# Study on the financial performance of District Cooperative Agriculture and Rural Development Bank (DCARDB), Hoshangabad, Madhya Pradesh

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## **ABSTRACT**

Cooperative banks are small size units organized in the cooperative sector which operate both in urban and rural regions. District Cooperative Agriculture and Rural Development Banks (DCARDBs) are mostly working in the rural and semi-urban areas. They are the backbone of banking system and contribute for growth of the agriculture in rural areas. The present study was undertaken with the objective to study about membership of the selected DCARDB, Hoshangabad during 2003-04 to 2012-13 and work out the linear and compound growth rate of share capital, reserves, deposits, borrowed capital and working capital during the 10 years. The data revealed that there was significant growth in the reserves and owned funds (share capital and reserves) and deposits with reference to DCA and RDB. There was moderately significant growth in working capital per member. But the EPS of DCA and RDB was not enhanced. There was non-significant growth in the paid up share capital. The data also revealed that there was non-significant growth in the borrowing capital and working capital. There was no increase in the growth of principal and nominal members with reference to DCA and RDB. Therefore the performance of DCA and RDB was not satisfactory. For improving its performance it has to concentrate on recovery performance, controlling expenses, robust risk management practices and diversifying their operations.

**Keywords:** Cooperative bank; linear growth rate; compound growth rate; financial performance

#### INTRODUCTION

Cooperative banks are small size units organized in the cooperative sector which operate both in urban and rural regions. These banks are traditionally centred in communities, localities and work place groups and essentially lent to small borrowers and business. These cooperative institutions are very powerful and most have emerged as part of the Indian developing process. The institutions are engaged in the production, processing, distributing, servicing, banking and marketing process. In rural part of India even today the required capital of funds for agricultural activities was raised through unorganized money market agencies namely money lenders who had been providing money at higher rate of interest. The cooperative banks have moved towards rural areas for overcoming such problems and providing the capital required through short and long term borrowings at a reasonable rate of interest. Capital is one of the most limiting factors in raising agricultural productivity in India.

Sustained agricultural progress depends largely upon the persistent rise in farm investment. Agricultural growth depends on the growth of productivity which requires sustained infusion of finance. Although District Cooperative Agriculture and Rural Development Banks (DCARDBs) have shared remarkable progress in the field of financing agriculture sector, reforms are still undergoing in the loan system. The present study was undertaken to study the membership of the selected DCARDB, Hoshangabad, MP during 2003-04 to 2012-13 and to work out the linear and compound growth rate of share capital, reserves, deposits, borrowed capital and working capital during the 10 years.

# METHODOLOGY

District Cooperative Agriculture and Rural Development Bank (DCARDB), Hoshangabad was purposively selected for this study. There were six branches of DCARDB in Hoshangabad viz Itarsi, Bankhedi, Piparia, Sohagpur, Babai, Sionimalwa. DCARDB, Hoshangabad provided long term loans for different types of productive and non-productive purposes in rural areas. The secondary data played the major role in the study. Secondary data were collected from annual report of DCARDB, Hoshangabad and each branch's records. Analysis of data was made using certain tools and techniques such as averages, percentages and regression coefficient.

#### RESULTS and DISCUSSION

There were two types of members in DCARDB, Hoshangabad viz principal and nominal members. Principal member was one who had taken the loan and land was owned by him or her and the rest members of the group were nominal members.

It is evident in Table 1 (Fig 1) that from 8901 persons in 2003-04 the principal members of the bank had increased to 9713 in 2006-07. After 2006-07 the number of principal members declined from 9586 members in 2007-08 to 7140 in 2012-13. The percentage of principal members increased from 4 to 8 per cent. There was still a wide scope for the bank to increase the membership in rural areas. After 2008-09 percentage declined from 16 to 20 per cent. Besides there has been a significant increase in nominal members from 18985 in 2003-04 to 19716 in 2007-08. But after 2007-08 there was

a decline in the number of nominal members from 9832 in 2008-09 to 9969 in 2009-10. There was increase in the number of nominal members from 10031 in 2010-11 to 10033 in 2012-13. The percentage of the nominal members increased up to 4 per cent and after 2008-09 the percentage declined to 47 per cent.

# Working capital (Fig 2)

The information regarding the relative as well as absolute contribution of the different sources towards the working capital of the bank is presented in Table 2. The working capital of the bank (both owned and borrowed funds) steadily increased over the year from Rs 52.9 crores in 2003-04 to Rs 55.1785 crores in 2012-13. The percentage increase over the total working capital (2003-04=100) stood at 104 and the linear growth rate of working capital during the same period was -1.15844 per cent, t-value was not significant with 0.4053 and compound growth rate was -1.12375 per cent.

The share capital in 2003-04 was Rs 3.3786 crores which went up to Rs 3.3016 crores in 2012-13 with a decrease of Rs 0.077 crores. As against this during the period from 2003-04 to 2006-07 share capital moved up from Rs 3.0786 crores to Rs 5.6612 crores showing an absolute increase of Rs 2.2826 crores which constituted 68 per cent increase. After 2006-07 the increasing rate of share capital declined from 58 to 7 per cent. The linear growth rate of share capital was -2.3367 and the t-value 0.7497 was not significant. The compound growth rate was -2.3424 per cent. Paid-up share capital can be less than a bank's total capital because a bank may not issue all the shares that it has been authorized to sell. Paid-up capital can also reflect how a bank depends on equity financing. But negative

Table 1. Membership of the selected District Cooperative Agriculture and Rural Development Bank, Hoshangabad, MP during 2003-04 to 2012-13 (members in thousands)

Year	Principal	%	Nominal	%	Total	%
2003-04	8901	100	18985	100	27886	100
2004-05	9232	104	19015	101	28247	101
2005-06	9747	110	19385	102	29132	104
2006-07	9713	109	19645	103	29358	105
2007-08	9586	108	19716	104	29302	105
2008-09	7502	84	9832	52	17334	62
2009-10	7639	86	9969	53	17608	63
2010-11	7523	85	10031	53	17554	63
2011-12	7226	81	10033	53	17259	62
2012-13	7140	80	10033	53	17173	62

growth rate shows that the interest of shareholders had been decreasing during the study period.

The reserves is the indicator of financial position of the banks. The reserves also improved moderately from Rs 2.5815 crores in 2003-04 to Rs 11.5476 crores in 2012-13 with linear growth rate of 16.58986 and with moderately significant t-value of 18.4634. The compound growth rate was 19.612. The main purpose of holding reserves is to avoid bank runs and generally appears solvent. These findings are in close conformity with the work of earlier workers (Talla et al 2013).

The reserves had accounted for 76 per cent of share capital in 2003-04 and it increased to 350 per cent in 2012-13. DCARDB never depended on the outside borrowings. It was remarkable achievement of this bank.

Another indicator of progress of the bank was the deposits mobilized by it. Deposit is the amount accepted by bank from the savers in the form of current deposits, saving deposits and fixed deposits and interest is paid to them. It indicated the trust and faith in the DCARDB. In 2003-04 deposits were around Rs 3.2740 crores and in 2012-13 these declined to Rs 0.0216 crores with a 99.34 per cent decrease. The linear growth rate of deposit was -34.8738 with significant t-value ie 4.0363 and the compound growth rate was -52.8012. These findings are supported by the earlier works (Singh et al 2012). The deposits are critical to the operation of a bank because they are (at most banks) the primary source of funds to be implemented on the asset side typically in the form of higher yielding loans.

The borrowing capital in 2003-04 was Rs 43.6659 crores which went up to Rs 40.3077 crores in 2012-13 with a decrease of Rs 3.3582 crores. As against this during 2003-04 to 2006-07 borrowing capital moved up from Rs 43.6659 crores to Rs 60.8864 crores showing an absolute increase of Rs17.22 crores which constituted 39 per cent increase. After 2006-07 the increasing rate of borrowing capital declined from 39 to 10 per cent. The linear growth rate was -2.0731 and the t-value of borrowing capital was 0.6871 which was not significant. The compound growth rate was 2.12833 per cent.

Borrowing capital is the fund borrowed from either individuals or institutions. The data reveal that

there was decrease in the interest of individual or institution to take funds from DCARDB, Hoshangabad area.

The working capital increased from Rs 52.90 crores in 2003-04 to Rs 55.1785 crores in 2012-13. The growth rate of working capital increased up to 39 per cent during 2003-04 to 2006-07. But growth rate of working capital decreased from 39 to 4 per cent during 2007-08 to 2012-13 with a linear growth rate of -1.158 with a non-significant t-value of 0.4053. The compound growth rate was -1.12375 per cent.

Table 2 (Fig 3) also shows the growth and composition of the working capital. Borrowing capital was 43.6659 crores in 2003-04. It declined to Rs 40.3077 crores in 2012-13 recording a linear growth rate of -2.0713 with non-significant t-value of 0.6871 and a compound growth rate of -2.12833. Out of the total working capital borrowing capital constituted the largest proportion. Borrowing capitals were at 82.54 per cent in 2003-04 which decreased to 73 per cent in 2012-13. Deposits were at 6.19 per cent in 2003-04 which decreased to 0.039 per cent in 2012-13. It showed a linear growth rate of -34.87 with a significant t-value of 4.0363 and compound growth rate of -52.8012. Owned funds (paid-up share capital and reserves) increased from Rs 5.9601 crores in 2003-04 to Rs 14.8492 crores in 2012-13. The share capital increased at a linear growth rate of -2.3367 and the reserves at growth rate of 16.5898. As a result the proportion of share capital in owned funds decreased phenomenally from 56.69 to 55 per cent ie from Rs 3.3786 crores to Rs 3.3016 crores and that of reserves from 43 to 194 per cent ie from Rs 2.5815 crores to Rs 11.5476 crores. Thus the working capital of DCARDB showed an increasing trend and the bank depended largely upon owned funds for building working capital.

The working capital of the bank per member (including nominal member) increased from Rs 0.001897 in 2003-04 to Rs 0.003213 in 2012-13. Related to principal member only the corresponding figures were Rs 0.005943 and Rs 0.007728 respectively.

# Growth of membership and the working capital

The membership and the working capital are two basic foundations for a bank and its development depends upon their growth. The growth of membership and working capital is presented in Table 3 and Fig 4. The data reveal that the membership rose from 27886 in 2003-04 to 29302 in 2007-08. However membership

Table 2. Details of working capital and linear and compound growth rate of District Cooperative Agriculture and Rural Development Bank, Hoshangabad MP during 2003-04 to 2012-13

Year	Paid-up share capital (Rs in crores)	share tal rores)	Reserves (Rs in crore	erves crores)	Deposits (Rs in crores)	sits ores)	Borrowing capital (Rs in crores)	ving al ores)	Working capital (Rs in crores)	capital cores)	Working ca /members	Working capital /members
	Amount	Index	Amount	Index	Amount	Index	Amount	Index	Amount	Index	Principal	All members
2003-04	3.3786	100	2.5815	100	3.2740	100	43.6659	100	52.9000	100	0.005943	0.001897
2004-05	(0.39) 4.8125 (7.78)	142	(4.88) 2.5975 (4.20)	101	3.8735	118	50.5796	116	61.8631	117	0.006701	0.002190
2005-06	5.1138	151	(4.20) 2.8198 (4.04)	109	(6.26) 4.0163 (5.75)	123	(81.70) 57.8622 (82.88)	133	(100.00) 69.8121 (100.00)	132	0.007162	0.002396
2006-07	5.6612	168	2.9588	115	4.0744 (5.54)	124	60.8864 (82.75)	139	73.5808	139	0.007575	0.002506
2007-08	5.3312	158	5.1943	201	0.0182	0.56	56.7452	130	67.2889	127	0.007019	0.002296
2008-09	4.8821	154	6.9738 (10.79)	270	0.0185	0.57	52.7358	121	64.6102	122	0.008612	0.003727
2009-10	4.5808	136	7.5990	294	0.0206 $0.032$ )	0.63	51.9686 (80.99)	119	(100.00) (100.00)	121	0.008400	0.003644
2010-11	4.2108	125	7.8766	305	0.0209 $0.035$	0.64	47.8780 (79.81)	110	59.9863	113	0.007974	0.003417
2011-12	3.6115	107	7.9240 (14.85)	307	0.0209	0.64	41.8070 (78.34)	96	53.3634 (100.00)	101	0.007385	0.003092
2012-13	3.3016	86	11.5476	447	0.0216	99.0	40.3077	92	55.1785	104	0.007728	0.003213
LGR	-2.3367		16.5899		-34.8738		-2.0731		-1.1584			
t-value	0.7497 <sup>NS</sup>		18.4634*		4.0363*		0.6871 <sup>NS</sup>		$0.4053^{NS}$			

NS=Non-significant, \*Significant at 0.05 level, Figures in brackets denote percentage values

Working capital per member of the selected District Cooperative Agriculture and Rural Development Bank, Hoshangabad, MP during 2003-04 Table 3.

to 2012-13										
Year	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13
Working capital (Rs in crores) Working capital/member (Rs in crores)	52.900 0.0019	61.8631 0.0022	69.8121 0.0024	73.5808 0.0025	67.2889 0.0023	64.6102 0.0037	64.1690 0.0036	59.9863 0.0034	53.3634 0.0031	55.1785 0.0032

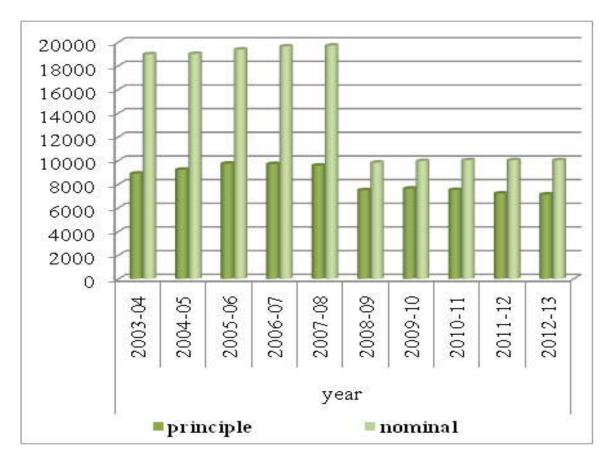


Fig 1. Growth trend of principal and nominal members of DCARDB, Hoshangabad, MP during 2003-04 to 2012-13

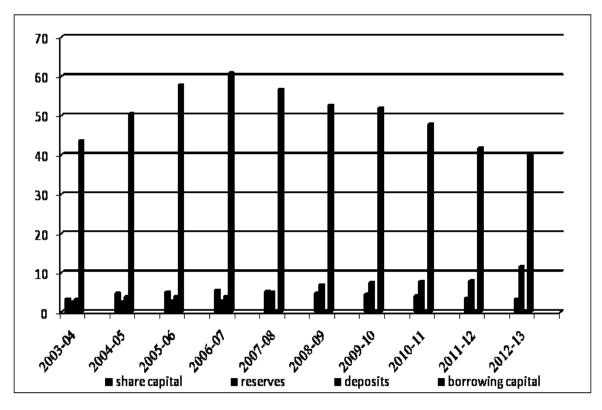


Fig 2. Growth trend of share capital, reserves, deposits and borrowing capital of DCARDB, Hoshangabad, MP during 2003-04 to 2012-13

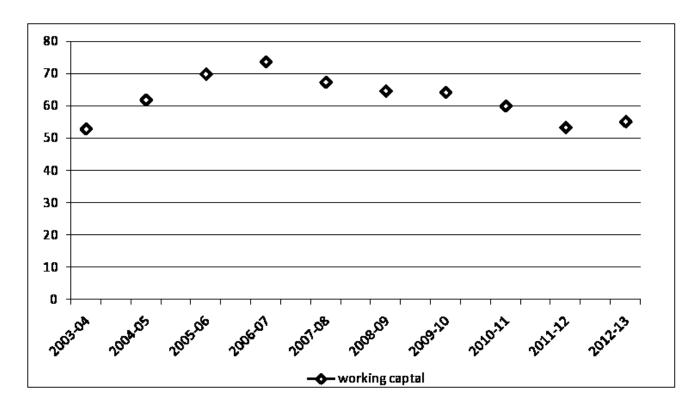


Fig 3. Growth trend of working capital of DCARDB, Hoshangabad, MP during 2003-04 to 2012-13

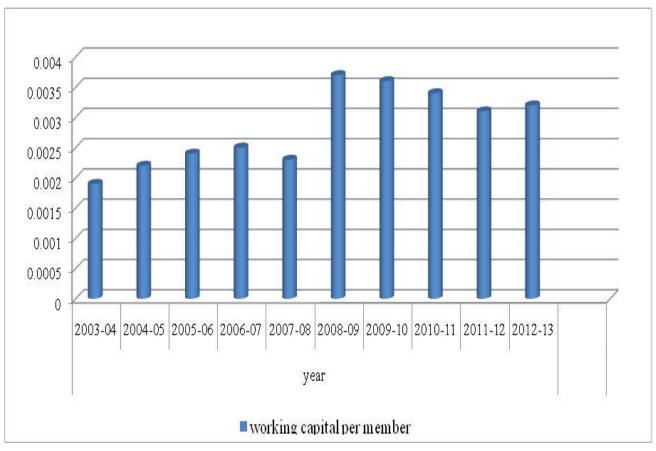


Fig 4. Working capital per members of DCARDB, Hoshangabad, MP during 2003-04 to 2012-13

declined from 17334 in 2008-09 to 17173 in 2012-13. The working capital increased from Rs 52.9 crores in 2003-04 to Rs 55.1785 crores in 2012-13. The growth of both membership and working capital was not steady. There were major fluctuations in the growth of membership and working capital. Moreover the growth of working capital was higher than that of membership. Consequently the working capital per member showed improvement from Rs 0.0019 crores in 2003-04 to Rs 0.0032 crores in 2012-13.

## CONCLUSION

It is concluded that the District Co-operative Agriculture and Rural Development Bank was registered in 1963 and completed 50 years in 2013. As such its membership (principal and nominal) decreased over the years. The reserves, owned funds, borrowing capital and working capital increased or decreased during the period. There was no significant increase in the growth of working capital with reference to DCARDB which shows that there was no significant increase in growth of total working capital with reference to DCARDB. There was rise in the growth of working capital which indicates that even there was no rise in growth in the membership, there was increase in the growth of working capital per member. DCARDBs face severe shortage of funds to meet the demand for credit from their members and end up with huge backlog of unmet demand for credit every year.

Similarly in ability to meet production credit and working capital need long term borrowers resulting in underutilization of assets affecting their income and repayment capacity. The bank had been facing the problem of over-dues during this period. It is suggested that the banking institution should have effective recovery machinery with plans. To this effect the bank should provide staff with sufficient training. For improving its performance it has to concentrate on recovery performance, controlling expenses, robust risk management practices and diversifying their operations. The DCARDBs failures have been relatively high in recent years. Thus it can be said that DCARDB achieved less growth in profits and showed moderate performance in banking operations in the last phase of this period. The banks should adopt the modern methods of banking like internet banking, credit cards, ATMs etc. The banks should also plan to introduce new schemes for attracting new customers and satisfying the present ones.

## REFERENCES

Singh A, Anurag B and Tandon P 2012. A study of financial performance: a comparative analysis of SBI and ICICI bank. International Journal of Marketing, Financial Services and Management Research 1(11): 56-71.

Talla NG, Bethapudi A and Reddy GR 2013. An analytical study on financial performance of Dharmavaram Urban Cooperative Bank, AP, India. Journal of Research in Commerce and Management **2(8):** 1-13.