	7.50	-50%	-50%
NABARD	Term Loan	0	3.0	3.0	0%	-
Central Bank of India	Term Loan	0	0	10.0	-	-
ABN AMRO	Term Loan	37.00	39.00	51.10	31%	38%
ING Vysya Bank	Term Loan	0	0	3.00	-	-
HDFC	Term Loan	38.0	51.1	20.00	-61%	-47%
Axis Bank	Term Loan	4.0	4.0	20.00	400%	400%
ICICI Bank Ltd.	Term Loan	45.0	45.0	10.00	-78%	-78%
Kotak Mahindra	STL	0	0	10.00	-	-
IFMR Trust	STL	0	0	5.00	-	-
Total secured loan	-	-	-	-	-	-
CC/DD	-	-	-	-	-	-
Axis bank	-	5.5	5.5	5.4	-	-
Overdraft from commercial banks	-	0.72	-	20.0	-	-
Unsecured loan	-	-	-	-	-	-
ICICI bank	-	4.7	4.7	0.98	-	-
Subordinated debt	-	-	-	-	-	-
Grameen Foundation, USA	Term Loan	1.04	1.04	0.90	-13%	-13%
Vinod Khosala	Term Loan	1.01	1.01	1.02	1%	1%
Cordaid	Term Loan	1.54	1.54	6.40	316%	316%
Dia Vikas Capital Pvt. Ltd	Term Loan	8.0	8.0	10.00	25%	25%
NABARD	Term Loan	0	1.0	1.00	-	-
Total		**176.51**	**210.89**	**246.4**	**17%**	**40%**

Source: Primary survey "Study of mFI (CASHPOR micro credit) supported by NABARD with capital assistance and revolving fund assistance".

It appeared from above table that CMC had attracted new banks namely Union Bank of India in 2008-09 and Allahabad Bank, Central Bank of India, ING Vysya, Kotak Mahindra and IFMR Trust during 2009-10. This was due to increase in the confidence level of banks on CMC on account of NABARD support to CMC. The capital infusion had also helped CMC to attract more fund. It is also evident from the above table that the existing banks also extended additional facilities to CMC during 2009-10. It was also clear that CMC had utilized diversified source of fund for its expansion.

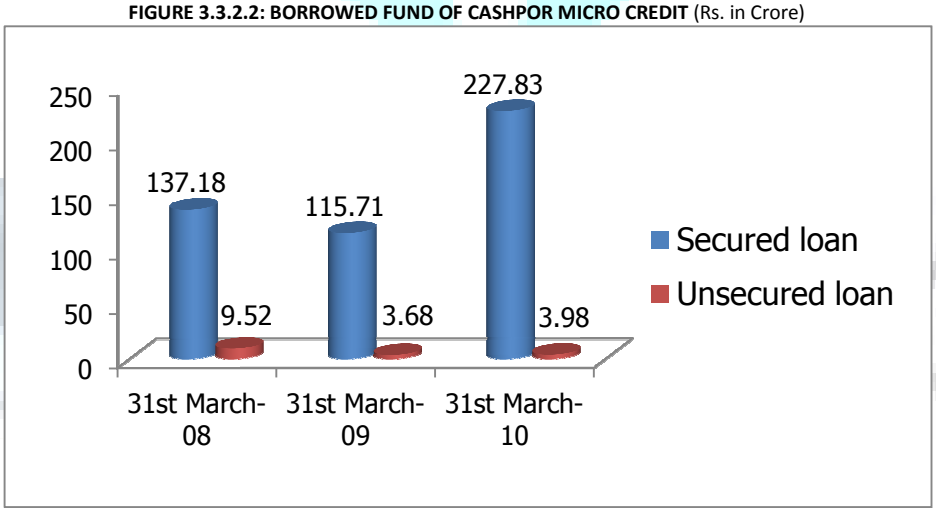
The outstanding of the of the borrowed fund from various banks and other financial institutions during last three years is given below in table 3.3.2.2

TABLE 7: BORROWED FUND OF CASHPOR MICRO CREDIT (Rs. in Crore)

Item	**31st March, 08**	**31st March, 09**	**31st March, 10**
Secured loan	137.18	115.71	227.83
Unsecured loan	9.52	3.68	3.98
Total	**146.70**	**119.39**	**231.81**

Source: Primary survey "Study of mFI (CASHPOR micro credit) supported by NABARD with capital assistance and revolving fund assistance".

FIGURE 3.3.2.2: BORROWED FUND OF CASHPOR MICRO CREDIT (Rs. in Crore)



It was evident from the above table that outstanding of the borrowed fund although decreased during 08-09, but had increased substantially during 09-10. The increase in 09-10 over 31st March 09, was 94%. It was clear that the outstanding of borrowed fund almost doubled during 09-10, which helped in increasing depth and width of outreach substantially. The increase in borrowed fund was due to increase in capital through capital assistance and revolving fund received from NABARD and ploughing back of profit in reserves during 2009-10. CASHPOR Micro Credit pointed out that confidence of banks and financers had increased due to NABARD support and helped in leveraging fund from banks and other financial institutions.

PORTFOLIO BUYOUT

After the increase in confidence level of the bankers on CMC, the banks and financial institutions also started portfolio buyout from the CMC during 2009-10. The portfolio buyout by the various organizations is given below in table 8:

TABLE 8: PORTFOLIO BUYOUT (Rs. in crore)

Name of Organizations	2007-08	2008-09	2009-10
ICICI	-	-	40.62
Fullerton	-	-	50.00
HDFC	-	-	4.92
DCB	-	-	15.50
Mass Financial Services Ltd.	-	-	5.33
Total Portfolio buyout	**-**	**-**	**116.37**

Source: Primary survey "Study of mFI (CASHPOR micro credit) supported by NABARD with capital assistance and revolving fund assistance".

It could be seen from the above table that CMC had arranged Rs.116.37 crore from various organizations by selling the portfolio resulting into leverage of fund. It could be concluded that CMC could leverage its fund in a sustainable manner from financial institutions. One of the contributing factors was NABARD capital support and revolving fund assistance.

SUSTAINABILITY RATIO

Under Sustainability Ratio we had calculated "operating self sufficiency ratio" and "financial self sufficiency ratio" and the same is presented in table 9

TABLE: 9: SUSTAINABILITY RATIO

Sr. No.	Ratios	Formula	2007-08	2008-09	2009-10
i.	Operating Self Sufficiency Ratio	(Fin. Income / Fin. Cost + Operating Cost + Loan loss provision) X 100	104.82%	101.18%	115.16%
ii.	Financial Self Sufficiency Ratio	(Financial Income / Fin. Cost + Operating Cost) X 100	106.59%	101.31%	115.16%

Source: Primary survey "Study of mFI (CASHPOR micro credit) supported by NABARD with capital assistance and revolving fund assistance".

From the above table it may be observed that both operating self sufficiency ratio and financial self sufficiency ratio had shown good improvement during 2009-10. These ratios reflected the growing managerial and financial acumen of the CMC.

The impact on quality and sustainability of JLGs supported were judged through the asset quality, streamlining JLGs operation, per capita loan, number of members on different cycle of loan, and incremental income of members etc. The asset quality of the CMC is presented in table 10:

TABLE 10: PORTFOLIO QUALITY OF CMC (Rs. in lakh)

Particulars	31st March-08	31st March-09	31st March-10
Outstanding	14734	18107	26740
On time repayment	14358.73 (97.45%)	17959.97 (99.19%)	26637.33 (99.62%)
Over dues upto 4 weeks	236.6 (1.61%)	33.79 (0.19%)	44 (0.16%)
Sub standard portfolio (Over due of 4 weeks to 50 weeks)	57.11 (0.39%)	43.7 (0.24%)	10.9 (0.04%)
Doubtful portfolio (Over due of more than 50 weeks)	81.56 (0.55%)	-	1.6 (0.01%)
Lost Portfolio	-	70.17 (0.39%)	46.17 (0.17%)

Source: Primary survey "Study of mFI (CASHPOR micro credit) supported by NABARD with capital assistance and revolving fund assistance".

It was observed from the above table that on time payment had increased from 97.45% as on 31st March, 2008 to 99.62% as on 31st March 2010. This showed that portfolio quality had improved over the years. Late payment had also reduced over the years as well. Overdue up to 4 weeks had reduced from 236.6 lakhs on 31st march 2008 to 44 lakhs on 31st march, 2010. Substandard portfolio had reduced from Rs. 57.11 lakhs as on 31st march, 208 to Rs.10.9 lakh as on March, 2010. Similarly, there was substantial reduction in doubtful assets and lost assets. This clearly indicated improvement in assets quality of CMC.

CYCLE OF LOAN

The number of JLGs members obtained loan of 4th cycle and above were increasing. The number of clients on 4th cycle of loan and above during last 3 years were as under:

TABLE 11

Date	Number of clients in 4th cycle and above
31st march 08	35932 clients
31st march, 2009	59931 clients
31st march 2010	101952 clients

Source: Primary survey "Study of mFI (CASHPOR micro credit) supported by NABARD with capital assistance and revolving fund assistance".

This also indicted that JLGs member were marching towards sustainability.

INCREASE IN INCOME LEVEL OF BORROWERS

94% of the sampled beneficiaries had started income generating activities and were getting good income. 71% of the sampled beneficiaries had income more than Rs. 3000 per month.

Royal Bank of Scotland had conducted impact as study in December 2008 and had observed that 67% of the matured clients had crossed poverty line. CASHPOR had also conducted a study and observed that 81.6% of the matured clients had crossed the poverty line. ABN Amro Bank had observed in impact study during 2009, that 60% of matured clients (loan cycle of 4 times and above) had gone above the poverty line. These all were clean proof of sustainability of JLGs.

DROPOUT RATE OF JLGs MEMBERS

Credit crunch faced by the CMC during first three quarter of 2008-09 had led to a high clients dropout of 27.6% during 2008-09. An increase in waiting time for the next disbursement had increased uncertainty amongst members. The competition from other mFIs had also contributed lead to high clients dropout rate. Closure of some centre which were not following guidelines was also one of the reason for high dropout rate in 2008-09. Some dropouts were due to pregnancy of women, illness and disappointing return on investment. However, the dropout rate improved during 2009-10. Credit cycle wise percentage of dropout of members during 2009-10 was as under:

TABLE 12: PERCENTAGE OF THE DROPOUT OF JLGs

Credit Cycle	% of dropout members
1st cycle	9 %
2nd cycle	6 %
3rd cycle	3 %
4th cycle	3 %

Source: Primary survey "Study of mFI (CASHPOR micro credit) supported by NABARD with capital assistance and revolving fund assistance".

Dropout members were replaced in JLGs by inducting new members by the JLGs. Reduction of dropout also was a testimony of the sustainability of the JLGs. This all shows the sustainability of the JLGs.

STRENGTH OF JLGs OF CASHPOR MICROCREDIT

- Selection process of poor through CASHPOR Hosing Index.
- Initial 5 days Continuous Group Training (CGT) for awareness creation and motivation.
- Weekly meeting through group recognition test (GRT)
- Utilization of loan for the intended purpose for income generating activities.
- 100% insurance from September 2009, thereby mitigating the risk of clients and CASHPOR Micro Credit both.
- Providing saving product as banking correspondence of Union bank of India, ICICI, SBI and HDFC.
- Group responsibility- group sometimes pay the loan amount of defaulter by collecting money from members.
- Sincerity of CMC employee.
- Weekly monitoring at center's meeting.
- Strong internal control and monitoring system.

HELP REQUIRED FOR IMPROVING JLGs SUSTAINABILITY

issues of sustainability of JLGs with various stakeholders and sought their suggestions for improving JLGs sustainability.

Suggestions given by stake holders were given below:

a. **Capacity building of JLG members:** Capacity building of JLGs members with respect to technology and managing the enterprise were felt need in the area. CMC was not able to spend much fund for the purpose Help from apex institutions like NABARD and SIDBI was required to take up capacity building. NABARD should help selected accredited MFIs in capacity building in the line of MEDP for SHG members.

b. **Lowering the rate of interest:** Need to reduce rate of interest was few by the stake holders. Presently CMC was not in a position to reduce the rate of interest due to their cost of fund and transaction cost. An alternative should be to provide fund at cheaper rate to MFI. This could be possible if the apex institutions like NABARD/SIDBI start refinancing to accredited MFI. Simultaneously MFIs should reduce the interest rate by reducing transaction cost. Since MFI was financing to poorest among poor, interest subvention scheme may also be thought off.

c. **Fund for deepening outreach:** CASHPOR Micro Credit was facing fund crunch in widening and deepening the outreach due to poor tier I capital. Solution for the same would be capital infusion in MFI by NABARD/SIDBI to increase the net owned fund so that MFI could leverage the fund from banks. Secondly, refinancing MFIs by apex bank, and portfolio bye-out may ease the problem of fund.

d. **Credit plus activity:** Some credit plus activity like health, education, solar light, and drinking water may also be started by MFI in collaboration of government associated organization to help the poor members.

FINDINGS AND RECOMMENDATIONS

Major finding and recommendation of the present study are given ahead:

MAJOR FINDINGS

- CMC had adopted the JLG concept for financing. The CASHPOR Micro Credit provided microfinance services at door steps of clients exclusively to women from Below Poverty Line (BPL) families.
- CMC had outreach in 16 districts, 25768 JLGs, 417038 active loan clients with loan outstanding of Rs.267.4 crore. CMC had 1458 staff as on 31st March, 2010. Its disbursement during 2009-10 was Rs.471.87 crore. CMC had wiped out all the accumulated loss and had achieved sustainable viability.
- CMC was structured with well experienced Board of Directors that included socially minded representatives.
- CMC was facing challenges of high staff attrition rate. Staff attrition rate during 2008-09 was 22%.
- CASHPOR Micro Credit was identifying clients by using HOUSING INDEX method. Centre Managers of CASHPOR Micro Credit provided Continuous Group Training (CGT) to identified clients regarding terms and conditions and methods of lending followed by group recognition test (GRT) by Branch manager.
- CMC was using TRAccount, software for management information system and accounting. 60% of the staff of CASHPOR Microcredit was computer literate. Branch offices were not computerised.
- CMC offered three types of loan products-Micro loans, Bada loan and emergency loan. Micro loans for income generation were the primary product of CASHPOR Micro Credit.
- Typical activities included livestock for milk production (28%), trading (54%), transportation (3%) and agriculture (3%), etc.
- Loan size ranged from Rs. 2,000 to about Rs.14000, depending upon the cycle of credit. At each cycle loan amount were gradually increased subject to repayment in full on time. Loan was repayable in 46 weekly instalments with a grace period of 6 weeks.
- Bada loan was for matured clients for availing loan amount of Rs.15000 to Rs.25000. CMC also offered an Emergency Loan product for unforeseen expenses (i.e. illness, food deficit etc.). The maximum loan amount for emergency loan was Rs.1000 and repayable in 25 weekly instalment with five-week of grace period.
- Rate of interest charged from clients was 27% at reducing balance. CMC had not reduced rate of interest after getting NABARD support but planning to reduce the same during 2010-11.
- After providing capital assistance and revolving fund, loan disbursement and active loan clients had shown a quantum jump. Disbursement during 2009-10 had increased to 82.46% if compared from 2007-08.
- Average loan disbursement per clients had increased to Rs.11315 during 2009-10 from Rs.8528 during 2007-08. The increase indicated the deepening of outreach after NABARD assistance.
- Average number of clients per branch had also increased to 1550 during 2009-10 from 1189 during 2007-08.
- The highest outreach in terms of loan outstanding was observed in Mirzapur district followed by Varanasi, Ballia and Ghazipur district. Siwan, Sonebhadra and Kushinagar districts were lagging behind and needed more attention.
- Portfolio at risk had come down from 0.69% to 0.28% which was a positive sign for CASHPOR Microcredit indicating improvement in monitoring and supervision. Portfolio at risk for ">30 days" had sharply gone down during 2009-10, which was 0.28% as on 31st March 2010 against 0.69% as on 31st March 2009. On time repayment % had increased from 97.45% during 2007-08 to 99.62% during 2009-10. It had been made possible because of better control measures and regular monitoring of loan portfolio by the CASHPOR Micro Credit. Similarly loan loss ratio had gone down to a considerable extent and stood at 0.31% during 2009-10.
- Equity of the CASHPOR Micro Credit was stagnant during the last three years.
- Net worth of CMC had shown an increasing trend. Although the net worth during 2008-09 had shown declining trend the same had increased substantially during 2009-10, registered a growth of 74%.
- Net income had marginally declined during 2008-09 as compared to year 2007-08. However, it had shown quantum jump of 833.82% during 2009-10 over 2007-08 due to steep increase in income. The CASHPOR Micro Credit had wiped out all accumulated loss of Rs.4.32 crore during 2009-10 and achieved sustainability. But CMC required to increase their capital base further for leveraging more fund from Banks for expansion.
- CMC had attracted new banks namely Union Bank of India in 2008-09 and Allahabad bank, Central Bank of India, ING Vysya, Kotak Mahindra and IFMR Trust during 2009-10. Existing banks had also increased their exposure during 2009-10. Total borrowed fund as on 31st March, 2010 was Rs.231.81 crore as compared to Rs.146.70 crore as on 31st March, 2009. This was due to increase in the confidence level of banks on CMC on account of NABARD support to

CMC. CMC had also arranged Rs.116.37 crore during 2009-10 from portfolio buyout to ICICI, Fullerton, HDFC, DCB, and Mass Financial Services limited. This had helped CMC in expanding the outreach.

- The liquidity Ratio of the CASHPOR Micro Credit was more than 100% during 2009-10, indicating thereby that the liability was fully covered by current assets.
- Capital adequacy ratio of the CASHPOR Micro Credit (without taking into account external support) during 2009-10 had shown declining trend in spite of good increase in net worth. This was due to doubling of risk weightage assets during 2009-10. After considering NABARD capital support, revolving fund and other sub-ordinate debt under Tier II capital (totaling Rs.16.39 crore as on 31st March 2010), the capital adequacy as on 31st March 2010 would be 10.28%.
- CASHPOR Micro Credit had made good endeavour in managing its operations efficiently resulting into de-escalation of all sorts of cost which had improved its profitability during 2009-10.
- The return on performing assets and yield on portfolio ratio had increased during 2009-10. 3.31% return on assets and 33.32% yield on portfolio during 2009-2010 could be treated as impressive. This showed that the operation of CASHPOR Micro Credit was profitable.
- Operating self sufficiency ratio and financial self sufficiency ratio of CMC had shown good improvement during 2009-10. These ratios reflected the growing managerial and financial acumen of the CMC.
- The CASHPOR Micro Credit had strong and effective internal control measures. It had its own independent internal audit department reporting directly to the Managing Director. Internal audit department had 32 staff. They checked every branch twice a year.
- CMC had brought improvement in risk management system by insuring all the loans and beneficiaries from 15th September 2009. For this CASHPOR Micro Credit had tied up with Bajaj Allianz Insurance and ICICI prudential.
- Unique system of identification of poor, continuous group training (CGT), group recognition test (GRT), regular weekly meeting, regular repayment, loan mostly for income generating purposes, strong and effective monitoring and internal control system, linking the loan amount with cycle of credit were strength of JLGs.
- Dropout rate of clients were high.

RECOMMENDATIONS

- CMC should develop the strategy to check high staff attrition rate.
- CMC should gradually computerize branches to improve MIS.
- Interest rate of CASHPOR Microcredit was 27% over the year. For sustainability of JLGs, interest rate should be reduced by reducing cost of delivery, increasing business volume and use of technology.
- There was a suggestion to further increase the loan amount per borrower. This would be possible only when CASHPOR Micro Credit would have sufficient fund. More capital support and revolving fund to CASHPOR Micro Credit from apex institution like NABARD and SIDBI would help CASHPOR Micro Credit to improve its capital adequacy and thus leveraging the fund form various Banks for deepening the outreach.
- Internal credit control system, audit, monitoring and supervision should be further strengthening to improve asset quality and sustainability of JLGs.
- Capacity building of JLGs members, transfer of technical knowhow and marketing support to JLG were the areas where CASHPOR Micro Credit should also concentrate.
- Sustainability of JLGs should be given due weightage in planning and expanding business.
- Capacity building of staff in the field of assets quality, risk management, internal control system and MIS should be strengthen.
- High clients dropout was a matter of concern. CMC should develop suitable strategy to check high clients dropout rate.
- NABARD should recognize MFIs also as Joint Liability Group Promoting Institution (JLGPI) in the line of SHPI and devise the system of reimbursement of the cost of JLGs formation and nurturing. NABARD should also help MFIs in capacity building of JLG in the line of SHG -Bank linkage programme. This could be started as a pilot project at least for 50 accredited MFIs in the country.
- NABARD/SIDBI may develop strategy to refinance accredited MFIs to help them in reducing cost and thereby reducing rate of interest. This would also help in getting fund for deepening and widening outreach. Fifty accredited MFIs may be identified to launch this scheme as pilot project.

REFERENCES

1. Annual Report of CMC – For 2007-08 and 2008-09.
2. Balance Sheets of CMC – 2007-08 and 2008-09 and 2009-10.
3. The Bharat Microfinance Report – SIDE BY SIDE 2009 By Sa-Dhan.
4. The Bharat Microfinance Repot – Quick Data 2009 By Sa-Dhan.

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