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EDITORIAL

The Constitution (97th Amendment) Act 2011 relating to cooperative societies became operational from 15 February 2012. This is a path breaking legislation in the long history of cooperative movement in India. The constitutional amendment of cooperatives has three main parts. Firstly, Part I of the Constitution has been amended by inserting a new article numbered as 19(1)(c), making formation of cooperatives as well as membership in a cooperative if it shares a common goal, a fundamental right of every citizen. Secondly, promotion of cooperative societies has been included in the directive principles of state policy by inserting article 43(b) in Part IV of the Constitution which reads "The State shall endeavour to promote voluntary formation, autonomous functioning, democratic control and professional management of cooperative societies". Thirdly, a new chapter numbered as Part IX(b) has been inserted in the Constitution to spell out essential aspects relating to the term, composition and constitution of Board, Annual General Meetings, audit of accounts, right of members to information, member participation in management etc. According to these provisions, the Board of Directors of all cooperatives will have a uniform tenure of five years with number of directors on the Board not exceeding 21 and reservation of 1 seat for SC/ST and 2 seats for women in the Board of all societies with membership consisting of individuals including persons belonging to the above categories. Provisions are also made for constitution of Election Authority by govt for timely conduct of elections to cooperatives. Similarly, Annual General Meetings have to be held within six months from the close of financial year and auditors have to be appointed from a panel of auditors/auditing firms approved by the Govt. These provisions in the constitutional amendments are same as the provisions in the Multi State Cooperative Societies Act 2002 except the clauses relating to conduct of elections and appointment of auditors. The responsibility to conduct elections of Multi State Cooperative Societies are now shifted from

Board to the Election Authority being constituted by the Govt. Presently, Multi State Cooperative Societies have the option to appoint auditors either from its own panel or from the panel approved by the Central Registrar. The constitutional provision makes it mandatory for societies to appoint auditors from the panel approved by the Govt.

However, the provisions in Part IX(B) of the Constitution are revolutionary when compared to the Cooperative Acts across states. Cooperation being a state subject, every state has its own Cooperative Law. Although the State Laws are different from each other in their character and contents, there are striking similarities among State Acts with regard to the powers of government to supersede elected boards and to keep management of any society under administrator appointed by the govt for any length of period as it wishes. The constitutional provisions, however, restrict the powers of the govt to supersede the Board beyond six months within which elections have to be held. In other words, no society can remain without an elected board for more than six months. Moreover, the board of cooperative societies without govt equity or govt aid cannot be superseded under any circumstance. The Board of cooperatives are also expected to become more professional with the co-option of experts and inclusion of functional directors as non voting members on the board. This will also bring uniformity with regard to composition and tenure of board, frequency of general body meetings, arrangement for audit of accounts, requirement of minimum participation by members etc. The constitutional provisions shall become mandatory for all cooperatives in the country with effect from 14 February 2013 i.e. after lapse of one year from the date on which constitutional amendment became operational, irrespective of provisions in the concerned Act. The Constitution (97th Amendment) Act 2011 stands out as a pioneering legislation to push reforms in the cooperative sector and to bring uniformity in essential aspects of governance of cooperatives which otherwise can never happen as it requires separate legislations by all states on the same lines.

K. K. Ravindran
Managing Editor

Growth And Challenges: An Overview Of SHGs Bank Linkage Programme in India

Dr. P. Pugazhendi*

Abstract

Poverty is multidimensional. Lack of credit facility is one of the root causes for rural poverty. Hence SHGs Bank Linkage Programme is used as a tool to attack or to reduce poverty in India. This paper attempts to analyse the growth of SHGs over the periods of 25 years, regional disparities in SHG formation and credit disbursement, present NPA status, some challenges and issues in SHG movement. And also this paper throws some light to carry forward the SHGs Bank Linkage Programme in near future. NABARD worked over 25 years to reduce poverty in India through SBLP and the SBLP coverage reached nearly 32 millions of the poor and deserving people. Over the year, formation of SHGs and overall distribution of credit is remarkable in India. Another striking feature is involvement of women to form SHGs and their savings contribution which indicate that women are the prime pillars of poverty alleviation. Even though some challenges like skewed distribution of SHGs, sustainability of existing SHGs, variation in distribution of loans, poor marketing linkages for SHGs' products are existed. The author discusses the study findings in the context of national level and suggested that more emphasis should be given to workout regional specific strategies to form the quality SHGs in uncovered areas. Author also recommended that sufficient credit will be disbursed to involve productive activities and create better marketing linkages.

Introduction

Indian economy is a rural economy. The growth and development of the economy depends on the smooth flow of rural credit. Credit becomes crucial factor to production if not available at the right time, quantity needed and in the required institutional

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forms (Upendra Kunwar 1987). The success of credit delivery system depends upon the soundness of the credit institution and credit system. Initially the credit delivery system was dominated by non-Institutional Agencies like moneylenders, landlords, traders, friends and relatives than Institutional Agencies like Commercial Banks (CBs), Regional Rural Banks (RRBs) and Cooperative Banks, as they provide credit any time, at doorstep service, extend credit of any amount for any purpose and does not demand any complex formalities. But they charge exorbitant interest from the borrowers. Rural-folk were under the clutch of local money lenders and money lenders occupied predominant position in the rural finance. After independence, the Government of India (GoI) and the State Governments took keen interest in organizing and managing the Cooperative Credit Institutions, Commercial Banks and Regional Rural Banks so as to enable the rural poor people to avail credit at concessional rate.

The era of globalization has brought another institutional approach for rural credit i.e., Self Help Groups (SHGs). The origin of SHGs was from the Grameen Bank of Bangladesh, which was started by Prof. Mohammad Yonus in 1983 to bridge the gap between formal and informal system. Followed by Prof. Mohammad Yonus concept Both Government and Non Governmental Organizationals (NGOs) took keen interest in organizing and registering the SHGs, containing 12 to 20 members in each group with homogeneous character of rural poor which comes together to: save small amount of money regularly, mutually agree to contribute to common fund, meet their emergency needs, have collective decision making, resolve conflicts through collective leadership and mutual discussion, provide collateral free loans on terms decided by the groups at the marketing driven rates, collective involvement in social mobilization and collective involvement in micro enterprise activities. At present, the Institutional Agencies (IAs) consist of the Cooperative Banks, CBs, RRBs and SHGs at the ground level and National Bank for Agriculture and Rural Development (NABARD) as a refinancing agency at national level extending their support for rural credit to rural poor people through SHGs Bank Linkage Programme (SBLP) model.

The first official interest in group lending in India took shape during 1986-87 when NABARD supported and funded research project on saving and credit management of Self Help Groups of Mysore Resettlement and Development Agency (MYRADA). Accepting the recommendation in April 1996, Reserve Bank of India (RBI) advised the banks that lending to SHGs should be considered as an additional segment under priority sector advances. The SHGs thus have become a regular component of Indian financial system since 1996. Self Help Group is group of 12-20 members from a homogeneous class typically having common problems. The members of SHG observe discipline and voluntarily accept savings on a regular basis and make small interest bearing loan to their members and encourage them to enter into entrepreneurial activities. (NABARD 2004).

Initially this lending progrmme was initiated in Southern Region with the help of MYRADA and from the inception, the programme has been overall success in Southern Region. India has ventured the SBLP in a massive way with the help of formal financial institutions, even though the outreach is lagging in North, West and Eastern regions. Under this situation it is very important to see how the benefits of the programme reach across all the sections of the society and regions.

Indian microfinance sector is known for its diversity of delivery models. With the support of NABARD, the SHG model had grown rapidly. A significant number of institutions have adopted the Grameen methodology. Cooperatives are yet to take the lead in reaching out to the poor. The banking sector could play a major role in reaching out the poor, but they have limitations due to their involvement in multiple services, and it is expensive for them to service small loans in huge volume.

Though there are several Institutional Agencies (IAs) like CBs, RRBs, SHGs, and NABARD playing to eradicate the poverty and promote the standard of living of the rural poor people, still there is disparity and imbalance in the country to form, develop and nurture the SHGs, credit distribution and repayment of loans. In this angle the existing states have been classified under six regions (Table 1). Each region has it own advantages and disadvantages in implementation of

Table 1: Specification of the Regions

Northern Region	North-Eastern Region	Eastern Region	Central Region	Western Region	Southern Region
Haryana	Assam	Bihar	Chattisgarh	Goa	Andhra Pradesh
Himachal Pradesh	Megalaya	Jharkhand	Madhya Pradesh	Gujarat	Karnataka
Punjab	Nagaland	Orrisa	Uttarakhand	Maharashtra	Kerala
Jammu & Kashmir	Tripura	West Bengal	Uttar Pradesh		Tamil Nadu
Rajasthan	Arunalchal Pradesh	A&N Island			Pondicherry
New Delhi	Mizoram				
	Manipur & Sikkim				

Source: Status of Micro Finance in India, NABARD, Mumbai.

SBLP micro credit journey. This paper attempts to analyse the overall present situation of the SBLP, Regional disparities in SHG formation and Credit disbursement, Growth of SHGs over the periods of 20 years, Non Performing Asset (NPA) status, some challenges and issues in SHG movement to be resolved for further development and throw some light for the future direction and how to carry forward the SBLP with the help of macro level data which are available in different reports.

2. Outreach and Growth of SBLP in India.

Indian microfinance sector is known for its diversity of delivery models. With the support of NABARD, the SHG model had grown rapidly. A significant number of institutions have adopted the Grameen Bank methodology. Cooperatives are yet to take off in reaching out to the poor. The banking sector could play a major role in reaching out to the poor, but they have limitations due to their involvement in multiple services, and it is expensive for them to service small loans in huge volume.

Though there are several Institutional Agencies (IAs) like CBs, RRBs, SHGs, and NABARD working to alleviate poverty and promote standard of living of the rural poor people, still there is disparity and imbalance in the country to form, develop and nurture the SHGs, credit distribution and repayment of loans.

2.1 Outreach and Growth of SBLP in India:

The SBLP is the dominant model in terms of number of borrowers and loan disbursement. Micro credit programme was launched during 1986-87 with the financial support of NABARD in South India and gradually moved to other places of India. It took a decade to spread over all the states with lot of

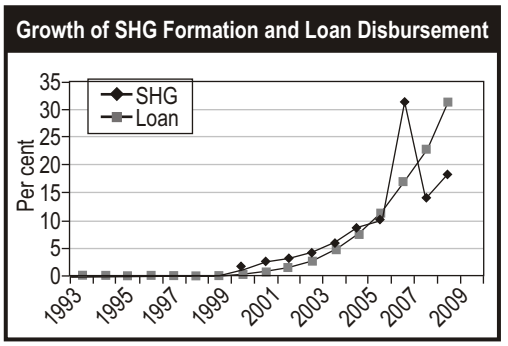
Table 2.1: SHGs in India- Outreach and Growth

Sl.No	Year	SHGs formed during the year (in No)	No. of SHGs (Cumulative) (in No)	Loan disbursed during the year (₹ in Crore)	Bank Loan (Cumulative) (₹ in Crore)
1	1992-93	225 (0.004)	225	0.29 (0.001)	0.29
2	1993-94	395 (0.006)	620	0.36 (0.001)	0.65
3	1994-95	1,492 (0.024)	2,112	1.79 (0.005)	2.44
4	1995-96	2,645 (0.043)	4,757	3.62 (0.009)	6.06
5	1996-97	3,841 (0.063)	8,598	5.78 (0.015)	11.84
6	1997-98	5,719 (0.093)	14,317	11.92 (0.031)	23.76
7	1998-99	18,678 (0.305)	32,995	33.31 (0.09)	57.07
8	1999-2000	81,780 (1.336)	1,14,775	135.80 (0.35)	192.87
9	2000-01	1,49,050 (2.435)	2,63,825	288 (0.74)	480.87
10	2001-02	1,97,653 (3.229)	4,61,478	545.43 (1.40)	1,026.30
11	2002-03	2,55,882 (4.18)	7,17,360	1,022.38 (2.62)	2,048.68
12	2003-04	3,61,731 (5.91)	10,79,091	1,855.52 (4.75)	3,904.20
13	2004-05	5,39,365 (8.812)	16,18,456	2,994.26 (7.66)	6,898.46
14	2005-06	6,20,109 (10.131)	22,38,565	4,499.09 (11.52)	11,397.55
15	2006-07	19,22,019 (31.40)	41,60,584	6,570.39 (16.82)	17,967.94
16	2007-08	8,49,210 (13.873)	50,09,794	8,849.26 (22.65)	26,817.20
17	2008-09	11,11,353 (18.156)	61,21,147	12,253.51 (31.36)	39,070.71

Note : Figures in brackets denote percentages of growth

Source: Status of Micro Finance in India, Various issues, NABARD.

modifications. After that it was substantial spurt in formation of SHGs and disbursement of credit to rural poor people.



During the year 2006-07 both formation of the SHGs and Credit distribution reached a peak level which grew 31.5% and 17% over the previous year respectively in India. Though a small gap exists in SHG formation and Credit distribution, the overall achievement is remarkable in India. It is seen from the graph that the bank loan disbursement has increased gradually and the table revealed that the bank loan aggregating ₹ 39,070.71 crore were disbursed to 61, 21,147 SHGs with refinance support from NABARD up to March 2009. Around 80% of the SHGs linked were represented by women SHGs. So far disbursement of loan is concerned, it has registered a remarkable increase between this period of 17 years, and various studies found that the on-time repayment of SHG loan to bank was over 90% and above.

Table 2.2: Overall Progress of Savings (₹ in Crore)

Sl. No	Year	No. of SHGs	Amount	Exclusive Women SHGs	Amount
01	2007-08	50,09,794	3,785.39	39,86,093 (79.57)	3,108.65 (82.12)
02	2008-09	61,21,147	5,545.62	48,63,921 (79.46)	4,434.03 (80.00)
03	2009-10	69,53,250	6,198.71	53,10,436 (77.38)	4,498.66 (72.57)

Note : Figures in brackets denote percentages.
Source: Status of Micro Finance in India, Various issues, NABARD.

Karmakar, K.G. (1999) observed that SHG savings serve a wider range of objectives other than immediate investment; it imposes credit discipline on group members; enhances the self-confidence of the individual; cover the individual risk against normal business risk, normal variations of income etc; and demonstrate the strength of unity. To up-hold his analysis, Ramana Rao, D.V.V (2001) found that the SHG members become self confident and have social solidarity, habit of regular savings followed by economic independence. Further, a majority of the members of the SHGs could own assets, were free from debt and could engage in economic activities. According to their statement the habit of regular savings increased among the SHGs over the year; which is reflected in the Table 2.1. As on March 2010,

the share of women SHGs in the total SHGs with saving bank accounts was 53,10,436 SHGs which is accounted for 77.38% as compared with the preceding year share of 79.46%. Though the male population is more than female population, the involvement of women to form SHGs is tremendously higher than that of men. Even women contribution to savings is also higher than that of men. This indicates that women are the pillars and prime stakeholders of this poverty alleviation programme of India.

During the year 2009-10, the banks financed 15,86,822 SHGs, with the bank loan of ₹14,453.30 crore as against 16,09,586 SHGs with the bank loan of ₹ 12,253.51 crore during 2008-09 registering a growth rate of 1.4% (No. of SHGs) and 17.9% (Bank loan disbursed). The average loan size increased from ₹ 76,128 to ₹91,083.

2.2 Regional Imbalances in Credit Distribution:

The micro credit programme aims at giving financial assistance to poor people. The loans have been provided to start income generating activities and thereby empower the poor, economically and socially. Availing loans from money lenders and other informal sources with very high interest rates has significantly reduced due to the SHG intervention, resulting in an improvement in the general well being of the beneficiaries Karmakar, K.G. (2008). There has been an increase in the number of families' assisted through the programme. Overall, the number of families assisted through the programme has increased from 4.5 million in 2001 to 32.19 million in 2009. Thus, the micro credit programme has become a people's movement.

Table 2.3: Overall Progress of Bank Loan Disbursement (₹ in Crore)

Sl.No	Year	No. of SHGs	Amount	Exclusive Women SHGs	Amount
01	2007-08	12,27,770	8,849.26	10,40,996 (84.79)	7,474.26 (84.46)
02	2008-09	16,09,586	12,253.51	13,74,579 (85.40)	10,527.38 (85.91)
03	2009-10	15,86,822	14,453.30	12,94,476 (81.58)	12,429.37 (86.00)

Note : Figures in brackets denote percentages.

Source: Status of Micro Finance in India, Various issues, NABARD.

Karmakar.K.G. (2008) also observed that the incidence of poverty in the country has been reduced because of the SHG movement. The number of families below the poverty line reduced from 56.4% in 1973-74 to 37.3% in 1993-94 and further to 26% in 2003-04. However, the absolute number, about 26 crore people still continues to live below the poverty line. Correspondingly, BPL Census Report reveals that though the SBLP covered 32.19 million people in the country, still 193.24 million of the rural people are living below the poverty line. The BPL survey reveals that high percentage of rural poverty is noticed in Eastern and Central Regions which is accounted for 36.24% and 32.57% respectively. Among the regions and states, highest number of people living below poverty line is in Uttar Pradesh (21.32%) and in Bihar (19.48%).

As on March 2010, the number of SHGs formed in Uttar Pradesh is 4,29,760 and Bihar is 1,40,824. However in these two states which have a large share of the poor at 40.80% of the total below poverty line population in India, the SBLP coverage is comparatively low. There is a lot of scope and opportunity to organize the SHGs in these two states and to eliminate

Table 2.4: Regional Imbalance of Savings and Loan Disbursement (March 2010)

Sl.No	Region	SHGs' Savings		Loan Disbursed	
		No.of SHGs	Amount (In ₹ Crore)	No.of SHGs	Amount (In ₹ Crore)
1	Northern Region	3,51,801 (5.06)	342.07 (5.52)	37,375 (2.36)	306.33 (2.12)
2	North Eastern Region	2,92,188 (4.2)	121.67 (1.96)	49,307 (3.11)	287.17 (1.99)
3	Eastern Region	13,74,242 (19.76)	1120.15 (18.07)	2,77,446 (17.48)	1,540.19 (10.66)
4	Central Region	7,65,965 (11.02)	513.64 (8.29)	77,846 (4.91)	632.1 (4.37)
5	Western Region	9,45,620 (13.6)	926.68 (14.95)	1,49,130 (9.4)	646.98 (4.48)
6	South Region	32,23,434 (46.36)	3,174.51 (51.21)	9,95,718 (62.75)	11,040.54 (76.39)
7	**Total**	**69,53,250 (100)**	**6,19,870.89 (100)**	**15,86,822 (100)**	**14,453.31 (100)**

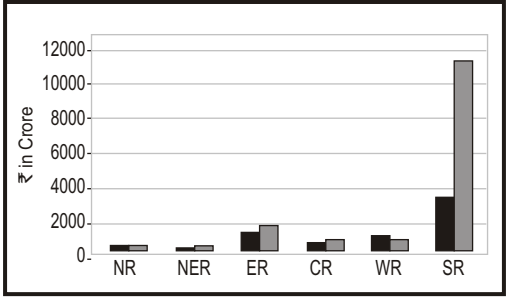
Note : Figures in brackets denote percentages

Source: Status of Micro Finance in India, NABARD.

the poverty through SHGs Bank Linkage Programme.

The SBLP has made inroads into different regions in India. The data revealed that the Southern Region accounts for huge share in the total SHGs of the country. The cumulative number of SHGs linked has grown almost tenfold in the last five years to achieve an outreach of about 32.19 million families and women's membership is about 27.49 million SHGs by March 2009 at all India level.

Figure 2.2: Region Wise Progress of Savings and Loan Disbursement



Source: Status of Micro Finance in India, NABARD.

Similarly the Central, Western and Eastern Regions are emerging as potential regions in promoting SHGs. West Bengal in Eastern Region (6,47,059), Utter Pradesh in Central Region (4,29,760) and Maharashtra in Western Region (7,70,695) formed highest number of SHGs. The remaining states from these respective regions still have a lot of opportunity to explore and form new SHGs. The Northern and North Eastern Region (NER) are lagging behind in the growth of SHGs. In Northern Region (NR), Rajasthan alone formed highest number (2,13,295) of SHGs where as other states are far behind in forming SHGs. The NR and NER have suffered from inadequate development due to inherent lack of institutional arrangement & framework, non availability of good infrastructure and poor presence of potential NGOs. A series of

Table 2.4: Regional Imbalance of Savings and Loan Disbursement (March 2010)

Sl.No	Types of Banks	No.of SHGs (in Nos)	Savings Amount (₹ in Crore)	PerSHG Savings (in ₹)
01	Commercial Banks	40,52,915 (58.30)	3,673.89 (59.30)	9,065.00
02	RRBs	18,20,870 (26.20)	1,299.37 (21.00)	7,136.00
03	Co-op.Banks	10,79,465 (15.50)	1,225.44 (19.80)	11,352.00
04	Total	69,53,250 (100.00)	6,198.71 (100.00)	8,915.00

Note : Figures in brackets denote percentages

Source: Status of Micro Finance in India -2009-10, NABARD.

Table 2.5: Bank wise Distribution of SHGs Savings (March 2010)

Sl.No	Types of Banks	No.of SHGs (in Nos)	Savings Amount (₹ in Crore)	PerSHG Savings (in ₹)
01	Commercial Banks	40,52,915 (58.30)	3,673.89 (59.30)	9,065.00
02	RRBs	18,20,870 (26.20)	1,299.37 (21.00)	7,136.00
03	Co-op.Banks	10,79,465 (15.50)	1,225.44 (19.80)	11,352.00
04	**Total**	**69,53,250 (100.00)**	**6,198.71 (100.00)**	**8,915.00**

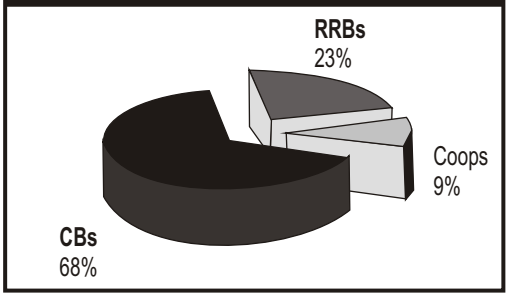
Note : Figures in brackets denote percentages

Source: Status of Micro Finance in India -2009-10, NABARD.

initiatives have been taken by NABARD to popularise micro finance in Northern and North Eastern Regions. Over the year; there has been an increase in the number of SHGs linked with banks across all the regions.

As on March 2010, total of 69,53,250 SHGs were having savings bank accounts with outstanding saving of ₹6,198.71 crore as against 50,09,749 SHGs having savings of ₹3,785.39 crore as on March 2008, thereby having growth rate of 22.2% and 46.5% respectively. Thus more than 12.94 crore poor households were linked with banking agencies under SBLP. As on March 2010, the Commercial banks had 40,52,915 SHGs savings accounts which is the maximum share of total SHGs savings account and with the savings amount of ₹3,673.89 crore followed by Regional Rural Banks having savings account of 18,20,870 SHGs with the savings amount of ₹1,299.37 crore and Cooperative banks having savings bank accounts of 10,79,465 SHGs with savings amount of ₹1,225.44 crore. The average savings per SHG with all banks had decreased slightly from ₹9,060 as on March 2009 to ₹8,915 as on March 2010. It varied between ₹7,136 per SHG with RRBs and ₹9,065 per SHG as Commercial Banks.

Figure 2.3: Loan Disbursement



Source: Status of Micro Finance in India -2009-10, NABARD.

Table 2.6: Bank wise Distribution of Loan (March 2010)

Sl.No	Types of Banks	No.of SHGs Financed (in Nos)	Bank Loan (₹ in Crore)	Loan per SHG (in ₹)
01	Commercial Banks (CB)	9,77,527 (61.60)	9,780.18 (67.67)	1,00,050
02	RRBs	3,76,797 (23.75)	3,333.20 (23.06)	88,461
03	Co-op. Banks	2,32,504 (14.65)	1,339.92 (09.27)	57,629
04	**Total**	**15,86,822 (100.00)**	**14,453.30 (100.00)**	**91,083**

Note : Figures in brackets denote percentages

Source: Status of Micro Finance in India -2009-10, NABARD.

In the case of SBLP linkages, the CBs played a pivotal role and have disbursed ₹9,780.18 crore which is accounted for 67.67 per cent where as RRBs and Cooperative banks disbursed ₹3,333.20 crore and ₹1,339.92 crore which accounted for 23.06% and 09.27% respectively. The level of success of Commercial Banks was because of the close cooperation and coordination between different field level partners in microfinance, viz, lead banks, NGOs, and the Government agencies.

3. Non -Performing Assets

More than 25 years of hard work of NABARD, Banks and NGOs, SBLP coverage reached high level. Micro credit aims at generating the sources for repayment of loan through micro enterprise activities and makes the SHG self-reliant. Micro credit serves as a productive input only when it is used for income generating purpose in order to generate more income after paying the interest and capital. Unfortunately, the micro credit is availed by the SHG members (less than 10 %) for meeting their consumption purpose or social needs under the alleged reason of borrowing for productive purpose. Such diversion for unproductive purpose would affect the repaying capacity of the SHG members and create over due/NPA. But this percentage is very reasonable.

Ranjit, Karmakar and Bholanath Ghosh (2002) could observe that the loan recovery position was highly satisfactory among the SHG members. The inculcation of savings habit, group habit and

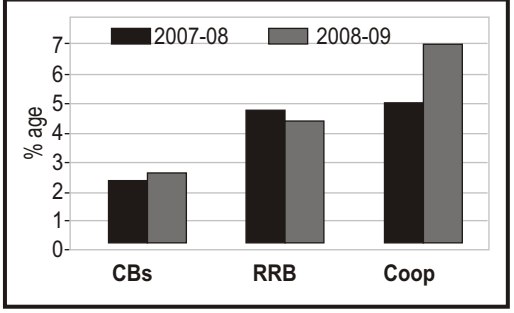
Table 3.1: Region wise NPA for Bank Loan to SHGs (in %)

Sl.No	Region	2007-08			2008-09		
		CBs	RRB	Coop	CBs	RRB	Coop
01	Northern Region	2.60	3.51	5.92	3.5	14.2	7.6
02	North Eastern Region	10.0	6.25	3.23	10.6	6.0	5.4
03	Eastern Region	2.00	4.51	4.17	3.0	3.2	10.7
04	Central Region	3.60	17.52	5.59	8.3	10.3	8.4
05	Western Region	3.20	4.97	3.42	4.4	5.9	9.2
06	Southern Region	1.60	1.20	4.91	1.1	2.2	6.0
	Overall	2.10	4.48	4.81	2.4	4.20	6.8

Source: Status of Micro Finance in India -2007-08 & 2008-09, NABARD.

taking responsibility of the group to disburse loans, led to lesser possibility of wastage of money by the borrowers. Molcolm Harper (2002) also found that most of the SHGs promoted by the NGOs, by banks and by individuals achieved nearly 100% internal repayment rates. Further all the members of the SHGs have borrowed atleast once and the amount borrowed was reasonably equitable.

Figure 3.1: NPA for bank Loan



In similar line, many studies highlighted that more than 90 % of the SHGs' repaying their loan amount very systematically and less than 10 % of the SHGs has some interruption to repay their loan amount. Fig. 3 revealed that as on March 2009, the overall NPA of Commercial Bank is 2.4 %, RRB is 4.20 % and Cooperative Bank is 6.80 % which reflect higher NPA among the banks. Regional wise analysis shows that Central Region should pay more attention on NPA followed by North Eastern Region and Northern Region. This NPA may attribute to (i). Misutilization of loan amount or divert the loan amount for unproductive purposes, (ii). Family expenditure, (iii). Natural calamities like drought and flood are mainly responsible for the

economic deterioration and (iv). Poor monitoring and supervision of loan was one of the main reason for overdue and NPA.

The total number of banks participating in the SBLP has increased substantially from 64,456 to 70,776 during the period 1996 to 2006. Among the formal financial institutions, commercial banks widened the lending operations to SHGs because of the good recovery performance of loans to SHGs when compared to individual loans. When we look into data of Regional spread of banks, more number of banks spread noticed in Southern Region, where as in North Eastern Region spread of banks are very less. Considerable spread is noticed in other regions. This analysis revealed that there is a need to strengthen NER and special attention should be given in NER.

4. Challenges in SBLP Movement

(i). Sustainability of SHGs and NGOs

Majumdar, (2003) explained that, NABARD began an experiment in 1992. It was looking at innovative way of reaching the banking system to rural people. NABARD started with a pilot project of 500 Self Help Groups (SHGs). This experiment of NABARD achieved great success to cater to the micro credit need of the rural poor through SHGs. Today the SHG concept is resounding success in India and one of the most successful programmes run by NABARD. Prabhu Ghate (2008) also observed that now the SBLP sector is reasonably confident and it will

Table 3.2. Regional Spread of Banks in India **(in number)**

Sl.No	Region	1996	2006	Change
01	Northern Region	10,021	11,821	1,800
02	North-Eastern Region	1,936	1,949	13
03	Eastern Region	11,686	12,308	622
04	Central Region	13,344	14,104	760
05	Western Region	9,938	10,996	1,058
06	Southern Region	17,531	19,598	2,067
07	All India	64,456	70,776	6,320

Source: Status of Micro Finance in India, Various Issues, NABARD.

continue growing rapidly enough to be able to make a major impression in financial inclusion within next 10 years.

According to them, the SHG membership increased substantially in the country but their distribution was skewed at state level as well as district level. This may be due to more efforts put up by the state government, skewed distribution of NGOs, local culture and practices and existence of institutions involved in social intermediation. At the district level, the presence of NGOs and active support of promoting agencies and the demonstration effect were main reasons of skewness. To overcome this problem, NGOs can play a lead role. As the NGOs were main guiding force in this movement, number of potential NGOs in lesser served states is to be increased. Established NGOs setup branches where the SHG formation is lagging behind in the district level/state level. To cover the risk the NGOs should be funded on assured basis. Incubate the microfinance institutions where to establish and sustain new SHGs, under the guidance of established MFIs. The promoting agencies like NABARD and DRDA should give more emphasis for the development of SHGs in the SHG backward areas.

The less number of NGOs in the states was a matter of concern as they played major role in SHG movement. The main reason behind this was the lesser margin available to NGOs, which was only 0.5 % to 2 % per annum of the loan advanced. As the loan amount was not substantial, it was seen that margin was not compatible to the efforts put by NGOs in the cost of production, initial training, documentation etc. So the government should plan either to increase the margin or give the financial help to NGOs in the state to make microfinance economically viable for them.

(ii). Variation in Loan Disbursement

Public sector banks have been in the fore front of SBLP. With in the public sector banks there have been high variability in the credit distribution for SHGs. SBI have been consistently leading the client outreach and portfolio volume chart riding on the back of its large network. The top five banks in terms of disbursement are SBI, IOB, IB, SBH and Andhra bank. In RRBs, more than 16 lakh SHGs have savings account but only 4.05 lakh SHGs received credit facilities. The average savings made by SHGs with RRBs was ₹12,217.64 higher

than in the case of commercial bank and cooperative banks. There is lot of room for RRBs to expand their SHG portfolio. In state such as Punjab, Haryana, Rajasthan, Uttar Pradesh, Madhya Pradesh and Bihar, RRBs can gain significant market share by concentrating on SHGs.

Cooperative banks had been late competitor to microfinance through SHGs. To a large extent, the performance of Cooperative banks has been influenced by the state government policies. State like Rajasthan, Orissa, West Bengal, Maharashtra, Karnataka, Kerala and Tamil Nadu seem to have provided a supportive environment in forming SHGs. Cooperative banks accounted for a share of only 14.12 % of volume of savings and 12.39 % borrowing groups (Table No.8&9). Cooperative banks from Maharashtra, Orrisa, West Bengal and also Karnataka made it to the list of top in credit linkages by number of groups and loan volume. Surprisingly, Andhra Pradesh, Tamil Nadu and Kerala do not figure.

(iii). Training / Volume of Loan for Economic Activities

The lack of training and identification of economically viable activities has been a major problem among the SHGs. Moreover, group activity was limited to a very few groups as majority of members were doing the activity individually. The SHG promoting agencies should first of all identify economically viable activities according to the availability of the raw materials and demand of products in the area and training programmes should be undertaken to support such activities. On an average the loan disbursed per member in case of SHGs comes around to be only ₹10,000 per member for an average of 15 members group. This was very meager amount to start micro enterprise activity or even to extend existing business. The government should rethink in this aspect and increase the volume of loan to groups. Dasgupta (2005) and several studies also suggested that loan amount per member has to be increased so that member may not face any difficulty in initiating different economic activities. The studies also highlighted that the formal financial institutions like CBs, RRBs and Cooperative Banks were charging between 12 to 15 % interest rate per annum from SHGs. To promote the SHGs in the country, the government should lower the interest charged from the groups.

(iv). Market Linkages

The micro financing programme is working very effectively, but a major challenge for this programme is the viability and sustainability of the economic activities. Two major problems are, firstly, to find an economic activity that will yield a rate of profit necessarily to cover the interest rate on the loan. Secondly, marketing of the product is a problem. The main market for economic activities is in urban areas, hence when these activities are taken up by rural women the produced goods cannot meet the standards of the urban market. Moreover, the distance also imposes a cost of marketing, which these women cannot bear (Madheswaran and Dharmathikary 2001). It is also seen that at macro level, there is a problem of sustaining the micro enterprise activity that could engage much large number of people, "unless there is a proper marketing system; merely producing the goods would not help" (Sharma 2003).

Thirdly, SHGs' products are non-branded and it is a hindrance in promoting group products. Further, large number of corporates had entered into marketing of basic household commodities like pickles, spices etc. Due to economies of scale, their products are cheaper as compared to products manufactured by SHGs. This trend has exposed the SHGs to competition which is beyond their capacities and has in a sense denied them opportunities to become economically viable and sustainable. Moreover, the tastes and preferences have changed in recent times and this has affected demand for some SHGs products. So, the SHG promoting agencies may think about the adoption of models such as women cooperatives who are successfully marketing their products under whose brand names, new SHG's product may be sold. The other option may be the SHG Promoting agencies may find the possibilities and discuss with corporate those who are in the same line and ask them to purchase the SHG products periodically. Selected SHGs should be trained to produce quality products to meet the urban standard.

5. Conclusion and Suggestions

a. Formation of SHGs in uncovered areas

The growth of SHGs are very high in four southern states because historically stronger presence of

NGOs which have been instrumental in forming SHGs. There are three main types of SHG promoting agencies appearing in the region. They are (i). NGOs, (ii).Government agencies and (iii). Banks. Among the three agencies, NGOs played predominant role to promote the SHGs during initial period. The same model should be replicable to other regions where SHGs formation and credit disbursement are very low in number. More over good number of potential NGOs will be promoted with the financial assistance and direction of NABARD.

Secondly, the process of group formation is involving social engineering. Comparatively, the group formation in many instances is opposed by well off people especially the socially dominant classes and local money lenders of rural population in most of the North Indian States. Though the Jamindari was abolished officially, it is prevailing indirectly in most of the villages in North India. Most of the villages are under the clutch of big landlords and village headman. It is very difficult to organize and form the SHGs with out their help in the villages. The rural poor becoming a collective force is viewed as a threat to the existing socio-economic power relation in the village. To break the social barrier, Regional specific approach is necessary to establish and promote the SHGs in each region.

Before considering the formation of new groups, it is essential to understand the nature of existing groups in the society. More emphasis should be given to form SHGs on the basis of activities like Social Forestry Groups, Watershed Development Groups, Water User Groups, etc. Different steps/levels should be followed to strengthen and sustain the SHGs. Hamlet Level Federation (HLF), Panchayat Level Federation (PLF) and Block Level Federation (BLF) should be strengthened continuously with the support of local NGOs. For that little financial assistance may be given to meet out the recurring cost.

b. Quality of SHGs

One of the important challenges is how to ensure the quality of SHGs in an environment of exponential growth. Due to fast growth of SHG bank linkage programme, the quality of SHG has come under stress. This reflected particularly in indicators such as the poor maintenance of books and accounts.

c. Region specific SBLP focus

Nearly 70 % of the poor population is living in Eastern Region and Central Region (Table 3.2). As on March 2009, the share of credit distribution to SHG in different region in the programme was Northern Region 2.47%, North Eastern Region 2.01%, Eastern Region 10.10%, Central Region 6.38%, Western Region 4.77% and Southern Region 77.28%. To bridge the existing demand and supply gap and to reach out to under-served states like Uttar Pradesh, Bihar, Madhya Pradesh, Sikkim and Nagaland where the concentration of poverty is high, it is important to invest in the capacity of the existing social intermediaries/NGOs for organizing the poor through SBLP.

d. Credit Distribution

India, with its geographic, economic, social and cultural diversity, will require variety in delivery mechanisms of financial services. This should be encouraged and recognized by the mainstream financial institutions. Micro-loan alone will not reduce poverty, though they are helpful in arresting the poor from further fall in times of crisis. There should be clear strategy to help them to move up through diversified loan products, bigger loan for productive activities to reduce their vulnerability. Bankers should encourage the SHGs by sanctioning subsequent doses for finance without causing hardship to the members.

Dr.C.Rangarajan opine that, as the microcredit expands, as it must, banks need to introduce appropriate organizational changes in the various branches in order to play a pro active role in bringing more and more SHGs under SBLP.

In similar thought, to speed up the transactions pertaining to the SHGs, Indian Bank started separate satellite branch for SHGs which is called Microsate branches in Tamil Nadu and is functioning well. The same model may be implemented where more number of SHGs existed in one place.

e. Promoting livelihood opportunity

Promoting livelihood opportunities and developing skills to undertake micro-enterprises will help in increasing the household income. NGOs and other SHPIs should not treat all the SHGs to have the same capacity and talent. Economic activity should not be

imposed and it should be chosen by SHG members based on their skill and raw materials available in the local areas. Selected SHGs should be trained to produce quality products to meet the urban standard.

According to Dr.C.Rangarajan, the scope for productive activities remains large. For example, readymade garments have a market even in rural areas. Thus, the choice of products becomes extremely important. The SHPIs have thus a dual role to play forward and backward linkages. Not only should they facilitate the availability of credit from the formal sector to the SHGs, they should also assist the SHGs to identify suitable product which they can manufacture and sell.

Yet another requirement for the success of SHGs is the provision of effective marketing outlets. Marketing strategies and mechanisms should be taught to those who involve in MED programme. SHGs' products should be purchased by District Level Authority and it will be marketed through reputed business people. For that Government may tie up with corporates.

f. North Eastern Region

Special attention and separate regional oriented strategies should be developed by NABARD with the consultation of NABARD Regional office at state level, Banks, NGOs and State Governments. NABARD SBLP impact study (Pugazhendi.V and K.C. Badatya 2002) revealed that bankers shows unenthusiastic attitude in promoting SHGs. Importance in terms of rigorous training for capacity building and to change their attitude should be thrust upon bankers for strengthening SHG.

Analysis revealed that there were lowest credit linkages in Manipur, Sikkim, Tripura, Nagaland and Arunachal Pradesh due to the following reasons. (i). Lack of concentrated efforts by banks, (ii). Inability of the bank to identify potential NGOs, (iii). Lack of motivation among bankers and (iv). Lack of big NGOs working with SHGs. Bankers from seven sister states should be trained in the areas of SBLP and motivated by NABARD. Potential NGOs should be identified and supported by NABARD to promote SBLP in North Eastern Region especially in Manipur, Sikkim, Tripura, Nagaland and Arunachal Pradesh.

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फूलों की खेती

देश के कई जिलों में फूलों की खेती से किसान अपनी आजीविका चलाने के अभिनव प्रयत्न कर रहे हैं. गेहूं-धान आदि फसलों के मुकाबले फूलों की फसल से किसान अधिक लाभ कमा रहे हैं. फूलों की खेती से किसान नकदी प्राप्त करता है. अन्य फसलों को जानवर नुकसान पहुंचाते हैं, जिससे किसानों को हानि होती है, जबकि फूलों को जानवर नुकसान नहीं पहुंचाते. इसी कारण फूलों की खेती से किसानों को लाभ मिल रहा है और उनका व्यवसाय फल-फूल रहा है देश में फूलों के उत्पादन की भारी क्षमता है. भारत के विभिन्न क्षेत्रों में अलग-अलग जलवायु पाई जाती है, जो कि हर तरह के फूलों की खेती को सक्षम बनाती है. नई तकनीक की भी जरूरत है. घरेलू व निर्यात बाजार में हालांकि गुलाब की काफी मांग है, लेकिन गुलदाउदी, कॉर्नेशन, लिली, ऑर्किड आदि भी मशहूर हैं.

फूलों की खेती के तहत गेंदे की फसल बहुत अच्छी हो रही है. उन्नत किस्म का बीज हो, व खाद और पानी की समुचित व्यवस्था हो तो एक हेक्टेयर भूमि में लगभग २३० क्विंटल तक गेंदे के फूल तैयार हो जाते हैं. गेंदे के फूलों का बाजार भाव भी दो हजार से आठ हजार रूपये प्रति क्विंटल तक रहता है. इसके अलावा डहेलिया, जिनिया और गुलाब आदि फूलों की पैदावार भी आसानी से संभव है. मंदिरों और सजावट आदि की दृष्टि से फूलों की खेती का भविष्य अच्छा है. स्थानीय खपत के साथ-साथ अंतर्राष्ट्रीय मंडी तथा अन्य शहरों में फूलों को भेजा जा सकता है. फूलों की खेती वैज्ञानिक विधि से करने पर अच्छे किस्म के फुलों का उत्पादन किया जा सकता है. युवा वर्ग फूलों से करोड़ों रूपयों का सालाना व्यवसाय कर रहे हैं. बागवानी के क्षेत्र में काम करने के लिए कृषि विज्ञान की जानकारी भी जरूरी है. उत्तराखंड में गेंदे की खेती अच्छी तरह से रही हो.

तुरंत आय अर्थातु नकदी वसूली के उत्साह में मध्य प्रदेश के किसान का रूख तेजी से फूलों की खेती की ओर हो रहा है. किसानों के रुझान का अंदाजा इस बात से भी लगाया जा सकता है कि वर्ष २००८ के बीज जिले में फूलों का रकबा वर्ष २००७ के मुकाबले बढ़कर दुगना हो गया. इन्दौर और इसके आसपास का क्षेत्र पीले यानि सोयाबीन की पैदावार के लिये विख्यात है, लेकिन अब किसान सोयाबीन के स्थान पर फूलों की खेती में रूचि लेने लगे हैं. फूलों की खेती के कारण किसानों की आर्थिक स्थिति बेहतर होती जा रही है. फूलों की फसल दो महीने के अंदर ही खेत से बाजार में पहुंच जाती है. सिंचाई की सही व्यवस्था होने पर पूरे साल फूल उपजाए जा सकते हैं. इंदौर में ज्यादातर गुलाब और ग्लौडुलस के फूलों की पैदावार अधिक होती है. जिले में पिछले वर्ष फूलों का रकबा लगभग १२०० हेक्टेयर था, जो २००८ में बढ़कर २५०० हेक्टेयर तक पहुंच गया.

बिहारशरीफ में कृषि लागत बढ़ जाने से कुछ क्षेत्रों में किसान अपनी परंपरागत खेती को छोड़ फूलों की खेती का भरपूर लाभ उठा रहे हैं. पहले यहां कोलकाता से आने वाले फूलों से कारोबार किया जाता था, लेकिन वह काफी महंगा पड़ता था. विकल्प के लिए किसानों ने यहां अपनी परंपरागत खेती को छोड़कर गेंदा, जाफरी, चेरी और गुलदाउदी फूलों की खेती आरंभ की. फूल की खेती करने वाले किसानों को एक कट्ठा जमीन में फूल लगाने में एक हजार रुपये लागत आती है और फसल तैयार होने पर

सौजन्यः- सृजना

बिक्री से १७ से १८ सौ रूपये की आमदनी हो जाती है. गेंदे की खेती सालभर होती है, जाफरी चेरी और गुलदाउदी की बुआई सितंबर में की जाती है. इसमें फरवरी-मार्च तक फूल आ जाते हैं. फूलों की खेती करने से किसानों की तीन तरफा फायदा होता है. एक तो ताजा फूल बिकता है, दूसरी तरफ बासी फूल या सूखे पेड़ को कई जगहों पर लगे डिस्टिलेशन प्लांट में डालकर उनका अर्क निकाल लिया जाता है, जिसे सेंट (इत्र) बनाने वाली कंपनियां अच्छी कीमत देकर खरीद लेती हैं.

इन फूलों को उगाने के लिए बीज व पौधों से जुड़ी सामग्री के आयात की जरूरत है, जिससे खरीदार की मांग के अनुसार फूल उगाऐ जा सकें. वर्ष २००७-०८ में ८.७० लाख टन खिले फूल और ४३,४१७ टन कटे हुए फूलों का उत्पादन हुआ था. अनुमान है कि कुल १.६० लाख हेक्टेयर जमीन पर फूलों की खेती होती है. मुख्यतः उत्पादन महाराष्ट्र, हरियाणा, पश्चिम बंगाल, कर्नाटक, राजस्थान और आन्ध्र प्रदेश में होता है. फूल उत्पादकों की राह में मुख्य बाधाओं में से एक है उचित विपणन की सुविधा का अभाव.

फूलों का अब भारत में लगभग सभी समारोहों में इस्तेमाल हो रहा है. इसका बाजार बहुत व्यापक है तथा भारतीय कठ-प्लावर के निर्यात की क्षमता की कोई सीमा नहीं है. एक सामान्य उष्णकटिबंधीय देश होने के कारण, भारत सजावटी पौधों का खजाना है. फूलों की खेती खुले स्थान में की जा सकती है, हालांकि पॉलीहाउस में की जाने वाली खेती से नियंत्रित पर्यावरण उपलब्ध होता है. फूलों का उत्पादन हर मौसम में पूरे वर्ष किया जाता है. पॉलीहाउस में फूलों का उत्पादन दो प्रकार से होता हैः (क) मृदा खेती-पौधों को मिट्टी में उगाया जाता है. (ख) मिट्टी रहित/हाइड्रोपोनिक कल्वर-पौधों को बर्गर मिट्टी के बर्तनों में उगाया जाता है. बर्तनों में मिट्टी के स्थान पर धूल/रेत, कोको-पिट आदि का प्रयोग किया जाता है. बाहर से पाइप या ड्रिप के जरिए पोषक तत्वों तथा पानी की आपूर्ति की जाती है. हाइड्रोपोनिकली उत्पादित फूलों की गुणवत्ता अच्छी होती है तथा बाजार में उसका अधिकतम मूल्य प्राप्त होता है. इस क्षेत्र में स्वरोजगार की अच्छी संभावनाएं हैं. लघु फूल उत्पादन उद्योग स्थापित किए जा सकते हैं जो कि एक लाभकारी रोजगार हो सकता है. इसके उत्पादन के लिए आवश्यक वस्तुएं पॉलीहाउस के माध्यम से ही प्राप्त की जाती हैं. मांडवी के आसपास के इलाके में २० पॉलीहाउस बनाकर इसकी पैदावार की जा रही है. मूल भारतीय फूल जरवेरा एक एकड़ में ४००० तक फूल देता है, जिसका प्रयोग बुके के रूप में समारोहों में किया जाता है. पॉलीहाउस में जरवेरा का रखरखाव आसान नही है. इसके लिए अनुकूल जलवायु दशाएं होनी चाहिए. ३५ डिग्री सेल्सियस के तापमान में ही यह अच्छा फूल दे पाता है. दक्षिण गुजरात में जरवेरा के लिए अनुकूल जलवायु दशाएं आसानी से मिल जाती हैं. थोड़ी बहुत खेती राजस्थान में भी हो रही है. अहमदाबाद में इसके पॉली हाउस हैं, लेकिन वहां तापमान को बनाए रखना मुश्किल हो रहा है. इसके लिए आर्द्रता ६० प्रतिशत से ज्यादा नहीं होनी चाहिए. एक एकडं के पॉली हाउस के रखरखावके लिए १० मजदूरों की आवश्यकता होती है. इसमें तापमान को फोगर नामक यंत्र से बरकरार रखा जाता है.

देश में इन दिनो फूलों की वार्षिक घरेलू मांग २५ प्रतिशत प्रतिवर्ष की दर से बढ़ रही है। भारत का अंतरराष्ट्रीय फूल बाजार ९०,००० करोड़ रूपये का है जो हर वर्ष बढ़ता ही जा रहा है। भारतीय बागवानी बोर्ड

के अनुसार फूलों की खेती से संबंधित उत्पादों से कुल आय २०५ करोड़ की है। जिसमें १०५ करोड़ परम्परागत फूलों से है और १०० करोड़ आधुनिक फूलों से है। भारत में फूलों का निर्यात करने वाली ३०० से अधिक इकाईयां है।

राष्ट्रीय बागवानी बोर्ड की रिपोर्ट के अनुसार भारत में वर्ष २००७-०८ में १६०.७ हजार हैक्टेयर क्षेत्र में फूलों की खेती हुई। इस वर्ष चीन के बाद भारत दूसरे नंबर पर है। आइये जाने भारत में उगने वाले प्रमुख फूलों की देखरेख के तरीके

एन्यूरियमः

रोपाईः ३० गुणा ३० सेमी की दूर पर तिकोनी जगह में।

कटाई का चरणः छड़ का कड़ा होना. पर १/३ से ३/४ फूल खिला होने पर।

पैदावारः २ से ३ फूल हर पौधे से पहले साल में। जो कि बढ़कर ४ से ६ दूसरे साल और ६ से तीसरे साल तक हो जाती है।

गुलदस्ते में उम्रः २२ से २३ दिन

जरवेराः

रोपाईः ३५ गुणा ४५ सेमी की दूरी पर। जाड़े के लिए जनवरी, फरवरी बेहतर है और जून, जुलाई गर्मी के लिए।

कटाई का चरणः पंखुड़ियों के पूरा खुल जाने पर

पैदावारः २०० से २५० फूल प्रति वर्ग मीटर हर साल

गुलदस्ते में उम्रः ७ से ८ दिन

ऑरकिड

रोपाईः कटाई का चरणः जब फूल की आधी पंखूड़ियां खुल चुकी हों

पैदावारः २ से ३ छड़ प्रति पौधे से दुसरे साल से और ५ से ६ छड़ तीसरे साल से

गुलदास्ते में उम्रः १२ से २१ दिन किस्म के प्रकार पर निर्भर

टियूब रोज (गुलाब)

रोपाईः फरवरी, मार्च में मैदानों में अप्रैल, मई में पहाड़ों पर। २० से २५ सेमी का दूरी पर ५ से ७ सेमी के गड्ढे में

पैदावारः २ से ६ फूल हर पौधे से गुलदस्ते में उम्रः ६ से ८ दिन

गुलाब

रोपाईः अक्टूबर से अप्रैल की शुरूआत तक। ६० गुणा ६० सेमी की दूरी पर।

कटई का चरणः एक दो पंखूड़ियों के खिलते ही।

पैदावारः १५ से ३० हर पौधे से।

गुलदस्ते में उम्रः ४ से ७ दिन

मॉरिगोल्ड

रोपाईः साल के किसी भी समय ४० गुणा ४० सेमी

कटाई का चरणः पूरे आकार का होने पर

पैदावारः ११ से १८ टन/हेक्टेयर गुलदस्ते में उम्रः २ से ४ दिन

ग्लौडोलस

रोपाईः जुलाई या दिसंबर में ३० गुणा २० सेमी की दूरी और ७ सेमी गहरे गडढे में।

कटाई का चरणः पंखुडियों में रंग आने पर।

पैदावारः ७०,००० से ७५,००० छडें। गुलदस्ते में उम्रः लगभग दो सप्ताह।

कारनेशन

रोपाईः सितंबर से नवंबर

कटाई का चरणः बाहरी पंखुडियों के खुलने पर।

पैदावारः १५० से २०० कू लय/वर्ग मीटर

गुलदस्ते में उमः १४ से २१ दिन, २ से ४ डिग्री सेल्सियस तापमान में।

THE HARYANA STATE COOPERATIVE AGRICULTURE AND RURAL DEVELOPMENT BANK LTD.

Sahakarita Bhawan, Bay No. 31-34, Sector - 2, Panchkula

The Haryana State Cooperative Agriculture and Rural Development Bank Ltd., is the specialised institution in the State, which caters to the Long Term credit needs of the farmers for the upliftment of the economic position of the agriculturists and allied fields.

The bank advances Long Term loans to the farmers for the following purposes :-

Scale of finance and periodicity of Major Sectors

Farm Sector

Sr.No.	Name of the Scheme	Period	Scale of finance
1.	Minor Irrigation	9 years	₹ 36,000 to 1,50,000
	i. WCS/UGPL	-do-	90% of the project cost
2.	Farm Mechanisation	5-9 Years	85% of the cost of the Machinery
3.	Purchase of Agriculture Land	10 Years	Upto Rs. 10.00 Lacs
4.	Horticulture/Plantation	5-9 Years	₹ 40,000 to 1,55,000 per Acre
	i. Medicinal & Aromatic Plants	-do-	90% of the project cost
5.	Animal Husbandry	5-7 Years	90% of the project cost
6.	Rural Godowns	Upto 10 Years	75% of the project cost

Non Farm Sector

Sr.No.	Name of the Scheme	Period	Scale of finance
1.	Rural Housing	Upto 10 Years	Upto ₹ 5.00 Lacs
2.	Marriage Palaces	Upto 10 Years	90% of the Project Cost
3.	Community Halls	Upto 10 Years	90% of the Project Cost
4.	Village Cottage Industry	Upto 10 Years	90% of the Project Cost
5.	PublicTransport Vehicles	Upto 10 Years	85% of the Project Cost
6.	Rural Educational Infrastructure	Upto 10 Years	90% of the Project Cost
7.	Other SSI Units	Upto 10 Years	90% of the Project Cost

Rate of Interest

The Loans for the purpose of non-farm sector, Rural Housing and Purchase of land are being advanced @ 13.25% p.a. w.e.f. 1.4.2011. All other loans are being advanced @ 12.25% p.a. w.e.f. 1.4.2011 and a rebate of 25% w.e.f. 1.12010-31.3.2012 is allowed on all slabs to regular paymasters.

Note:-

For further details, kindly contact The Haryana State Coop. Agri. & Rural Dev. Bank Ltd., Panchkula or the District Co-op. Agri. and Rural Dev. Banks at District level and its branches at Tehsil & Sub-Tehsil level in the State.

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Financial Performance of Alappuzha District Co-operative Bank in Kerala

Dr.G.Veerakumaran*
Miss. Deepa P H **

Abstract

The co-operative banking structure is pyramidal or federal in character. The District cooperative banks act as a link between the State Co-operative Bank and the primary banks. In the deregulated banking environment, the co-operative banks engaged in financing agricultural and non-agricultural activities are also exposed to various types of risks like credit risk, interest rate risk and liquidity risk. Hence, an attempt has been made to study the financial performance of Alappuzha District Co-operative Bank. This paper reflects the financial performance of Alappuzha District Co-operative Bank for the period from 2000-2001 to 2009-2010. The financial performance was analyzed through the ratio analysis. After a detailed study of the financial statements of the bank, it is clear that Alappuzha District Co-operative Bank is efficient enough in mobilization of resources. The increase in deposits for the period from 2000-2001 to 2009-2010 is a solid proof. The ratio such as credit to deposit ratio, borrowed funds, and working capital and total funds shows that the bank's deployment level has not reached up to the expected level. As well the Profitability of the Alappuzha District Co-operative Bank was not satisfactory. Hence, the bank should go for financial reengineering.

1. Introduction

The co-operative banks have a history of more than 100 years. The co-operative banks are important constituent of Indian financial system. Their role in rural financing continues to be an important segment even today and their business in the urban areas has also increased phenomenally in recent years mainly due to the increase in number of co-operative banks. The co-operative banking

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structure is pyramidal or federal in character. At the base that is at the village level there is a primary credit society upon which the edifice of co-operative credit is based. These societies are federated at the district level into a central society called the Central Co-operative Bank.

At the state level, the district banks are federated into an apex bank. The apex or State Co-operative Bank in its turn is closely linked with the National Bank for Agriculture and Rural Development, which provides considerable financial assistance to co-operative credit structure. The fundamental objective of State Co-operative Bank is to act as a balancing centre, clearing house and a financing agency of the co-operative institution working within the state. District Cooperative Banks (DCBs) act as a link between the State Co-operative Bank and the primaries. They accept funds for Primary Co-operative Banks from the State Co-operative Bank. As on 31st March, 2010 there were 370 District Co-operative Banks in India, among them 14 were in Kerala. The main objective of District Co-operative Bank is to meet the credit requirements of member societies. In India as of 31st March 2010 District Co-operative Banks were working with an owned fund of 29, 792 crore and a deposit of ₹1,27,623 crore.

1.1 Statement of the Problem

Banks play significant role in the economic development of a country broadly by promoting mobilization of resources and allocating these resources in the form of loans and advances. District Co-operative Banks, occupy a cardinal position in the cooperative credit structure. They constitute an important link between the State Co-operative Bank and the Primary Agricultural Credit Societies. District Co-operative Banks act as a leader of the co-operative movement in a district and play an effective role in the all-round growth of the co-operative movement. Being the social banker, it has to take banking facilities to the rural areas and unbanked centers. The DCBs are also doing personal banking along with the financing of primary credit societies. The DCBs have to mobilize the available resources and utilize them in the most efficient and profitable manner. A significant problem observed recently in Kerala is the low deployment of funds mobilized by

DCBs compared to the volume of deposits. In the deregulated banking environment, the co-operative banks engaged in financing agricultural and non-agricultural activities are also exposed to various types of risks like credit risk, interest rate risk and liquidity risk. Hence, an attempt has been made to study the financial performance of Alappuzha District Co-operative Bank.

1.2 Objective of the Study

The objective of the study was to evaluate the financial performance of Alappuzha District Co-operative Bank.

2. Methodology

The Study was based on data generated from the annual reports of the bank. Moreover journal articles, banking regulations & directives and relevant research reports were also used. Period selected for the study was 10 years i.e., from 2000-01 to 2009-10. For the purpose of financial performance analysis the study included the variables viz., Share capital, Deposit, Borrowings, Reserves, Loans and advances, Owned fund, Working capital, borrowed funds, Loans outstanding, Interest income, Interest expenses. The study used the following ratios:

1. Efficiency in Mobilization

- Owned funds to Working Capital ratio
- Borrowed Funds to Working Capital Ratio
- Deposit to Working Capital Ratio
- Deposit to Borrowed Funds Ratio
- Owned Funds to Borrowed Funds Ratio

2. Efficiency in Deployment

- Credit to Deposits Ratio
- Credit to Working Capital Ratio
- Credit to Borrowed Funds Ratio
- Credit to Total Funds Ratio

3. Efficiency in Operation

- Spread Ratio
- Burden Ratio
- Profitability Ratio

3. Results and Discussion

3.1 Description of Alappuzha District Co-operative Bank

The origin of the Co-operative Banking system in Travancore can be traced back to 1914. Until 1951, the co-operative sector was governed by the Travancore Co-

operative societies Act of 1936. With the formation of the Kerala State in 1956, the Travancore State Co-operative Bank was converted in to The Kerala State Cooperative Bank(KSCB). To cater the needs of farmers, a branch of KSCB was opened in Alappuzha in 1957. During the second five year plan, the Co-operative movement in the Banking sector received a boost and the branch of the KSCB at Alappuzha was converted in to the Alappuzha District Cooperative Bank in 1958. At its inception on 01/09/1958, the bank had 180 Primary Societies as members, with a share capital of 1.67 lakhs, deposits of ₹ 53000/- and loan from Apex Bank of ₹11.27 Iakhs, thus, the initial working capital of Bank was ₹13.47 lakhs. As of 31st March 2010, the Bank had total deposits of ₹1149.46 Crores, loans and advances of ₹727.82 Crores and share capital of ₹7.5 Crores. At present, state government and co-operative societies are the share holders of the bank. In the year 1966, the bank was brought under the rules and regulations of the RBI (Banking Regulation Act). Thus the Alappuzha District Co-operative Bank came into existence as the federal body of the primary societies in the district. The area of operation of Alappuzha District Co-operative Bank extends to the entire district of Alappuzha with 176 primary credit cooperatives as 'A' class members.

As on 31st March 2010, the bank had 54 branches with all facilities like Core banking, Tele banking, Any Branch Banking (ABB) System, SMS alert system, Internet Banking, ATM facilities.

3.2 Financial Performance of Alappuzha District Co-operative Bank

As stated in the methodology the following paragraphs present the brief analysis of Alappuzha District Co-operative Bank's performance in three domain areas viz.,

- Efficiency in Mobilization,
- Efficiency in Deployment and Efficiency in Operation.

4. Efficiency in Mobilization

The analysis related to efficiency in mobilization facilitates the bankers to identify the right mix of funds and its sources. The banker can reduce the cost of fund significantly if a continuous assessment takes place in this line. For the purpose of working capital analysis the study adopted the definition as the one which includes

Table 1 : Selected Performance Indicators of Alappuzha District Cooperative Bank from 2001-02 to 2009-10

Year	Owned Fund	Deposits	Borrowed Fund	Working Capital	Credit	Total Funds	Interest Received	Interest Paid	Non Interest Expenses	Non Interest Income
2000-01	19.52 (100)	221.95 (100)	226.97 (100)	246.36 (100)	46.29 (100)	246.49 (100)	27.73	19.03	18.85	13.52
2001-02	21.64 (110.86)	279 (125.7)	292.25 (128.76)	313.65 (127.31)	181.59 (392.28)	313.89 (127.34)	40.52	25.98	22.11	78.36
2002-03	26.34 (134.930)	330.76 (149.02)	346.01 (152.44)	371.79 (150.91)	201.65 (111.04)	372.35 (151.06)	30.04	23.82	24.25	14.07
2003-04	30.41 (155.78)	354.73 (159.82)	365.83 (161.17)	394.54 (160.14)	255.15 (126.53)	396.24 (151.06)	40.1	27.5	28.56	29.56
2004-05	24.03 (123.1)	756.49 (340.83)	766.32 (337.63)	788.69 (320.13)	356.87 (139.86)	790.35 (320.64)	25.1	97.01	26.93	42.33
2005-06	28.42 (145.59)	451.35 (203.35)	466.37 (205.47)	490.29 (199.01)	366.3 (102.64)	494.79 (200.73)	42.37	28.06	47.62	32.21
2006-07	30.38 (155.63)	517.09 (232.97)	524.22 (230.96)	545.73 (221.51)	425.6 (116.18)	554.6 (224.99)	42.51	31.02	29.13	14.11
2007-08	34.07 (174.53)	650.27 (292.98)	658.98 (290.33)	684.11 (277.68)	501.53 (117.84)	693.05 (281.16)	54.58	42.57	27.92	21.66
2008-09	36.17 (185.29)	833.71 (375.62)	841.76 (370.86)	866.53 (351.73)	607.83 (121.19)	877.93 (356.17)	66.67	56.93	21.71	12.58
2009-10	40.62 (208.09)	1149.46 (517.89)	1152.4 (507.73)	1167.99 (474.09)	727.82 (119.74)	1193.02 (484)	92.62	72.54	30.59	15.31
CAGR	0.07	0.17	0.17	0.16	0.31	0.17				

Note: Figures in the parenthesis denotes Growth Index. Source: Published Annual Reports of Alappuzha District Coop. Bank.

share capital, reserves, deposits and borrowings less investment on fixed assets and cumulative losses.

4.1 Owned funds to working capital ratio

This ratio shows the share of owned funds in the working capital of Bank. It was calculated with the following formula;

Owned funds to working capital ratio = (owned fund / working capital) x 100

Owned funds to working capital ratio reflect the sufficiency of owned funds in Bank and hence a higher ratio is preferable. The results will portrait the Bank's capability to mobilize owned funds. From the table 2 it is clear that the owned funds to working capital ratio have shown a decreasing trend from 7.92% in 2000-01 to 3.47% by 2009-10. It could be concluded that the bank's position in terms of owned funds was very weak and the mobilization of share capital and creation of reserves was not taking place satisfactorily.

Table 2 Efficiency in Mobilization

Year	Owned Funds to Working Capital Ratio	Borrowed Funds to Working Capital Ratio	Deposits to Working Capital Ratio	Deposits to Borrowed Funds Ratio	Owned Funds to Borrowed Funds Ratio
2000-01	7.92	92.12	90.09	97.78	8.60
2001-02	6.89	93.17	88.95	95.46	7.40
2002-03	7.08	93.06	88.96	95.59	7.61
2003-04	7.70	92.72	89.90	96.96	8.31
2004-05	3.04	97.16	95.91	98.71	3.13
2005-06	5.79	95.12	92.05	96.77	6.09
2006-07	5.56	96.05	94.75	98.63	5.79
2007-08	4.98	96.32	95.05	98.67	5.17
2008-09	4.17	97.14	96.21	99.04	4.29
2009-10	3.47	98.66	98.41	99.74	3.52

Source: Calculated values based on the ADCB's performance indicators

4.2 Borrowed Funds to Working Capital Ratio

This ratio shows the share of borrowed funds in the working capital of Bank. It could be calculated by the following formula;

Borrowed funds to working capital ratio = (Borrowed fund / Working Capital x 100

A lower ratio is advisable for Banks to show good performance. This is because this ratio measures the proportion of borrowings and deposits in working capital of the Bank. If the ratio is high it mean that Bank's average cost of funds are high. Table 2 depicts that the borrowed funds to Working Capital ratio was 92.12% during 2000-01 and it increased to 98.66% in the year 2009-10. This means that the ratio has increased and hence the Bank's average cost of funds has also increased.

4.3 Deposits to Working Capital Ratio

Deposits constitute a major portion of total working capital. This ratio could be calculated by using the following formula;

Deposits to Working Capital Ratio = (deposit / working capital) x 100

Deposits to working capital ratio show the amount of deposit in total working capital of the Bank. Deposits are the total deposits of all types received by the Bank. From the Table 2 it is clear that the Deposits to Working Capital ratio

has increased from 90.09% in 2000-01 to 98.41% in 2009-10. It could be concluded that the lion share of working capital is derived from deposits. This shows the Bank's ability to mobilize more deposits from the investors and also indicates the faith bestowed upon by the customers on the Bank.

4.4 Deposits to Borrowed Funds Ratio

This ratio indicates the share of deposits in the borrowed fund. It measures the efficiency of the organization in mobilizing funds. It could be calculated as;

Deposits to Borrowed Funds Ratio = (deposit / borrowed fund) x 100

Deposits serve as a form of borrowings for Bank. A higher ratio indicates more amounts of deposits in borrowed fund and lower ratio shows the dominance of borrowings in the borrowed fund. Higher proportions of deposits are deemed as a symbol of self reliance. Table 2 reveals that the Deposits to Borrowed funds ratio have increased from 97.78% in 200001 to 99.74% to 2009-10. Thus there is a dominance of deposit in borrowed fund of Alappuzha District Co-operative Bank.

4.5 Owned Funds to Borrowed Funds Ratio

This is the ratio of owned funds to borrowed funds. It could be calculated by using the following formula;

Owned Funds to Borrowed Funds Ratio = (Owned funds / Borrowed funds) x 100

This ratio shows whether the Bank depends more on owned funds or borrowed funds. Owned funds include share capital and reserves and borrowed funds include deposits and borrowings. Higher ratio is preferable; hence it indicates the increased share of owned funds in the functioning of the Bank. From the Table 2 it is clear that the Owned funds to borrowed funds ratio has decreased from 8.60% in 200001 to 3.52% in 2009-10. This ratio indicates that the bank depends mainly on the borrowed fund for the mobilization of funds. It also indicates the need for a drive to mobilize more share capital.

5. Efficiency in Deployment

A series of ratios were being calculated in order to understand the efficiency in deploying funds. The funds collected by the Bank

through owned funds and borrowed funds should be deployed in profitable avenues. The efficiency in deployment of funds were discussed as below.

5.1 Credits to Deposits Ratio

Credit to Deposits ratio indicates the ability of Bank in deploying credit to customers out of the deposits mobilized. It is computed for knowing the performance of Bank in converting the cost incurring funds into maximum interest earning assets. The ratio was calculated by using the following formula;

Credit to Deposits Ratio= (Credit / Deposit) x 100

Table 3 reveals that the credit to deposit ratio has increased from mere 20.85% in 2000-01 to 63.31% in 200910. It could be observed that this ratio has increased to 82.30% during 2006-07, which was the highest record. However, Credit disbursement was not consistent and shows a fluctuating trend. It is high time that the Bank should

Table 3 Efficiency in Deployment

Year	Credit to Deposit Ratio	Credit to Working Capital Ratio	Credit to Borrowed Funds Ratio	Credit to Total Funds Ratio
2000-01	20.85	18.78	20.39	18.77
2001-02	65.08	57.89	62.13	57.85
2002-03	60.96	54.23	58.27	54.15
2003-04	71.92	64.67	69.74	64.39
2004-05	47.17	45.24	46.56	45.15
2005-06	81.15	74.71	78.54	74.03
2006-07	82.30	77.98	81.18	76.73
2007-08	77.12	73.31	76.10	72.36
2008-09	72.90	70.14	72.20	69.23
2009-10	63.31	62.31	63.15	61.00

Source: Calculated values based on the ADCB's performance indication

evolve appropriate credit delivery policy.

5.2 Credit to Working capital ratio

Credit to working capital ratio is the quantitative measure of the loaning operation of the Bank. It could be calculated by the formula;

Credit to Working Capital Ratio = (credit / working capital)x 100

This ratio shows the share of credit in working capital. This credit to working capital ratio is necessary to study the efficiency of Bank in managing the funds. Higher the ratio, higher will be the efficiency in managing funds. From the Table 3 it could be observed that the ratio was 18.78% during 2000-01 and it has increased to 62.31% during 2009-10. This means that even though credit disbursement has increased but it has not increased to that extent which is required. It also means that the money mobilized and available for lending was not deployed fully.

5.3 Credit to Borrowed funds Ratio

Credit to borrowed funds ratio reveals the measure of the efficiency of the Bank in converting the borrowed funds to loans and advances. It could be calculated by the following formula;

Credit to Borrowed Funds Ratio = (Credit / Borrowed funds) x 100

The cost of the borrowed funds is the major expenditure of the Bank. A higher ratio indicates the efficiency in the deployment of funds. Hence, bank should generate more income by deploying the borrowed funds into loans and advances. From the Table 3, it is clear that the credit to borrowed funds ratio has a fluctuating trend and it was only 63.15% in the year 2009-10. The highest ratio was during 2006-07 i.e. 81.18%. Since the borrowed fund was significant and it costs the bank has to take appropriate measures to deploy the borrowed fund in profitable ventures.

5.4 Credit to total funds ratio

Credit includes loans and advances. Bank takes and gives credit. It can be an important source of funds. This ratio implies the amount of credit in total funds of bank, where total funds includes owned funds and borrowed funds. From this ratio we can get an idea of quantum of credit that is included

in the total funds of bank. The ratio could be calculated by the following formula;

Credit to Total Funds Ratio = (credit / total funds) x 10

Table 3 shows the credit to total funds ratio for ten years from 2000-01 to 2009-10. From the table it is clear that the ratio was 18.77% during 2000-01 and it got increased to 61.00% by 2009-10. Highest ratio was during 2006-07 i.e. 76.73%. Hence, the bank needs to take serious steps to analyze the lending and investment portfolio on regular basis.

6. Efficiency in Operation

Efficiency in operation indicates the end result of all banking transactions. The spread and burden ratios calculated advocates the way a head of a bank.

6.1 Spread Ratio

Spread ratio explains the interest margin in total funds owned by bank. In other words spread means difference between interest received and interest paid. Spread plays an important role in the profitability of the bank, because it is directly related to profit. Higher ratio is preferable and it is possible only when the interest received on loans are more than the interest paid on deposit and borrowings. The formula for calculating spread ratio;

Table 4 - Efficiency in Operation

Year	Spread	Burden	Profitability
2000-01	3.52	2.16	1.36
2001-02	4.63	-17.92	-13.29
2002-03	1.67	2.73	-1.06
2003-04	3.17	-0.25	3.42
2004-05	-9.09	-1.94	-11.03
2005-06	2.89	3.11	-0.22
2006-07	2.07	2.70	-0.63
2007-08	1.73	0.90	0.83
2008-09	1.10	1.03	0.07
2009-10	1.68	1.28	0.40

Source: Calculated values based on the ADCB's performance indicators

Spread Rating = {(Interest received - nterest paid) / Total funds }x 100

Table 4 shows the spread ratio of ADCB for ten years i.e. from 2000-01 to 2009-10. It was just 3.52% during 2000-01. After that there were great fluctuations in the ratio. It was -9.09% during 2004-05. The increase in the deposits inflow has resulted in the payment of high rate of interest which was high for the deposits during that period. Hence, the interest paid is high compared to the interest received thus, the spread ratio has shown -9.09%. Later on it showed positive trend with 1.68% during 2009-10. It could be concluded that the funds were not utilized efficiently and needs re-engineering.

6.2 Burden Ratio

Burden ratio explains the margin of non interest expense and non interest income to the total funds owned by the bank. It is also a measure of profitability. A low value of this ratio is preferred.

Burden Ratio = {(Non- interest expense-Noninterest income) / total fund }x 100

Where,

Non- interest expense = contingency expenses and establishment expenses.

Non-interest income = miscellaneous income of Bank.

Table 4 shows the burden ratio of ADCB for ten years. It is clear from the table that the burden ratio has decreased from 2.16% in 2000-01 to 1.28% by 2009-10. Highest ratio was during the year 2005-06 i.e.3.11%. It was found that the non-interest expense was 47.62% in 2005-06 (Table-1).

6.3 Profitability Ratio

Profitability ratio explains difference between spread and burden of Bank. Spread explains the margin of interest received and interest paid and the burden explains the margin of non- interest income and non-interest expense. This ratio indicates the ability of bank to generate profit. Hence a higher value of this ratio is preferred.

The overall profitability is expressed in terms of spread and burden ratio.

Profitability Ratio = Spread ratio-Burden ratio

Table-4 explains the profitability ratio of ADCB for ten years i.e. 2000-01 to 2009-10. Even though ratio has a fluctuating trend it has decreased from 1.36% during 2000-01 to 0.4 percent by 2009-10. It could be observed that the operational result of the bank was

not consistent and significantly varies during the study period.

7. Conclusion

This paper reflects the financial performance of Alappuzha District Co-operative Bank for the period from 2000-2001 to 2009-2010. The financial performance was analyzed through the ratio analysis which expresses the numerical relationship between two accounting figures. This will enable the bank to weigh their financial strength. The ratio analysis also enables us to know about the efficiency in mobilization, deployment and operation. After a detailed study of the financial statements of the bank, it is clear that Alappuzha District Co-operative Bank is efficient enough in mobilization of resources. The increase in deposits for the period from 2000-2001 to 2009-2010 is a solid proof. The ratio such as credit to deposit ratio, borrowed funds, and working capital and total funds shows that the bank's deployment level has not reached up to the expected level. This is because its deployment of resources is less than the resource mobilization. As well the Profitability of the Alappuzha District Co-operative Bank was not satisfactory. Moreover, the operational result of the bank was not consistent and significantly varies during the study period. Hence, the bank should immediately go for financial re-engineering.

8. Selected References

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3. http://www.alappuzhadcb.org/

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FINANCIAL HIGHLIGHTS

		(As on 31.03.2011)	(As on 31.03.2012)
• Paid up Share Capital & Reserves	:	₹ 5209.10 Lakhs	₹ 7425.37 Lakhs
• Deposits	:	₹ 100273.24 Lakhs	₹ 118361.93 Lakhs
• Loans & Advance	:	₹ 34218.84 Lakhs	₹ 42223.38 Lakhs
• Investments	:	₹ 39898.78 Lakhs	₹ 47239.12 Lakhs
• Money Call & Short Notice	:	₹ 32898.43 Lakhs	₹ 41609.52 Lakhs
• Net Profit	:	₹ 2210.26 Lakhs	₹ 1117.82 Lakhs
• Working Capital	:	₹ 121827.43 Lakhs	₹ 145392.22 Lakhs

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- *Cash Certificates*
- *Fixed Deposit linked with RDs*
- *Housing Loan Linked Deposits*
- *Children Education Deposits*
- *Crop Loans for Agriculture through KCC / SHG / JLG Cooperatives*
- *Term Loans for Agril. & Allied Agriculture*
- *Aquaculture Development One Thousand Ponds Scheme*
- *Loans for Housing / Housing Complex*
- *Loan for SRTO*
- *Consumer Durables Loans*
- *Loans to Technocrats & Professionals*
- *Loans to educated unemployed youths*
- *Cash Credit & Overdraft Facilities*
- *Loans for Children Education*
- *Loans for women through WDC Cell*
- *Integrated Village Development Scheme*
- *Term Loan for Tourism Development*
- *Personal loan to salary earners*
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Land Development	:	Land leveling, Land reclamation etc.
Non Farm Sector	:	Small Scale Industries, Cottage Industries including Service Sector, Rural Housing, SRTOs, Rural Godowns, Packing & Grading House etc.
Minor Irrigation	:	Construction/repairs of irrigation well, Tube Well, Deep Tube well, Installation of pumpsets, pipelines, lift irrigation etc.

Bank accepts FD for 1 year and above at following rate for Senior Citizens

1 Year 9.50% 2 Years above 9.25% 0.5% more interest for Senior Citizens.

SALIENT FEATURES

1. Interest payable: Quarterly/half yearly and yearly as per demand.
2. Monthly income schedule is available.
3. TDS is not deducted on maturity of FDs.
4. FD outstanding as on 31-03-2010 is within the own fund limit.
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6. Loan against FD to the extent of 75% of FD amount.

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Irrigation Development in West Bengal

Dr. Sebak Kumar Jana*

Abstract

Irrigation is a key component of agricultural development of an economy. Irrigation management presently is of crucial importance in the context of declining water availability and the climate change. The paper attempts to give an overview of irrigation development in West Bengal. The paper highlights pattern and trend of irrigation development in the state in respect of different types of irrigation, inter-district disparity in irrigation development and irrigation expenditure in the state.

1. Introduction

It is well documented in the literature that irrigation plays the vital role in improving the yield or productivity in the agricultural sector and the impact of irrigation on reducing poverty is striking (Vaidyanathan 2006). It is found that in most states households with access to irrigation have only about half the poverty incidence compared to the households without irrigated land (IWMI 2011). The effect of irrigation facility even among the tribal households is worth mentioning (Roy 2006). The degree of instability in irrigated agriculture is also much lower than unirrigated agriculture. But the rained areas in the country still accounts for 60% of the cultivated area and are home to majority of rural poor and marginal farmers. Repeated draughts and erratic rainfall have severally affected the livelihood of rural people. India's irrigation sector is likely to be more affected in the coming years because of the predicted climate change which may lead to increased evaporation with more irrigation demand. Water scarcity will increasingly contribute to food price volatility. Many countries are facing worsening water scarcities. In all the regions poor will be disproportionately vulnerable because of their dependence on agriculture and their low capacity to adapt (World Development Report, 2008). In this backdrop we have taken irrigation development in West Bengal for our study. In West Bengal 78% of all the farmers are

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small farmers with less than 2 Ha. of land for whom irrigation plays a very important role. While the canal irrigation has declined from 8.86 lakh hectares to 5.6 lakh hectares in the last fifty years, ground water development is not satisfactory. The importance of irrigation is rising in the state to sustain agricultural growth. The major objective of the study is to get an overview of the irrigation development pattern in the state of West Bengal.

2. Irrigation Demand in West Bengal:

Water is required for different sectors like agriculture, industry, energy etc. Water requirement for agriculture is high compared to other sectors. Agriculture uses 85% of water consumed in developing countries, mainly for irrigation. Water is needed in agriculture mainly to meet the demands of evaporation (E), transpiration (T) and metabolic needs of the plants, altogether known as consumptive use (CU) for plants. The total water requirement in West Bengal is projected to increase from 10.85 mham in 2000 to 17.95 mham in 2025 with rise in share of agriculture from 49.6% in to 62.4% during the same period (WBPCB,2009).

The table-2 shows the water requirement and deficit in West Bengal (Mham). From table 2, we see that water deficit also will be more in the year 2025 than the year 2000.

Table-1: Sector-wise Percentage of Projected Water Requirement in West Bengal in 2025

Sectors	2000	2011	2025
Agriculture	49.6	59.3	62.4
Domestic	2.4	2.2	2.2
Industry (including thermal)	5.3	2.9	3.4
Inland Navigation	33.5	27.9	20.6
Forestry	0.1	0.1	5.7
Ecology, Environment and Others	9.2	7.7	5.7
Total	100.0	100.0	100.0

Source: WBPCB (2009)

Table 2: Water Requirement and Deficit in West Bengal (Mham)

Sl.	Year	Water Requirement	Deficit	% deficit
1	2000	10.85	4.08	37.60
2	2011	13.02	6.25	48.00
3	2025	16.60	9.83	59.22

Source: WBPCB (2009)

3. Irrigation Development in West Bengal

Source-wise irrigation in India may be divided into 4 categories (i) Canal Irrigation: Surface water stored in reservoirs or rivers and streams are distributed for irrigation through the canal irrigation network. (ii) River lift Irrigation (RLI): Water lifted directly from rivers and streams from suitable points. (iii) Irrigation well: It consists of dug wells, shallow tube wells and deep tube wells. (iv)Tank/Reservoir: An artificially impounded body of water constructed for the purpose of storage of water. These different systems of irrigation are found in different geographical contexts. Irrigation in India is also classified into three categories based on the command area: (i) major irrigation: culturable command area (CCA) is of 10,000 ha or more, (ii) medium irrigation projects: culturable command area between 2,000 and 10, 000 ha and (iii) Minor irrigation projects: below 2,000 ha. Minor irrigation has further classified into surface water minor irrigation and ground water minor irrigation schemes. Tube well irrigation and tank irrigation generally falls in the minor irrigation category. As water is the responsibility of the state in the Indian constitution, states are primarily responsible for planning, implementation and funding management. The three main institutions involved in irrigation development are Ministry of Water Resources, the Planning Commission and the Ministry of Agriculture. To manage the ground water resource in the state, West Bengal Groundwater Resources (Management Control and Regulation) Act 2005 came in to effect on 31st August 2005.

Major and Medium Irrigation

The decades of 1950 and 1960 witnessed a large scale dam-building within the geographical territory of West Bengal. The massive capital-intensive engineering interventions were made for meeting increasing needs of population and economy. These projects have not fared well in delivering due benefits and have instead been subject to serious and prolonged controversy over grim social, economic and environmental repercussions. The four major river valley irrigation projects in West Bengal are: (i) Mayurakshi Reservoir Project: The Project was taken up for execution in 1951 and has been completed 1985. The irrigation potential created through completion of this project comes to 2.5 lakh hectares in the districts of Birbhum, Murshidabad and Burdwan., (ii) Damodar Valley

Corporation: An irrigation potential of 4.83 lakh hectares out of its ultimate irrigation potential of 5.1 lakh hectares has been created through the project in the districts of Burdwan, Bankura, Hooghly and Howrah.(iii) Kangsabati Reservoir Project: It was started in the year 1956-57 in Mukutmanipur. Till date an irrigation potential of 3.48 lakh hectares has been created in the districts of Bankura, Midnapore and Hooghly through this Project. (iv) Teesta Barrage Project: It is one of the largest irrigation projects not only in West Bengal but also in the entire eastern region. It will create 9.22 lakh ha. of irrigation potential in six northern districts of West Bengal namely Coochbehar, Darjeeling, Jalpaiguri, Uttar Dinajpur, Dakshin Dinajpur and Malda.

Minor Irrigation

Since 1970 the dependence on ground water started to increase with the introduction of high-yielding but water-intensive seeds that replaced the traditional ones. According to Minor Irrigation Census there were 0.60 millions of shallow and more than 5,000 deep tube wells in the State in 2001. The rapid adoption of shallow tube wells paved the way for agricultural growth in the 1980s and 1990s. Around 10% of these shallow tube wells are powered by electricity and the rest by diesel. The reason for the preference for diesel is the government of West Bengal's electricity policy. In India as a whole there are concerns about overexploitation of groundwater and this appears to be driving water policies. In West Bengal, the high rainfall and the alluvial aquifer make it less likely that overexploitation will occur. However, the government policies of groundwater certification and rural electrification make it difficult for farmers to get connected to the grid, leading to economic scarcity of groundwater (Mukherji 2007a,b, AGWATRER 2010).

Minor irrigation facilities in West Bengal are created mainly by Water Investigation & Development Department (WIDD). Water Investigation and Development Department (WIDD) under Government of West Bengal came into being in the present form and style from the year 1995. Presently, this department is the controlling authority in respect of two major directorates namely Water Resources Development Directorate (WRDD) and State Water Investigation Directorate (SWID); two State-owned Corporations namely West Bengal State Minor Irrigation Corporation Ltd. and four CAD Authorities (Govt. of West Bengal, Economic

Review). The primary purpose of command area development authorities was to involve farmers' organizations in the irrigation management. WRDD is mainly engaged in developing existing potential of water resources available in the state for irrigation purposes and construction and maintenance of various minor irrigation structures for utilization of ground water as well as surface water.

Irrigation Development in West Bengal Compared to Other States

Factors affecting irrigation development are: topography and slope of soil, structure, depth and permeability of soil, depth of groundwater, climate, social and economic factors etc. Percentage share of irrigation of West Bengal in India has increased from 4.6% in 1998-99 to 9.4% in 2002-03 which shows relative improvement in irrigated area in the state. Uttar Pradesh has the highest share of irrigated land followed by Punjab. Per capita net irrigated area is 35.77 hectares per 1000 population in West Bengal which is less than the country average of 51.06 hectares. The gross irrigated area (GIA) as a percentage of gross cropped area (GCA) is 54% and West Bengal's position is 7th out of 34 states in India (CWC). As the last column of table 3 shows most of the

Table 3: State wise Coverage of Irrigation and Share of Wells in Irrigation (million ha) (2001-02)

States	GCA	GIA	GIA as % GCA	Wells as a % NIA
Andhra Pradesh	12.81	6.07	47.38	46.6
Bihar	7.58	4.43	58.44	65.1
Jharkhand	2.64	0.26	9.85	45.7
Gujrat	12.2	4.82	39.51	80.8
Haryana	6.39	5.46	85.45	55.8
Karnataka	12.44	3.6	28.94	45.0
Kerala	2.92	0.49	16.78	32.1
Madhya Pradesh	20.11	6.54	32.52	65.9
Chhattishgarh	5.73	1.49	26.00	20.1
Maharastra	22.57	4.45	19.72	64.6
Orissa	8.68	2.68	30.88	41.9
Punjab	7.98	7.76	97.24	72.4
Rajasthan	21.53	7.96	36.97	70.5
Tamil Nadu	5.84	3.31	56.68	54.2
U.P.	25.8	19.12	74.11	77.3
Uttarakhand	1.24	0.57	45.97	62.4
W.B.	9.64	5.43	56.33	55.1
India	193.72	85.78	44.28	59.0

Source: GOI, Ministry of Agriculture, Adopted from Deshpande (2011)

states depend heavily on well irrigation with contribution of wells in net irrigated area (NIA) being 55% for West Bengal.

The development of ground water in West Bengal along with other states is presented in Table 4. It is seen from the Table 4 that the ground water development in West Bengal is 39.4% in comparison to all India average of 53.2%, in spite of the fact that the state is water abundant. It has been pointed out that this is due to poor electrification of villages, high diesel prices in West Bengal compared to other states in India (Mukherji 2007b).

District wise Irrigation Development in West Bengal

The disparity in irrigation development in West Bengal across districts is presented in table 5. We have presented Net Cropped Area (NCA), Gross Cropped Area (GCA), GIA (Goss Irrigated Area), GIA as a percentage of GCA and cropping intensity (CI) in various districts in

Table 4: Ground Water Development in West Bengal (2001-02)

	Total irrigation potential ('000ha)	Ground water potential (000 ha)	Level of Groundwater Development (%)	Per cent of villages having tube well irrigation
Andhra Pradesh	11260	3960	42.12	43.8
Bihar	13347	4947	34.25	68.6
Gujrat	6103	2756	69.84	50.6
Haryana	4512	1462	105.45	81.4
Jammu & Kashmir	1358	708	4.12	4.4
Karnatak	5974	2574	63.72	59.3
Kerala	2679	879	29.21	7.0
Madhya Pradesh	17932	9732	45.51	40.6
Maharashtra	8952	3652	45.62	9.5
Orissa	8803	4203	14.33	31.3
Punjab	5967	2917	141.51	92.2
Rajasthan	5128	1778	111.75	54.3
Tamil Nadu	5532	2832	80.79	13.9
Tripura	281	81	4.06	38.5
Uttar Pradesh	30499	16799	64.63	82.2
West Bengal	6918	3318	39.47	43.9
India	139893	64050	53.22	63.1

Source: IDFC (2011)

Table 5. District-wise Irrigation Development in West Bengal (2005-06)

	NCA	GCA	GIA	GIA/GCA	CI
Bankura	335.58	493.8	273.55	55.4	147.1
Birbhum	319.96	514.4	291.82	56.7	160.8
Burdwan	454.94	825.02	317.99	38.5	181.3
Coochbehar	246.94	512.37	106.50	20.8	207.5
Dakshin Dinajpur	187.95	299.86	28.25	9.4	159.5
Darjeeling	141.77	239.77	8.94	3.7	169.1
Hooghly	218.82	528.8	335.11	63.4	241.7
Howrah	81.65	170.99	51.57	30.2	209.4
Jalpaiguri	336.64	561.8	93.58	16.7	166.9
Malda	221.54	439.8	125.38	28.5	198.5
Murshidabad	401.37	937.77	204.66	21.8	233.6
Nadia	291.99	730.46	213.01	29.2	250.2
North 24Pgs	260.54	495.91	155.70	31.4	190.3
Paschim Medinipur	551.72	931.8	304.02	32.6	168.9
Purba Medinipur	294.05	515.3	209.06	40.6	175.2
Purulia	308.64	329.6	72.13	21.9	106.8
South 24Pgs	370.37	507.6	109.54	21.6	137.1
Uttar Dinajpur	270.23	497.34	147.69	29.7	184.0
West Bengal	5294.7	9532.39	3048.49	32.0	180.0

Source: Own Calculation based on Government of W.B., District Statistical Handbooks

West Bengal in 2005-06. Cropping intensity is highest in the district of Nadia and is lowest in the district of South 24 Pgs. GIA as a percentage of GCA is highest in the district of Hooghly and lowest in the district of Darjeeling. It should be pointed out that GIA as percentage of GCA for the state differs in Table 5 and Table 3 as the source of data differs.

Irrigated area by different sources in West Bengal is presented in table 6. Out of 30.48 lakh hectares of irrigated land in West Bengal in 2005-06, source-wise irrigated land are as follows: Government canal = 10.65 lakh hectares, Tube well (TW) = 11.53 lakh hectares and tanks = 2.45 lakh hectares. The shares for different sources of irrigation for West Bengal are as follows: Government canal 35%, Tank 8%, Tube Well 37.8%, River Lifting Irrigation (RLI) 5.7% and others 13.5%. Canal irrigation forms an integral parts of the river valley projects mentioned earlier. Burdwan, Birbhum and Bankura are the most benefited districts from canal irrigation. The spatial pattern reveals high dependence on

tube well irrigation in the districts like Nadia, 24- Parganas, Hooghly, Coochbehar. Tank irrigation plays an important role in the districts like Bankura and Purulia in the dry western plateau tracts. Other irrigation methods include river lift irrigation (RLI) which is the characteristic feature of the north central and eastern districts of the state (Chatterjee 1995). In the last two columns we have presented district-wise percentage area of tube-well irrigation and canal irrigation in West Bengal.

4. Creation and Utilization of Irrigation Potential in West Bengal

Utilisation of irrigation potential is an important parameter for the efficiency of irrigation. It is seen from the table-7 that irrigation potential has increased from 44.24 lakh hectares in 1996-97 to 56.41 lakh hectares in 2009-10 and the

Table 6: Area Irrigated by Different Sources in West Bengal (2005-06)

	Area Irrigated by ('000 ha)					Percentage of	
	Govt.Canal	Tank	TW	Others	Total	TW	Canal
Bankura	176.3	33.1	50.1	14.1	273.6	18.3	64.4
Birbhum	159.9	25.3	49.4	57.3	291.8	16.9	54.8
Burdwan	283.7	0.0	22.4	11.9	318.0	7.1	89.2
Coochbehar	1.7	5.9	72.5	26.4	106.5	68.1	1.6
Dakshin Dinajpur	0.0	10.4	12.1	5.8	28.3	42.7	0.0
Darjeeling	2.4	0.0	2.0	4.5	8.9	22.5	27.2
Hooghly	99.8	37.5	155.0	42.9	335.1	46.2	29.8
Howrah	35.5	9.0	4.8	2.3	51.6	9.3	68.8
Jalpaiguri	58.4	2.1	6.7	26.4	93.6	7.1	62.4
Malda	0.0	1.3	90.1	34.0	125.4	71.8	0.0
Murshidabad	32.9	7.8	11.4	152.6	204.7	5.6	16.1
Nadia	0.0	0.0	192.2	20.8	213.0	90.2	0.0
North 24Pgs	7.5	15.1	117.4	15.6	155.7	75.4	4.8
Paschim Medinipur	66.1	24.7	145.2	68.0	304.0	47.8	21.7
Purba Medinipur	63.6	26.3	75.8	43.5	209.1	36.2	30.4
Purulia	30.3	28.3	0.0	13.5	72.1	0.0	42.0
South 24Pgs	44.9	12.3	14.0	38.3	109.5	12.8	41.0
Uttar Dinajpur	2.6	6.0	132.2	6.9	147.7	89.5	1.8
W.B.	1065.5	245.0	1153.2	584.7	3048.5	37.8	35.0

Source: Government of West Bengal, District Statistical Handbooks

Table 7: Creation of Irrigation in West Bengal (lakh ha.)

Year	Potential created upto the Year			Percentage of		
	Major & Medium	Minor	Total	Major & Medium	Minor	Total
1996-97	13.36	30.89	44.25	30.2	69.8	100.0
1997-98	13.57	31.64	45.21	30.0	70.0	100.0
1999-00	14.30	33.64	47.94	29.8	70.2	100.0
2000-01	14.78	34.27	49.05	30.1	69.9	100.0
2001-02	15.33	35.64	50.97	30.1	69.9	100.0
2002-03	15.49	36.29	51.78	29.9	70.1	100.0
2003-04	15.52	36.99	52.51	29.6	70.4	100.0
2004-05	15.55	37.64	53.19	29.2	70.8	100.0
2005-06	15.61	38.14	53.75	29.0	71.0	100.0
2006-07	15.66	38.64	54.30	28.8	71.2	100.0
2007-08	15.71	39.30	55.01	28.6	71.4	100.0
2008-09	15.76	39.98	55.74	28.3	71.7	100.0
2009-10	15.82	40.59	56.41	28.0	72.0	100.0

Source: WBPCB (2009)

share of minor irrigation has increased over the years. In 2009-10 the share of major and medium irrigation potential was 28 % and that of minor irrigation was 72% in total irrigation potential created.

Utilisation of irrigation potential is an important factor for agricultural development. Creation and utilization of irrigation in West Bengal have presented in the table-8. The table shows irrigation potential created and utilized in different districts of West Bengal for different seasons. In most of the districts season-wise actual area irrigated out of irrigation potential is very low.

Introduction of submersible motor driven pump though came as a blessing to the cultivators, it caused further lowering of ground-water level. The efficiency of the well irrigation is found to be higher compared to other irrigation forms. Ground water offers control and reliability of water in irrigation which proves very important, though ground water irrigation is less equitable compared to surface irrigation (IDFC 2011). The problem with groundwater irrigation in West Bengal is over exploitation of groundwater in some districts. Depth to water level data analyzed by the State Water Investigation

Table 8: Season-wise Irrigation Potential created and Utilised in Different Districts (2001)

Sl.No.	District	Season-wise Irrigational Potential Created (ha)			Season-wise Actual Area Irrigated (%)		
		Kharif	Rabi and others	Total	Kharif	Rabi and Others	Total
1	Bankura	11414.48	14172	25586.680	49.2	36.3	42.0
2	Bardhaman	16155.49	15153	31308.240	47.3	72.7	59.6
3	Birbhum	21684.83	25302	46986.920	22.8	49.9	37.4
4	Dakshin Dinajpur	14167.35	20308	34475.780	24.7	55.5	42.9
5	Darjeeling	1159.56	4180	5339.410	35.6	82.2	72.1
6	Howrah	29612.11	44770	74382.270	38.1	67.1	55.6
7	Hooghli	18978.5	25011	43989.420	62.8	79.9	72.5
8	Jalpaiguri	6258.42	27387	33645.580	40.6	85.9	77.5
9	Coochbehar	6669.01	8849	15518.180	11.4	39.0	27.1
10	Maldah	7683.56	18204	25887.450	44.0	61.4	56.2
11	Medinipur	26098.36	52605	78703.170	28.1	79.9	62.7
12	Murshidabad	17132.44	21250	38382.630	26.7	46.5	37.7
13	Nadia	18145.24	18207	36352.670	24.9	36.6	30.8
14	North 24-Paraganas	4829.55	7013	11843.010	39.7	60.5	52.1
15	Purulia	6066.03	5790	11855.720	28.4	29.8	29.0
16	South 24-Paraganas	30625.28	40717	71342.190	7.1	77.9	47.5
17	Uttar Dinajpur	5444.91	9117	14562.100	18.4	36.7	29.9
	Total	**242125.1**	**358036**	**600161.420**	**31.1**	**64.6**	**51.1**

Source: Own calculation based on GoWB, 2003

Directorate, Govt. of W. Bengal, indicated significant average annual fall in pre monsoon depth to water level during the period 1995 to 2004 to the tune of 16 to 70 centimeters in some blocks of Murshidabad, Burdwan, Purba Medinipur and Hooghly districts. In some parts of Hooghly, Burdwan and Murshidabad districts, significant fall was noticed in both pre and post monsoon period. As per latest assessment, 37 falls under 'semi-critical' category, 1 block falls under critical category and the remaining blocks fall under 'safe' category in West Bengal (GoWB , Economic Review, 2011). Crunch is already felt in drinking water sector in rural west Bengal during Boro cultivation season. Unpredictable monsoons, destruction of green coverage, siltation of rivers, uncontrolled urbanization

have compounded this problem. Area under arsenic and fluoride are increasing day by day (Rudra 2010). In this backdrop it is important to search for sustainable irrigation. There should be more emphasis on surface irrigation like canal irrigation and tank irrigation. The key problem with the surface irrigation is poor maintenance and system management (Shah 2011).

5. Irrigation Expenditure in West Bengal

Analysts have argued that one of the causes of food price hike after 2007 is underinvestment in irrigation. The expenditure on Irrigation and Waterways Department for the year 2010-11 was about ₹1,140 crore in West Bengal (Economic Review, 2010-11). In table-9, we

Table 9: Expenditure on Irrigation in West Bengal (₹ lakh)

Years	Major and Medium	Minor Irrigation	CAD	Flood Control	Total Irrigation Expenditure	% of irrigation Exp to SDP	% of irrigation Exp to Rev Exp
1985-86	2894	3653	71	1835	8452	0.485	3.74
1986-87	3534	3666	86	2167	9453	0.499	3.50
1987-88	3622	4542	89	2274	10527	0.457	3.48
1988-89	4127	5128	102	2561	11918	0.483	3.43
1989-90	4659	5861	123	2940	13584	0.489	3.42
1990-91	5698	7857	134	2919	16608	0.527	3.24
1991-92	5815	7266	108	2663	15851	0.435	2.98
1992-93	6096	8142	117	2714	17069	0.440	3.01
1993-94	7024	10218	138	3732	21112	0.436	3.06
1994-95	7653	9940	138	3903	21634	0.402	2.84
1995-96	8562	11223	166	4475	24427	0.364	2.83
1996-97	9979	13016	196	4596	27788	0.373	2.68
1997-98	11133	15970	215	4980	32299	0.363	2.85
1998-99	14077	20748	341	5876	41043	0.387	2.88
1999-00	17189	25855	345	10231	53621	0.459	2.75
2000-01	19087	33195	384	19164	71830	0.557	3.25
2001-02	16139	28797	384	14178	59498	0.421	2.54
2002-03	15182	23238	382	6640	45442	0.300	1.96
2003-04	14218	24101	374	5682	44375	0.260	1.72
2004-05	16924	23912	375	6564	47774	0.252	1.70
2005-06	18476	26314	381	8598	53769	0.253	1.73
2006-07	24187	27306	391	9866	61751	0.250	1.81

Source: Govt. of West Bengal, Statistical Abstract, Various Issues

have presented the revenue expenditure on irrigation in West Bengal during 1985-86 to 2006-07. Total expenditure on irrigation can be decomposed into major and medium irrigation, minor irrigation, Command area development (CAD), flood control. Total revenue expenditure on irrigation has increased from ₹84.52 crores in 1985-86 to ₹617.5 crores in 2006-07. Major and medium irrigation mainly comprises of canal irrigation. Minor irrigation comprises mainly well irrigation and tank irrigation. As well irrigation is mainly private in nature; minor irrigation expenditure may contain a high share of tank irrigation expenditure. The percentage share of minor irrigation expenditure is seen to have improved over the years. It is to be mentioned that though the share of major irrigation expenditure is still very high, the area under major and medium irrigation is not improving. We have calculated the irrigation expenditure as a percentage of State Domestic Product (SDP) and as a percentage of Budgeted revenue expenditure over the periods 1985-86 to 2006-07 (Table-9). It may be observed that total irrigation expenditure as a percentage of SDP and as a percentage of revenue expenditure has a declining tendency. As has been revealed in the table, revenue expenditure on total irrigation has been reduced from 0.48% of SDP in 1985-86 to 0.25% of SDP in 2005-06. Percentage of irrigation expenditure in total revenue expenditure has been reduced from 3.74% in 1985-86 to 1.8% in 2005-06. This indicates there is less emphasis on the maintainenance of irrigation.

6. Conclusion

Agricultural water management is of crucial importance in the context of declining water availability. The official projection for West Bengal increasing gap between demand of water for agriculture and available water (WBPCB 2009). Creation of additional storage and demand side management are dual challenges of present water management. On the demand side there should be more emphasis on extension works on the part of government involving NGOs and farmers' organsiations to disseminate best agricultural water management practices. Institutional arrangements are crucial along with technology in irrigation management (Sengupta 1991). Participatory irrigation management (PIM) and PPP models are being suggested for irrigation management (IWMI 2011). There should be diversification in favour of crops with low water require-

ments. On the supply side ground water potential should be exploited. Mahatma Gandhi National Rural Employment Guarantee Act (MGNREGA) funds should be used to build or rehabilitate storage and irrigation infrastructure in the rainfed areas of the state. The gap between the available and utilizable surface water should be reduced. One major challenge of water management is to reduce this crucial gap. In the dry zone it has also been observed that irrigation technologies like micro irrigation and innovative scheme like happa (Jana 2011) have strong anti-poverty potential. The advantage for West Bengal is that the state is endowed with plenty of rainfall and receives run off from neighbouring states. Much of the irrigation problem in the state can sustainably met through traditional practice of rainwater harvesting and switching to less water intensive crops instead of boro. It is important to make a balance between economic parameters, climatic conditions and institutional arrangements.

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Need for Resuscitation of Credit Cooperatives in India

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Cooperative institutions are bestowed with several negative aspects like lack of professional management, political interference, low volumes of business, small range of banking products, high level of NPA, high transaction costs, high cost of funds, dual control by state government and banking laws and regulator, poor internal control mechanisms, very low level of technology awareness, overstaffed resulting in low staff productivity, lack of transparency, poor quality of audit, poor quality of credit appraisal etc.

Then why there is a need for resuscitation of the credit cooperatives in India. We have done a study on Primary Agricultural Credit Societies (PACS) of Contai and Tamluk sub-divisions of Purba Medinipur district of West Bengal covering three Central Cooperative Banks namely Mugberia Central Cooperative Bank Ltd, Balageria Central Cooperative Bank Ltd and Tamluk-Ghatal Central Cooperative Bank Ltd. We have conducted personal interview of about 200 members of different PACS across the sub-divisions.

Based upon the empirical study we present here about the credit / operational aspect of the PACS, findings of the survey and lastly the suggestions for the improvement of the credit cooperatives.

Kishan Credit - Card (KCC) Kishan Credit Card are issued to farmers through Primary Agricultural Credit Societies. For the purpose of issuing KCC two copies of photo and Xerox copy of voter's identity card are required. KCC are issued to the farmers who are not the members of PACS through Gram Panchayats with the help of nearby Cooperative or nationalized banks operating in the locality. The rules and regulations for issuing KCC remains the same. Credit limit for KCC are fixed on the basis of ownership of land of the farmers. The benefits of farmers is that they can withdraw money as and when needed but PACS have not yet started issuing KCC on large scale in the locality due to the

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reason for maintenance of books of accounts and time for which member farmers are unable to reap the benefits of KCC. Agricultural loan for kharif season (Aamon) are issued in the month of April but the process of agriculture for kharif season is started in the month of June-July. During this gap period the farmers utilize the loan for personal and other purpose and they suffer from lack of adequate fund for agriculture in the time of need. Again at the time of repayment of loan the market price of the crop are low that the farmers are either not in a position to sale their produce or they are forced to sale their produce at reduced rate; again those who are engaged in agriculture and in business they have to clear their dues to creditors in the month of March as a result they face crisis in the repayment of loan. Though there is a provision of fixing the support price by Government for paddy but some people engaged in unethical practices from owners of Rice Mill and PACS purchase poor quality paddy at reduced price from open market and supply it to the Government. KCC are provided to marginal farmers. About 70% of the member farmers utilize the loan from KCC other than for agricultural purposes. There is no cost for issuing KCC.

Agricultural Credit - For Kharif and Rabi crop cultivation short term loan is provided by PACS. Crop Insurance @ 2.5% is deducted from the loan provided to the members. Apart from this PACS also deduct premium for accidental death @ ₹ 15 per year from the member farmers. On account of crop failure due to the natural calamity officers from Insurance Companies do crop cutting in the specified field / area of land as samples to measure the productivity of the land and to measure the quantum of loss from crop failure. Generally the samples for crop cutting are done in the nearby field beside the road but the field which are inside the villages or part which are in the middle of the field are not selected as samples for crop cutting even if crop failure occurs in these parts of the locality as a result no compensation is received from the Insurance Companies. It is our experience that people who suffer from crop failure get the same amount of compensation as received by the people who do not suffers from crop failure to that extent.

Earlier the member farmers were to purchase fertilizers from specified shop from the loan provided for agriculture but now the members can purchase fertilizers from open

market. Some of the Board Members of certain PACS who are engaged in the business of fertilizer charge higher price than the price as stipulated / fixed by government and in order to earn profit they are also engaged in the black marketing of the fertilizers.

Generally PACS do not provide long term loan. Long term loan are provided for betel leaf plantation, purchase of motor van, power tiller etc. Some PACS provide storage facility of the crop. Number of Godown maintained by Mugberia Central Cooperative Bank Ltd (MCCB) is 20 and the total capacity is 4,800 MT.

Table 1

Name of Branch of MCCB Ltd	Number of Godown	Capacity (MT)
Main	5	600
Bajkul	3	100
Heria	4	400
Contai	8	3,700
Total	**20**	**4,800**

Chalti Samabay Krishi Unnayan Samity and Balubarh Samabay Krishi Unnayan Samity of Contai Branch have 1 and 2 Godown with capacity of 600 MT and 1,500 MT respectively.

Storage facility is provided after charging rent and on collateral security of crops. Long term loan are provided by Agricultural and Rural Development Banks for purchase of Machinery, Land Renovation etc. Agricultural Development Officer working at Block Level some times provide training to the farmers through gram panchayats for increasing the fertility of land and on farmer education. The use of organic fertilizer is very little. Earlier organic fertilizers meant only the use of cow dung in the field for crop cultivation. But presently vermi compost, oil cakes of mustard, neam, mahua, karanja, are also available for use in the field.

Cost of Cultivation - The cost of cultivation is different for different farmers depending on the area of land cultivated, use of own labour and hired labour. Generally the cost of cultivation of kharif crop (paddy) varies from ₹175 ₹180 per decimal of land and cost of cultivation of rabi crop (paddy) varies from ₹260 ₹265 per decimal. The loan amount provided by PACS for kharif crop is ₹130 (raised from ₹104) per decimal which is about 70% of the amount required and for rabi crop the amount of loan disbursed is R ₹170 (raised from 145) per decimal which is about 65% of the amount required for cultivation. For betel leaf plantation loan amount provided is ₹2,200 per decimal. Betel leaf plantation is a

cash crop which is quite popular in the district of East Midnapore district of West Bengal (eg. Ramnagar, Depal, Mohanpur, Rajnagar, Alangiri, Amarda, Amarshi, Paniparul etc). There are villages where PACS and banks are functioning. Various village developmental grants from government are released through these PACS and banks but there are also villages where no banks are operating except PACS and the grants for NREGS are also provided through these PACS and for these they are provided very little fund as contingency. In almost all the PACS the members are not able to clear their dues in time because these members have to repay their dues to usurers and creditors of the villages. So the board members of the PACS make arrangement with the usurers to repay the loan and the excess interest are paid to the usurers. The common term used in parlance is "Dharat Sud" means "Added Interest". The work load of the employees of the PACS is quite high but their salary is very low. So these employees face economic crises to run their family. The categorization of BPL is based on the ownership of land. It is our experience that people with BPL card have good economic condition with no ownership of land but the marginal farmers with little land are clubbed in APL Category.

Table 2
Statement of Cost of Cultivation of Paddy in East Midnapore

	Activities	**Kharif** ₹	**Boro** ₹
1.	Irrigation	N.A.	1,500
2.	Ploughing	1,000	1,000
3.	Sowing of Seeds	300	300
4.	Plantation of Crop	2,000	3,000
5.	Fertilizers & Insecticide	1,500	2,600
6.	Cleaning of weeds	500	1,000
7.	Harvesting	2,800	2,600
Total cost for 46 decimal of land		8,100	12,000
Production (Kg of paddy)		800	1,200
Cost per decimal		176	261

Loan Interest - The agricultural loan disbursed by PACS @ 7% for both Kharif and Rabi crop. The Kharif loan are disbursed in the month of April and are collected by 31st March of the next year while the Rabi (Boro) loan are disbursed in the month of January. The loan repayment schedule is in the month of July but the bank officials do not take initiative in the month of July rather repayment of Rabi loan is made in the month of December so that Kharif loan can be disbursed. What is interesting to note that the rate of interest of Boro loan is @ 7% from January to July while the rate of interest is @ 11% from August to December if the loan is not paid in July in other words the agricultural loan is treated as personal loan if not paid in time.

Findings of the Survey

Average age of the members taking loan from for agricultural purpose is 50 years. Average area of land cultivated is between 93 138 decimal of land. Average size of short term loan is ₹13,160 for each agricultural season. Some PACS do provide medium term and long term loan for betel leaf cultivation and for allied agricultural activities. Average member of family is 7 and earning members in the family is on an average 2. Literacy level is 100 %. The members who are in service have completed graduation and in some case post graduation else education is up to class x. There is no scope for farmer education or formal training for cultivation. Average earning of the family is between ₹5,000-10,000 p.m. Those who are also engaged in service have earnings more than ₹15,000 p.m. whereas those who are engaged only in farming have earning between ₹2,000-5,000 p.m. About 30% of the families are BPL card holders. About 55% of the members are also depositors. Remaining of the members are only loanee members. Almost all members divert the agricultural loan for other household activities. Members who are marginal farmers take land for cultivation on barga and on lease. On an average members have to visit PACS for 2 to 3 times for sanction of loan. Marginal farmers also take loan from usurers @ of 3% p.m to meet the credit need. These factors are directly related to the productivity, adoption of modern techniques for cultivation, investment in agriculture and improvement in agricultural activities. Young generation is not ready to take up farming as a profession. NREGA programme have also resulted in decrease of agricultural labourers and increase in the labour cost.

Challenges before the Indian Cooperatives

Cooperative banks have less resource as compared to the other nationalized and public banks. Several committees have been formed by Reserve Bank of India for restructuring and development of the cooperatives particularly credit cooperatives but the recommendations are not accepted and implemented by the government. A task force was constituted by the Central Government under the chairmanship of Prof. A Vaidyanathan in 2004 and recommended for a financial assistance to a tune of ₹13,596 crore but only ₹8,661 crore (64%) has been released by NABARD for recapitalization of 53,380 PACS in sixteen states as on 31.03.2011. Rising operating expenses of these cooperatives

indicates operational inefficiencies. This suggests that a comprehensive planning to streamline the business activities and human resource development initiatives is required in this regard. Also computerization of PACS needs further impetus. The process of adoption of Common Accounting System (CAS) and Management Information System (MIS) for PACS should further become broad based. Proper training and orientation programme is needed for the employees of these institutions in order to familiarize them with the new technology. The cooperatives are governed by multiple agencies with overlapping authority of control. Proper mechanism to be developed and demarcation of authority of NABARD, RBI and Government Agencies needs to be done. To strengthen the PACS proper recruitment policies needs to be developed. Professionalism and leadership from successful cooperatives needs to be inculcated. Accountability of the personnel involved in the cooperatives needs to be delineated. Upgradation of the infrastructure like godown and storage needs to be addressed simultaneously the products should be properly marketed through better packaging. Financial restructuring of loss making cooperative units needs to be done.

Suggestions

- Table 3 reveals that even though the investment in Agriculture and Allied Activities has increased but the actual expenditure as a percentage of total expenditure has decreased over the planning period. The production credit in Agriculture sector has overlooked the requirement of small and marginalized section resulting in the formation of Task Force under the chairmanship of Umesh Chandra Sarangi. So, in order to increase the GDP of agriculture sector increase in the production credit and the investment expenditure in agriculture sector are required. Production credit and Investment expenditure in agriculture sector can be taken care of if the Cooperative Credit can be enhanced and if Cooperative Structure is strengthened. Investment in agriculture is not possible through FDI in retail agricultural activities rather Government should take initiative to increase investment in agriculture with better irrigation facility and improving the storage mechanism.

Table 3
Actual Plan Outlay for Agriculture and Allied Activities

Years	Amount (₹Crore)	Percentage
Sixth Plan 1980-85	6,623.5	6.1
Seventh Plan 1985-90	12,792.6	5.8
Eighth Plan 1992-97	24,895.7	5.16
Ninth Plan 1997-02	42,462.0	4.9
Tenth Plan 2002-07	58,933	3.9
Eleven Plan 2007-12 (Projected)	1,36,381	3.7

Source: Economic Survey 2010 11 (Planning Commission)

- Table 4 reflects that on 31.03.2003 the average size of loan from cooperative sector was ₹6,637 and the average size of loan from commercial bank was ₹31,585 (Vaidyanathan Committee Report). But on 31.03.2009 the average size of loan from cooperative sector was ₹13,862 and the average size of loan from commercial bank was ₹74,876. This shows that though the commercial banks meet their targets for lending to the priority sector, they have moved more towards larger customers. Thus, in a country predominated by small or marginal land holdings, the reach of the cooperative system is much deeper than the other institutional arrangements in the rural areas.

PACS NAFSCOB. Total number of borrowers assumed to be total no. of accounts.

- The Government of India, as part of its strategy to boost agriculture production, announced a package to double the flow of institutional credit to agriculture within three years starting 2004-05. NABARD and RBI were vested with the responsibility of overseeing with the implementation of the programme. One of the objectives of the study conducted by NABARD after the completion

Table 4
Average Loan Size of Public Sector Banks vis-à-vis PACS

Amount in ₹

Year	Particulars	Public Sector Banks (PSBs)	PACS
31.03.2003	No of Accounts	164 lakhs	639 lakhs
	Loan Amount Outstanding	51,799 crore	42,411 crore
	Average Loan Size	31,585	6,637
31.03.2009	No of Accounts	288 lakhs	462 lakhs
	Loan Amount Outstanding	2,15,643 crores	64,044 crore
	Average Loan Size	74,876	13,862

Source: PSBs Report of Trend and Progress of Banking, RBI.

of the programme was to study the trend in ground level credit flow to agriculture, number of accounts and coverage of new members. But nowhere in the report have mentioned the average loan size of the commercial banks. We have seen that the commercial banks which are located in the rural area have very few staff and it is beyond their capacity to overlook the loan for disbursement for cultivation. The commercial banks are fulfilling their commitment for disbursement of agricultural loan by providing loan to allied agricultural activities.

- If cooperative sector is ruined or neglected by the Government then very recently we can expect a task force to be formed to look after increasing dependence of the farmers on the usurers. If we accept the claim of the commercial banks about fulfilling the commitment of lending to priority sector then we would like to request RBI to come up with the data on amount of loan disbursed to marginal farmers.

- Private companies engaged in allied agricultural activities are giving advertisements seeking for investment in agricultural commodities. These companies are actually doing hoarding activities and selling the produce at exorbitant prices depriving the poor and marginal farmers and ensuring return to the rich. It is very interesting to see the articles from Commodities Market in India urging for mitigating risk through forward and future market contracts. Is it the mockery of the farmers or the ignorance of the economist that the farmers are not educated to know about forward and future markets?

- The amount of loan disbursed to farmers for cultivation is only 65-70% of the cost of cultivation. If better storage facility is provided to the farmers to keep the produce and the loan amount is disbursed against the collateral security of the produce then more loan amount can be sanctioned and the farmers can utilize the loan for personal household purpose also.

- It is our experience that the poor and marginal members of the society are able to support their livelihood because of the benefits of BPL category, NREGA and other social security provided by the

Government. These are short term measures to improve the economic condition of the poor. Without increase in production or productivity the economy cannot sustain for larger time.

NREGA beneficiaries are engaged mainly in earth works in the locality. NREGA programme can use the man force for increase in agricultural purpose.

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NEWS & NOTES

No direct lending role for Nabard: Government

The government has turned down a proposal to allow the country's largest rural bank to lend directly to customers, dealing a setback to its diversification plans. National Bank for Agriculture and Rural Development (NABARD), which is into re-financing, was looking to broaden its portfolio through direct lending to the infrastructure sector, especially creation of warehouses.

"There was this demand (for direct lending), but after careful consideration we have decided that NABARD should stick to its developmental role and continue to engage through re-financing," a finance ministry official said, adding that since both commercial and regional rural banks have a greater outreach, NABARD should support them rather than getting into competition. The government plans to increase the paid-up capital of NABARD to ₹5,000 crore by infusing about ₹2,000 crore this fiscal, which will give the bank more headroom for expansion. In the current fiscal, the government has allocated ₹5,000 crore for creation of warehousing facilities.

RBI further modifies Kisan Credit Card (KCC) Scheme

RBI had Revised Kisan Credit Card (KCC) Scheme. In a notification dated Aug 7, 2012 addressed to Commercial Banks, RBI has said, "It has been decided to make certain changes in the revised KCC Scheme as indicated in the Annex. All banks are advised to take note and implement the revised Kisan Credit Card (KCC) Scheme, as it stands modified, with immediate effect".

In Para 6 on Disbursement, in 6.1 the clause, "However, each installment of the drawable limit drawn in a particular year will have to be repaid within 12 months", in May 11 Circular has been remover. Other notifications are as follows :

Particulars	Instructions as per Circular RPCD.FSD.BC.No. 77/05.05.09/2011-12 dated May 11, 2012	Modified Instructions
Para 10 Repayment Period	10.1 Each withdrawal under the short term sub-limit as	10.1 The repayment period may be fixed by banks as per the

	estimated under (a) to (e) of para 3 above, be allowed to be liquidated in 12 months without the need to bring the debit balance in the account to zero at any point of time. No withdrawal in the account should remain outstanding for more than 12 months.	anticipated harvesting and marketing period for the crops for which a loan has been granted.
Para 13 Other Features	13.ii The KCC holder should have the option to take benefit of Crop Insurance, Assets Insurance, Personal Accident Insurance Scheme (PAIS) and Health Insurance (wherever product is available) and have premium paid through his KCC account. Necessary premium will have to be paid on the basis of agreed ratio between bank and farmer to the insurance companies from KCC accounts. Farmer beneficiaries should be made aware of the insurance cover available and their consent is to be obtained, at the application stage itself.	13.ii Besides the mandatory crop insurance, the KCC holder should have the option to take benefit of Assets Insurance, Personal Accident Insurance Scheme (PAIS), and Health Insurance (wherever product is available) and have premium paid through his KCC account. Necessary premium will have to be paid on the basis of agreed ratio between bank and farmer to the insurance companies from KCC accounts. Farmer beneficiaries should be made aware of the insurance cover available and their consent (except in case of crop insurance, it being mandatory) is to be obtained, at the application stage itself.
Para 14 Classification of Account as NPA	14.1 With a view to simplifying asset-classification, the Committee has recommended that an account could be treated as "standard", when the balance outstanding is less than or equal to drawing limit [short term (crop) loan] at any point of time during the preceding one year. In other words, it is suggested that the short term loan (with major component of crop loan) sanctioned on the KCC can be given the same treatment as a "cash credit" account for the	14.1 The extant prudential norms for income recognition, asset-classification and provisioning will continue to apply for loans granted under revised KCC Scheme.

	purpose of applying prudential norms and should not be treated as "out of order" if the balance outstanding is less than or equal to the drawing limit and each drawl is repaid within a period of 12 months. Term loan under KCC has fixed repayment schedule and is to be governed by extant prudential norms.	

LIC told to design specific scheme for farmers

The Finance Minister, has directed the Life Insurance Corporation to design a life insurance scheme a Kisan Bima Yojana for farmers. This scheme should be on the lines of the Janashree Bima Yojana, a social security scheme, where cover can extend up to 65-70 years. The additional premium could be borne by the farmers covered under the scheme, he suggested.

On the coverage of farmers under agricultural insurance, Finance Minister noted that the number of non-loanee farmers bave been coming down over the years. Agricultural Insurance Company of India Limited should work towards bringing not only all loanee farmers under cover but also as many non-loanee farmers as possible.

Nationalized banks to aid of broke DCC bank farmers

Nationalized banks have agreed to give loans to farmers to the six District Central Cooperative (DCC) banks that have gone broke. The agreement was reached at a special meeting chaired by Maharashtra Chief Minister Prithviraj Chavan in Mumbai. The meeting was attended by officials from the government departments concerned and senior managers of nationalized banks. The six DCCs Wardha, Buldhana, Jalna and Dhule-Nandurbar-have been denied permission by the Reserve Bank of India (RBI) to accept deposits, and in turn give loans, on account of their bad financial condition in arms of poor capital-to-risk-weighted-assets, cash reserve and statutory liquidity ratios and positive net worth. It had raised a question mark over the fate

of nearly eight lakh farmers who normally get loans from these DCCs.

The nationalized banks have agreed to give loans to these farmers directly after it was decided that the DCCs and Primary Agriculture Credit Societies (PACSs) attached to them will process the loan applications and forward them to the banks after endorsement. This will solve the problem of extra manpower the banks would have otherwise needed.

RBI issues norms for non-bank entities to set up ATMs

The Reserve Bank of India has issued final guidelines permitting permit non-bank entities to set up, own and operate ATMs in India. This is to ensure the expansion of ATMs in smaller centres across the country. The ATM roll-out conditions stipulated for the non-bank entities, which will be christened as white label ATM operators (WLAOs), are stiff. It has prescribed three schemes under which the roll-out of white label ATMs (WLAs) can happen.

Under the first scheme, WLAOs have to install at least 1000 WLAs in the first year; in the second year install at least twice the number installed in the first year; and in the third year install at least thrice the number installed in the second year. Under the aforementioned scheme, for every three WLAs installed in Tier III to VI centres, one WLA can be installed in Tier I (metros) to II centres (big cities).

Under the second scheme, WLAOs have to install at least 5000 WLAs every year for three years. For every two WLAs installed in Tier III to VI centres, one WLA can be installed in Tier I to II centres. Under the third scheme, WLAOs have to install at least 25,000 WLAs in the first year and at least another 25,000 in the next two years. For every one WLA installed in Tier III to VI centres, one WLA can be installed in Tier I to II centres.

What is common under the three schemes is that out of the WLAs installed in Tier III to VI centres, a minimum of 10% should be installed in Tier V and VI centres. Only cards issued by banks in India (domestic cards) will be permitted to be used at the WLAs in the initial stage

New risk-based supervision for banks in the works

Analysis of probability of failure of a bank and the likely impact of its failure on the banking/financial system will form the basis of the Reserve Bank of India's proposed risk-based supervision (RBS) regime. A committee on RBS for commercial banks has suggested that the regime will be based on evaluating both present and future risks, identifying incipient problems, and will facilitate prompt intervention/early corrective action. The present compliance-based and transaction-testing approach (CAMELS) is more in the nature of a point-in-time assessment.

As per the recommendations of the High Level Steering Committee (HLSC) for Review of Supervisory Processes for Commercial Banks, the periodicity/intensity of on-site inspection of a bank would depend on its position on the Risk-Impact Index Matrix rather than its volume of business. Under the proposed RBS, the supervisory rating would be a reflection on the risk elements (inherent business risks and effectiveness of control).

The supervisory rating exercise would aim at determining the overall probability of failure of the bank in light of risks to which the bank is exposed, strength of control/governance and oversight framework in place and available capital. The bank would be apprised of the direction/trend of key risk groups along with overall risk faced by it.

Banks asked to e-auction mortgaged properties

The government has asked banks to conduct electronic auction (e-auction) of properties that are sold to recover payments from the defaulting borrowers. This has been done to bring transparency in transactions concerning mortgaged properties, which are sold by financial institutions to recover their dues. The finance ministry has initiated this step to eliminate any chances of side-deals being done by bank officials in connivance with the property dealers. “Public sector banks have been told that they can do only e-auctions to sell properties as per the provision of the SARFAESI Act.

Under the Securitisation and Reconstruction of Financial Assets and Enforcement of Security Interest Act (SARFAESI), 2002, banks and financial institutional are allowed to auction properties (residential and commercial) when

borrowers fail to repay their loans. It helps banks in reducing their non-performing assets. If a home loan borrower defaults on repayments at a six month stretch, banks give a 60-day period to the borrower to regularise the repayment.

In case the repayment doesn't happen, the loan is declared as non-performing asset (NPA) and it is auctioned by the bank to recover the debt. In the physical auction, banks set a minimum reserve price and accept bids from interested parties in sealed envelopes. The property is sold to the highest bidder. To remove the discretion available to the bank officials, the government has asked banks to conduct e-auctions. State-owned banks have already started listing the properties being auctioned at the central public procurement portal *www.eprocure.gov.in.* As per the finance ministry's directions, the auctioning bank will have to take into account the borrowers dues to the other financial institutions as well. The bank will make remaining payment to the borrower after dues of all financial institutions are recovered.

Bank credit to farm, SME sectors forms over a third of bad loans

Loans to agriculture and micro, small and medium enterprises (MSMEs) were the main contributors to banks' bad loans in 2011-12. Agriculture and MSMEs used up only a fifth of bank credit, but they accounted for 36% of banks' non-performing loans, data from the RBI's latest Financial Stability Report show. It is interesting that these two segments make up priority sector lending, which is mandatory for all banks. Around 4.6% of the agriculture loans and 4.8% of MSME loans were non-performing as of March 2012, according to the report. The proportion jumped by 1.2-1.3 percentage points over the past year.

Loans given to consumers, in contrast, witnessed lower payment defaults. Non-performing loans as a proportion of retail credit fell from 3.2% in March 2011 to 2.8% in March 2012. More than half the consumer loans go to fund home purchases, where default rates tend to be low. Banks saw a jump in bad loans this year as public sector banks switched to computer-based identification of non-performing loans, instead of manual methods that allowed discretion. Rising interest rates seem to have boxed small and medium enterprises into a corner, making it difficult for them to service their debt. According to a CRISIL Research study, a one percentage point rise

in interest rates shaves roughly 14% per cent off the profits of the average SME.

Borrowing costs actually rose by 2.5% points in the 18 months ended March 2012. The overall stressed assets (NPAs and restructured assets) for the banking sector rose from 5% in March 2011 to 6.23% in March 2012.

Rising farm input costs may trigger NBFC growth

The rising demand for money in rural India to buy costly agriculture inputs will probably push gold loan NBFC's (non-banking finance companies) growth by 15-20% despite RBI's directive to lend only 60% of gold value to consumers from the earlier 75%. The country's biggest gold loan financier has achieved over 55% growths last year. The margins might take a hit as the company will only open 250 branches - 30% lesser than the previous estimate.

Earlier, RBI asked banks in April to reduce the exposure to any single gold loan NBFC from 10% to 7.5% of their capital funds and removed the priority sector status of these loans. The regulator sought to bring transparency in the business model of gold loan companies that grew by more than 85% in the last year. Recently, the gold loan companies formed a self-regulatory organisation to bring more fairness and transparency in the ₹1-lakh-crore industry.

RBI Guv hits out at poor service to 'no frills' account holders

Reserve Bank of India Governor D Subbarao gave vent to his annoyance against the shoddy treatment given by front line branch managers to 'no frills' account holders and low-income households that too when the banking sector is witnessing "a disappointingly large number of cases of bank branches with low customer footfalls and 'no frills accounts' which remain largely inoperative".

"The general impression I got is that frontline branch managers treat 'no frills' accounts as a 'nuisance' and low income households as an intrusion into their time and their business. This is disappointing to say the least," Subbarao said at a function organised by Indian Overseas Bank. "Bank managers have no time for them; the documentation required is not indicated all at once; the paper work is exacting; the attitude of the bank staff is

unsympathetic if also uncivil," Subbarao said.

Subbarao said banks should look upon financial inclusion as an opportunity to build 'fortune at the bottom of the pyramid'. "We need to reach out to people left behind, inspiring their trust and confidence in the banking system and supporting them in improving the quality of their lives."

NHB to extend home loan refinance to more regional rural banks

To encourage low-cost housing in rural areas and small towns, the National Housing Bank is planning to give refinance to 15 more regional rural banks in 2012-13. In the last couple of years, 19 RRBs have tapped NHB for refinance against home loans disbursed by them. According to the Chairman and Managing Director of NHB, Mr R. V. Verma, the capacity building initiatives launched by NHB have led to 19 RRBs collectively building up a home loan portfolio of about ₹500 crore. The capacity building exercise entails organising seminars/conferences to sensitise RRB staff about home loans and explaining the mechanics of refinance to the management.

There are 82 RRBs across the country. As on March-end 2011, the RRBs collectively had deposits and advances aggregating ₹1,66,232 crore and ₹98,917 crore, respectively. Emphasising the importance of RRBs as a distribution channel for providing loans for low-cost housing, Mr Verma said borrowers of these banks are normally end-users and not investors. Their average home loan requirement is in the ₹ 5-6 lakhs range or so. This fits with NHB's strategy and vision of encouraging low-cost housing.

SEBI, RBI propose survey to assess financial literacy

Financial sector regulators, including the RBI, the Sebi and the IRDA, have proposed a nationwide survey for assessing financial inclusion and literacy in the country in the draft 'National Strategy for Financial Education' that seeks to "create a financially aware and empowered India" and convert savers into investors. The draft, prepared under the aegis of the sub-committee of the Financial Stability and Development Council (FSDC), pitches for a five-year action plan for financial literacy with initial focus on four sectors

banking, securities market, insurance and retirement planning.

The strategy, the draft said, is to undertake a massive financial education campaign to help people manage money more effectively to achieve financial well being by accessing appropriate financial products and services. On delivery channels for financial education, the draft policy said that it should start at school and that people should be educated about financial matters as early as possible in their lives.

Akshaya e-centres make life easy in Kerala

Launched as an ambitious programme to provide computer education to at least one member in all families in the state, especially in the rural parts, Askhaya e-literacy centres have transformed themselves into effective centres that help the public to avail a multitude of government as well as private services under one roof.

For instance, if residents want to submit a ration card application or want to apply for a certificate from a village office, they can avail the services of a string of government departments without being present at these offices physically. They can send applications and easily receive digitally signed certificates through the nearest Akshaya centre. In addition, they can use it to make online payments for several utility services like telephone, water and power, and even book railway tickets. Currently, every panchayat in the state has at least two Akshaya centres. The task undertaken by these young private entrepreneurs on behalf of their fellow citizens range from e-filing of tax returns, computer training programme of international standards, UID registration, and even finding skilled labourers for construction or maintenance work from the local Akshaya database. The centres are also affiliated to Indira Gandhi National Open University (IGNOU) and work as its distant arm.

Having started off in 2002 as an e-literacy movement in Malappuram, one of the most backward districts in the state, Akshaya had undergone a tremendous transition in the last 10 years. From basic IT education and training in internet, the programme turned out to be one of the most successful models for effective proactive citizen service centres in India. It was a rare fete

when Akhaya registered 15 lakh families in 45 days in the comprehensive health insurance scheme run by Health Insurance Agency of Kerala (CHIAK).

RBI levels the field for priority sector lending

The Reserve Bank of India (RBI), said that foreign banks having 20 or more branches in the country will be brought on par with domestic banks for priority sector targets in a phased manner over a maximum period of five years starting from April 1, 2013. Foreign banks with less than 20 branches will have no sub-targets within the overall priority sector lending target of 32%. This is expected to allow them to lend as per their core competence to any priority sector category. The overall target under priority sector lending is retained at 40% as suggested by the Nair Committee. The targets under direct and indirect agriculture are retained at 13.5% and 4.5%, respectively while refocusing the direct agricultural lending to individuals, self help groups (SHGs) and joint liability groups (JLGs) directly by banks.

RBI brings more services under priority sector lending

Priority sector loans are small-value loans to farmers for agriculture and allied activities, micro and small enterprises, poor people for housing, students for education and other low-income groups and weaker sections. In the revised guidelines, the central bank kept the PSL target unchanged at 40%. It revised the list of services which will be classified as priority sector. Now, housing loans of up to ₹ 25 lakh in metropolitan cities and ₹ 15 lakh in other centres will be classified as priority sector lending.

Educational loan of up to ₹ 10 lakh for courses in India and ₹ 20 lakh for courses abroad will also come under priority sector lending. Bank lending to farmers who are caught in the web of moneylenders and other non-institutional organisations will also be classified as priority sector lending. Loans to individuals other than farmers up to ₹ 50,000 to prepay their debt to non-institutional lenders will also be eligible for PSL under the revised guidelines.

Loans to food and agro-processing units, for housing projects for economically weaker sections and low-income groups up to ₹ 5 lakh and loans to State

Sponsored Organisations for Scheduled Castes and Scheduled Tribes will also form the priority sector lending criterion for banks. In an effort to boost green energy, the central bank suggested that loans to individuals for setting up of off-grid solar and other off-grid renewable energy solutions for households be tagged under priority sector lending. Loans to micro and small service enterprises up to ₹ 1 crore and all loans to micro and small manufacturing enterprises will also be classified as priority sector loans.

RBI Governor stressed for shift to e-payment systems

Reserve Bank of India governor D Subbarao stressed the need to proactively shift from cash to electronic payment systems. He said India has one of the lowest numbers of ATMs and point of sale (PoS) terminals about 63 ATMs and 497 PoS for every one million population. Only a small fraction of over 10 million retailers in India have access to card payment acceptance infrastructure. Launching the Indian Banks' technology Consortium (IBTC) and inaugurating the mobile banking security lab at the Institute for Development and Research in Banking Technology (IDRBT), he said, "The large value payment systems have mostly shifted to the electronic mode, possibly because of the regulatory fiat. Disappointingly, retail payment systems continue to be paper-centric and electronic systems have not penetrated deep enough".

He said payment and settlement systems are fast-growing areas, witnessing rapid innovations, spurred by market forces as well as technology. We need to bring in the best practices and products of the world to India but we should adapt them to our environment and conditions. In particular, we should focus on reducing costs and improving 'literacy' about payment products and systems. And as we shift from a largely cash-based economy to a less cash-based economy, we need to grapple with the monetary policy implications of this transition," he said.

RBI favours A/C, ATM card for poor

The poorest of the poor will now be able to open bank accounts with an ATM card with RBI issuing new guidelines asking banks to do away with minimum balance requirement for basic accounts. These accounts are also aimed at preparing the infrastructure for

transfer of government benefits, electronically from the government to the citizen. The new directive comes after banks failed to make any major headway in no frills accounts. Also a major disadvantage of the no frills account was that without a cheque book or ATM facility the ability to conduct transactions was limited. The directive comes at a time when the number of ATMs in India has crossed 1 lakh with more than a third of banking transactions being done through the ATM. While there will be no limit on the number of deposits that can be made in a month, account holders will be allowed a maximum of four withdrawals in a month, including ATM with drawals; and facility of ATM card or ATM-cum-Debit Card, the RBI said.

Higher farm credit targets, a cause for bad loans rising: RBI Guv

The Government's bid to push more credit to the farm sector appears to have had unintended consequences bad loans of banks have increased. During 2004-12, the gross non-performing assets (NPAs) or bad loans ratio in the agriculture sector was higher than the corresponding ratio in the non-agricultural sector, except during 2009 and 2010, said Reserve Bank of India Governor, Dr D. Subbarao. The higher NPA ratio was partly due to the implementation of the agricultural debt waiver and relief scheme in 2008-09, the Governor said in his speech at Nabard's 30th anniversary function.

In 2011-12, agricultural NPAs rose by 47% as against the NPAs in the non-agricultural sector, which rose by 40%. Dr Subbarao observed that the rise in agricultural NPAs during 2011-12 could be due to the lagged effect of double-digit growth in agricultural credit during the last four years (2006-07 to 2009-10), the general economic slowdown and also, possibly, the new system-wide identification of NPAs.

Banks, especially public sector and regional rural banks, stepped up flow of credit to the agriculture sector as the UPA-I Government in 2004 announced measures to double the flow of credit to the agriculture sector within a period of three years. The actual disbursement by banks exceeded the targets in each of the three years. In 2004-05, banks were given a target to disburse ₹1,05,000 crore to the agriculture sector. In 2012-13, they have been asked to disburse ₹ 5,75,000 crore (against ₹

4,75,000 crore in 2011-12). To encourage credit flow to the agriculture sector, since 2006-07, the Government has been running an interest subvention scheme for short term crop loans to farmers for loans up to ₹ 3 lakh per farmer at the interest rate of 7%. An additional subvention of 3% is also given as an incentive to those farmers who pay their short term crop loans on schedule. The RBI has also advised banks to waive margin/security requirements for agricultural loans up to ₹ 1 lakh.

Farm loans being diverted to other activities

Cheaper agricultural loans have been diverted for non-farm purposes, according to the RBI Governor, Dr D. Subbarao. "On visiting some bank branches, it was not clear that the credit being shown as lent to farmers was actually used for agriculture purposes," Dr Subbarao said at the 30th anniversary of National Bank for Agriculture and Rural Development (Nabard). "This evidently defeats the objective of the subvention scheme (for farmers) and needs to be corrected either by modifying the subvention scheme or through tighter monitoring of the end use of agricultural loans". Under the Government's subvention scheme, short-term crop loans are available to farmers at 7% interest. They get an additional three per cent subvention on prompt payment of the loans.

In 2011-12, NPAs in the agriculture sector have risen by 47% against 40% in the non-agriculture sector. Further, there is a shift from direct to indirect credit within agricultural credit. Indirect credit has grown faster, its share rising from about 11% in 1995 to about 29% in 2011. "The rising importance of the indirect credit growth can be interpreted as a reflection of growing credit needs of strengthening the supply chain", the Governor said.

RBI fines coop bank in pune for violating rules

The Reserve Bank of India has imposed a ₹ 5 lakh monetary penalty on Pune headquartered Rupee Co-operative Bank for violation of its instructions/ guidelines. According to an RBI statement, the statutory inspection of the co-operative bank with reference to its financial position as on March 31, 2011 had revealed that the bank had violated the banking regulator's instructions by

granting term loans to some borrowers much in excess of the limit of ₹ 10.00 lakh. The bank had also sanctioned fresh Cash Credit limit to the existing borrowers in excess of ₹ 10.00 lakh, in 4 cases, in violation of the operational instructions, said the statement. Rupee Co-operative Bank has a network of 36 branches and 5 extension counters in Maharashtra.

RBI Clarification on Premature Repayment of Term/Fixed Deposits

RBI's notification dated June 9, 2005 addressed to Commercial banks had advised them "to incorporate a clause in the account opening form itself to the effect that in the event of death of the depositor, premature termination of term deposits would be allowed subject to the conditions which they may specify therein".

Now, in a notification dated Aug 16 2012 RBI has said "It has come to our notice that many of the banks have neither incorporated such a clause in the account opening form nor have they taken adequate measures to make the customers aware of the facility of such mandate, thereby putting the "surviving" deposit account holders(s) to unnecessary inconvenience. Banks are, therefore, advised to invariably incorporate the aforesaid clause in the account opening form and also inform their existing as well as future term deposit holders about the availability of such an option.

The joint deposit holders may be permitted to give the mandate either at the time of placing fixed deposit or anytime subsequently during the term/tenure of the deposit. If such a mandate is obtained, banks can allow premature withdrawal of term/fixed deposits by the surviving depositor without seeking the concurrence of the legal heirs of the deceased joint deposit holder. It is also reiterated that such premature withdrawal would not attract any penal charge.

Agriculture Debt Waiver & Debt Relief Scheme benefits 3.45 Crore Farmers

The Agriculture Debt Waiver and Debt Relief Scheme, 2008 was implemented by Public Sector Banks, Private Sector Banks, Cooperative Banks, Local Area Banks and Regional Rural Banks. The Debt Waiver portion of the Scheme closed on 30.6.2008. The

Debt Relief portion of the Scheme closed on 30.6.2010. Under the Scheme, ₹52,275.55 crore have been released by the Government through Reserve Bank of India and National Bank for Agriculture and Rural Development to give benefit to 3.45 crore farmers. This information was given by the Minister of State for Finance, Shri Namo Narain Meena, in Lok Sabha.

Message of the International Co-operative Alliance (ICA) on the Occasion of 90th ICA International Co-operative Day and 18th UN International Day of Co-operatives 7th July 2012

The 2012 International Day of Co-operatives is a day of unusual significance, as 2012 marks the United Nations International Year of Co-operatives. In keeping with that special occasion, the theme for the International Year is also the theme for this International Day: 'Co-operative enterprises build a better world'. The International Year of Co-operatives is the time to tell the co-operative story to a wider audience. It is not only a story of past success, of individuals coming together during difficult economic times to leverage their resources, access markets, and restore balance to price negotiations. The resiliency and stability of the co-operative enterprise model is also a message for today.

Co-operatives have the scale to contribute in a much greater way to that diversification. Even today, the Global300 Report produced by the ICA shows that the 300 largest co-operatives in the world have a combined annual turnover of USD 1.6 trillion, equivalent to the GDP of many large countries. They provide over 100 million jobs worldwide. In Brazil, Russia, India and Africa, some 15% of the population is a member-owner of a co-operative, compared to less than 4% who are shareholders. In Kenya, co-operatives contribute 45% of GDP, while in New Zealand, they contribute 22%. In the United States, 30,000 co-operatives employ two million people, with the largest regularly appearing on Fortune's '100 best places to work' list.

Co-operatives are values-based enterprises. The co-operative has the greatest degree of participatory governance of any of the major enterprise models. Because of this member engagement, co-operatives reflect the values of the community. Since their earliest days, they have been concerned with how their goods have been produced and their services delivered. A

commitment to sustainability is one of the seven Principles that ICA's members in 100 countries have agreed define a co-operative.

The ICA calls on all co-operators throughout the world to take the occasion of this special year's International Day of Co-operatives to tell their co-operative story. These stories can be found at www.stories.coop.

RBI asks banks to develop cost effective village branch model

The Reserve Bank has asked banks to develop cost effective village branch model in order to promote financial inclusion. "Indeed, I think there is a strong case for a much larger effort on innovating a cost effective village branch model," said RBI Governor D Subbarao. In 2010, a road map was drawn up to provide access to formal banking to every village with a population over 2,000. Under the roadmap, about 74,000 villages with population above 2,000 were identified as unbanked. These villages were allocated to various banks, including regional rural banks, for providing banking services by March 2012.

Uniform grievance redress system

The Finance Ministry has asked public sector banks to put in place a uniform three-tier public grievance redress system within three months. This is to ensure that all customer complaints are resolved within 21 days.

The primary responsibility for resolving grievances will be that of the branch manager. Branches will be allowed 10 days to redress customer grievance, said the ministry directive. If the matter is still unresolved, it will get escalated to the regional/zonal office level, which will get five days to resolve the grievance. If even after this the matter remains unresolved, the complaint will get transmitted to the head-office, which will get six more days to resolve it. Bank customers should be provided multiple channels complaint book/register at the branch, letter/fax/email, toll free telephone numbers/call centres, mobile (voice and SMS), and bank Web site for lodging their grievances, said the ministry.

Banks biased against SMEs, agri sector in debt recast: RBI

Banks are giving preferential treatment to the corporate sector in debt restructuring, and tend to ignore the retail, agriculture and

small and medium enterprise (SME) sectors, which are also the victims of economic downturn, according to Reserve Bank of India (RBI) Deputy Governor, K C Chakrabarty.

"Data suggests that banks are biased while restructuring. Those who can lobby and those who can hire consultants are getting better deals," Chakrabarty said, while speaking at seminar of corporate debt restructuring. "Public sector banks have more retail, agriculture and SME book but it's not reflected in the restructured book, while private sector banks have more corporate book, but the restructuring quantum is very less," Chakrabarty added.

A recent committee of RBI on debt recast had suggested taking away regulatory leeway of lower provisioning given to loan recast in two years time and suggested high provisioning in the interim. "We are looking into all suggestions received on the draft guidelines on restructuring," Chakrabarty said. The deputy governor emphasised the need to have a proper structure to be put in place by banks for debt recast. "The system needs be put in place at zonal, district and bank level to address the issue and every restructuring need not come to head office," he added.

Nabard launches CBS for coops and adhar enabled KCC

The RBI Governor, Dr. D Subbarao launched two of NABARD's initiatives in rural banking, as a part of the celebrations on the 30th Foundation Day of NABARD. The first initiative was the launch of core banking solution (CBS) for cooperative banks facilitated by NABARD, and the second was the launch of Aadhar enabled Kisan Credit Cards to farmers from RRBs.

RBI constitutes Expert Committee to review short term cooperative credit structure. The Reserve Bank of India constitute a Committee to review the existing Short Term Cooperative Credit Structure (STCCS) focusing on structural constraints in rural credit delivery system and explore various ways to strengthen the rural cooperative credit architecture with appropriate institutions and instruments of credit to fulfill credit needs. The Committee will make an in-depth analysis of the STCCS and examine various alternatives with a view to reducing the cost of credit, including feasibility of setting up of a two-tier STCCS as against the existing three-tier structure.

The Terms of Reference of the Committee are:

i. To assess role played by State & District Central Cooperative Banks in fulfilling the requirement of agriculture credit, the primary purpose for which they were set up.
ii. To identify Cooperative Banks that may not be sustainable in the long run even if some of them have met the diluted licensing criteria for the time being.
iii. To suggest appropriate mechanism for consolidation by way of amalgamation, merger, takeover, liquidation and delayering.
iv. To suggest pro-active measures that need to be taken in this direction by the cooperative banks themselves, GOI, State Governments, RBI and NABARD.
v. Any other issues and concerns relevant to the subject matter.

RBI allows RRBs to open branches in Tier-II cities

To increase banking penetration in the country, RBI has allowed regional rural banks (RRBs) to open branches in Tier-II centres without prior approval of the central bank. RRBs could, so far, open branches in Tier 3 cities without taking approval in each case. RBI has stipulated certain conditions for such branches.

67,524 cases pending at debts recovery tribunals

Rising loan defaults and a stringent law to recover assets have piled up as many as 67,524 cases at debts recovery tribunals (DRTs) until March 2012, minister of state for finance Shri Namo Narain Meena informed parliament. The pile of cases at DRT comes despite a provision in the Recovery of Debts due to Banks and Financial Institutions Act that stipulates that efforts have to be made to dispose off cases within 180 days from the date of receipt of the application.

"Some of the important reasons for delay in disposal of cases are increase in filing of new cases, adjournments sought by the debtors and enactment of Securitisation and Reconstruction of Financial Assets and Enforcement of Security Interest Act, 2002 under which appeal cases are filed before the DRTs," Shri Meena said in a written reply.

Cooperatives can turn our agriculture around

Brazil has adopted two measures to keep agriculturists rooted to the soil, with a fair bit of success. The first is, uprooting the well-heeled from their lands through the policy of "not serving its social function" ironically recognised by the Brazilian constitution.

The measure is revolutionary, if not draconian. Groups of landless farmers pressure the Government to legalise their claims on the land they are squatting on that belongs to the large farmers. Roughly 7.8 million hectares have been acquired through this admittedly ham-handed approach, and some 3.7 lakh families have benefited.

Our Constitution clearly would not permit adoption of this rough and ready measure. The second, however, is less revolutionary and would sit well with our grassroots democracy traditions. It consists in people, typically the sharecroppers, banding themselves together into a cooperative and acquiring land with government-guaranteed / subsidized loans. The Government in either case gives all assistance to encourage benign farming practices, such as eschewing use of pesticides, if possible, or using lesser quantities of chemicals, regenerating soil through crop-rotation, and so on. Small farmers and sharecroppers doing or pretending to do sundry work in rural areas such as laying of roads, digging of canals, and so on, under MNREGA, must be restored to the vocation they love dearly farming. The food processing industry should be a natural adjunct, lest there are wastages, and the harvest is utilised to the optimum. And there can be no better way of doing this than through an Amul-like movement whose lynchpin is a producers' cooperative.

Changes in ARDBs

i) Shri Ulhas B. Faidessai, has assumed charge as Chairman of the Goa State Co-op. Bank Ltd., w.e.f. 28th August 2012.

ii) Shri Sujit Das, has assumed charge as General Manager of the Tripura Co-op. Agriculture & Rural Dev. Bank Ltd., w.e.f. 14th August 2012.

iii) Shri Jyotilal Dutta, has assumed charge as President of the Tripura Co-op. Agriculture & Rural Dev. Bank Ltd., w.e.f. 23rd March 2012.

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AGRICULTURAL NEWS

Minimum support prices for kharif crops raised

The Cabinet Committee on Economic Affairs has approved increasing the minimum support prices (MSP) between 15.7% and 53%. Such an increase will benefit crops like paddy, urad, cotton and maize besides others. “This increase has been made on the basis of recommendations given by Commission for Agricultural Costs and Prices (CACP). However, the CCEA has referred the MSP proposal back for two pulses, tur and urad to seek some more clarifications,” the Home Minister. The most prominent kharif crop, paddy (common), has seen minimum rise of over 15%, while maximum increase has been in the case of jowar with over 53%, followed by ragi. At the same time, MSP for urad, groundnut, soyabean and sunflower has been increased by over 30%.

Innovative farming did the trick

Vasant Futane is a farmer with a difference. He is completely into organic farming since 1982, growing grains, vegetables and fruits. But the urge in him to do something creative prompted him to do something really innovative.

He brought mango seeds from all over the country not the grafted ones, but the desi varieties and grew them as trees. In the hot and non-irrigated land of Rawala village, in Amravati where Futane practiced his farming, some survived, others didn't. However, real innovation began when he decided to develop these into special varieties. He cross pollinated the mango varieties and in the process, created some marvelous trees that bore mangoes having a unique smell, taste and size. That was the beginning of a success story and an experimentation no one else has apparently tried so far.

"I was in no hurry so I concentrated on the experiment of cultivating mangoes using only seedlings. I would plant four seeds at one place and continue with the best one after germination. Now I have developed about 40 varieties, almost ten very good ones. They will live for hundreds of years and that is my contribution for my future generations," says Futane. He had to also add modern horticulture

methods like grafting into his cultivation practices for commercial reasons. Since the past few years, he also has grafted Kesar, Rajapuri Ratna, Sardar and Langda variety of mangoes. Futane's farm is an ideal example of a self-sufficient sustainable agriculture system where they buy nothing from the market.

Check this watershed of a project

In 1993, Ramesh Ginoya, a resident of Balapar village in Jamkandorna taluka of Rajkot, had to give away his mini-tractor to a creditor. He had earned just ₹60,000 from the 45 bighas of land he owned as against the ₹ 1.25 lakh he spent on cultivation. He had no option as he could only harvest a single crop in a year.

In 2012, he owns the same 45 bighas of land but is now the proud owner of a car, an apartment. "The credit entirely goes to watershed works carried out by Vruksh Prem Seva Trust (VPST), in our village. It turned our fortunes around," he said. "We have built 70 check dams in our village with their help." VPST, founded by Premjibhai Patel, works for rural development and involves the community in all its projects. It has initiated various techniques of rainwater harvesting in villages. Premjibhai, better known as Premji Bapa among villagers, has built more than 1,700 check dams (small, medium and large) in 30 villages of Gondal and Jamkandorna taluka of Rajkot under watershed schemes of the government through VPST. The state government provides 90% support for watershed schemes, whereas the remaining 10% is contributed by the beneficiary.

The model followed by the trust is being followed in many other states like Madhya Pradesh. Premjibhai was also awarded with 'National Water Award-2008' by Union Ministry of Water Resources for the watershed projects with effective community participation.

Best of waste: Pine needles boost rural economy

The needles shed by pine trees had since ages been a cause for worry for hundreds of villages in Hamirpur district of Himachal Pradesh. The needles, which contain resin canals making them inflammable, would lead to major forest fires in summers, reducing trees to ashes and charring wild animals to death. However, things have changed now. With a Punjab-based NGO and the government of the hill state joining hands, the same needles have now become a

source of income for the rural people.

The forest department of Himachal, in collaboration with Ambuja Cement Foundation, an NGO run by Ambuja Cement, Ropar, has developed a mechanism to convert the needles into bio fuel. The cement plant uses this fuel for its operations. Starting with mere 40 to 45 tonnes of needles two years ago, the villagers (around 200 families) collected nearly 600 tonnes this year, earning ₹ 12.61 lakh. Besides, the local transporters earned over ₹ 11 lakh, boosting the rural economy to a good extent, says Additional Forest Conservation Officer of Hamirpur.

The company makes direct payment to the locals, with the forest department facilitating the trade between the company and the villagers. In all, nine villages of Barsar tehsil and six of Nadaun in Hamirpur district and two villages in Una districts are engaged in collection of pine needles.

The needle fall starts in April-end and continues till the beginning of July. According to officials, the collection of needles greatly helps in checking forest fires. On an average, a pine forest yields two to three tonnes of needles per hectare during a season and Himachal Pradesh has pine forests spread across 1,500 sq km, found up to an altitude of 5,500 feet.

Farm production needs to rise 60 % : FAO

World farm production must rise 60% by 2050 to meet the needs of a growing population but this has to happen in a "more sustainable way", the U.N. food agency FAO and the OECD said. "It's mostly going to be about productivity", said Angel Gurria, head of the Organisation for Economic Cooperation and Development (OECD), at a press conference in Rome, explaining that farmland area would increase only slightly.

Food and Agriculture Organisation (FAO) head Jose Graziano da Silva said the world had to pursue new and more sustainable ways to increase production. "We cannot increase production with the same model as in the past. We must increase productivity in a sustainable way, particularly in developing countries and among small-scale farmers," Mr. Graziano told.

World farm production has grown at 2% a year in recent decades but the rate is expected to slow to 1.7% a year, the joint report said. Despite the slowdown, the

rate is to exceed expected demographic growth, meaning that farm output per inhabitant will grow by 0.7% a year. The calculations in the FAO-OECD report do not, however, take into account the rapid growth in the bio-fuels sector, with experts estimating that world production of bio-ethanol and bio-diesel will nearly double by 2021.

Managing bacterial leaf blight in paddy

Bacterial blight is a serious infestation affecting paddy crops. Initially water-soaked yellowish stripes appear on the leaf blades starting at the leaf tip, later increasing in length with a wavy margin. On the leaf surface a milky or opaque dewdrop can be noticed during early morning time. Lesions turn yellow to white as the disease advances. Severely infested leaves tend to dry quickly.

Lesions later turn grey in colour. As the infestation progresses the lesions cover the entire leaf blade which may turn white or straw coloured. Later the leaves wilt and roll up. Under severe conditions the entire crop wilts completely. Presence of weeds, rice stubbles and ratoons of infected plants, presence of bacteria in the paddy seeds and irrigation canals, warm temperature, high humidity, water stagnation, and over fertilization favour the infestation spread.

In the field, a portion of the infested leaf can be cut and placed inside a test tube with water for a few minutes. The cut portion inside the tube can be observed against sunlight to see bacterial ooze streaming out from the cut end into the water. After an hour the water turns turbid. Remove weeds, rice straws, ratoons to prevent infestation.

Likewise maintaining shallow water in the paddy nursery beds, providing good drainage during severe flooding, ploughing under rice stubble and straw following harvest are proper management practices to be followed. Right application of fertilizers is recommended. Use resistant varieties such as Ajaya, Asha, CO-43, Gobind, Radha, Sujatha, Suraj, Swarna, Udaya varieties.

Soaking the seeds before sowing in 0.1 gm/litre of streptocycline and 0.1gm/litre of copper sulphate solution for 20 minutes is the best practice to avoid spread of this infestation. Apply nitrogen in three split doses, 50% basal, 25% during tillering phase and 25% during panicle formation phase.

Napier Bajra grass can generate substantial power for Tamil Nadu

Napier Bajra grass also called as NB CO-4 hybrid or Emperor grass may become the renewable green resource to tap the serve power once.

"Released by Tamil Nadu Agriculture University (TNAU) during 2008, CO4 exhibits phenomenal biomass yield", said Dr. G. Kumaravelu. This grass can be grown in most soil types, except in heavy clay, highly alkaline and water logged areas. To verify its utility for power production, 5 to 6 months old, mature grass crop was harvested and weighed. The yellow mature stem, with more fibre and lignin content yielded around 200 dry metric tonnes per hectare. An appropriate practice package has been arrived at, within a year, by trials using biofertilizers, nutrients, biochar and chemical fertilizers with drip irrigation to ensure sustained high yield. About 2,000 acres of grass cultivation can supply raw material to run 10 MW biomass electric power mill, continuously, all through the year without break," he added.

The State Government, accepting the innovation in principle, announced in the Assembly, that they would help in setting up a 10 MW power project using this grass. "With Government's logistic support, we plan to complete planting of 2,000 acres within 12 months time, and erect 10 MW power mill in 18 months time," he says. In a 15 hectare area in Virudunagar district, borewells run on solar pumps will be commissioned for fertigation, and crops will be raised under the packages developed by Dr. Kumaravelu.

The cow dung and urine will be recycled to the plantation. Fodder for the free milch animal scheme announced by the Government can be benefited from this fodder. This grass is nutritious and relished by cattle and has enhanced milk yield from 1 to 2 litres per day. The waste biomass and leaves can be used to generate methane gas, similar to gobar gas. The high sugar content of this grass makes it an excellent raw material for the production of 2nd Generation cellulosic biofuels like Ethanol and Butanol.

Dr. Kumaravelu argues that "if such 10 MW green power mills are established in each of the 300 suitable Panchayat blocks by the Government, it could generate 3000 MW of electricity continuously. Farmers can earn a minimum of ₹75,000 per acre a

year. Those who desire to know more about this project can contact Dr. Kumaravelu at email: drgkumaravel@gmail.com, Mobile: 9600073059.

Controlling stem borer in maize

The stem boring insect, is the most destructive pest of maize. Its caterpillars damage the plants by boring into the leaves, stem and cob. In young plants this pest causes a typical 'dead heart' symptom as the central shoot dries up. Feeding of folded leaves makes 'shot holes'. The upper part of the stem in older plants dies due to the boring of the caterpillars in the stem pith. Bore holes are visible near the nodal region of the stem. The infested cobs lead to yield reduction and have low market value.

The adult moth lays around 400 eggs on the underside of the leaves near mid-ribs. Hatching takes place in 7-10 days. Larvae develop inside the stem for 28-37 days and pupate there itself. Pupal period lasts for about 10 days. Adult moths are straw colored and nocturnal. The entire life cycle is completed in three weeks. During winter the larval stage undergoes hibernation.

Management practices

-Follow crop rotation and fallowing practices. Plough the infested fields during summer.

-Burn stubbles which act as refuge of the pest. Use tolerant varieties like Ganga 5 Hybrid.

-Raise cow pea as intercrop with maize at 1:4 to minimize the borer incidence.

-Collect and destroy infested 'dead hearts'.

-Hand pick and destroy insect stages and shell the infested cobs to kill the caterpillars.

-Attract and kill the adult moths by setting up light trap at one/5 acres.

-Mix granular insecticides such as quinalphos 5G at 10 kg/ha or Carbaryl+ Lindane 4 G or carbofuron 3G at 17kg/ha with sand to make up a total quantity of 50 kg and sprinkle on the leaf whorls on 20th day of sowing.

Copious virtues of drip irrigation

The face of Indian agriculture has been changing swiftly since the Green Revolution. Farmers have started following intensive agriculture where assured irrigation becomes an essential

factor. The reliance on conventional irrigation sources such as tanks and canals has reduced, while the importance of ground water has increased substantially.

Most crops, especially during rabi and post-rabi (summer) seasons, are cultivated using primarily ground water. But due to scarcity of electricity, its supply to agriculture is sharply reduced in almost all the States. Heavily interrupted and limited supply of electricity poses great hardship to farmers who are unable to supply irrigation water to the standing crops from their own wells.

Field studies suggest that this looming power shortage can be effectively solved by adopting micro-irrigation (drip irrigation). The time required to irrigate one hectare of crop land under the conventional flood method of irrigation is large as it irrigates the entire land instead of crop. Moreover, the loss of water by conveyance, distribution and evaporation is large. Under micro-irrigation, water is supplied only at the root zone of the crops at the required quantity through a network of pipes.

One hectare of banana or sugarcane can be irrigated within an hour by drip irrigation method, whereas it requires 10-15 hours under conventional flood method of irrigation. This reduces the consumption of irrigation water and also electricity. Empirical studies done in Maharashtra, Tamil Nadu and other parts of India under the the Ministry of Agriculture proved that drip method of irrigation can save electricity up to as much as 45%, compared with conventional flood method. Since water is supplied only at the root zone of the crops and that too at the required level, farmers need not operate the pumpsets for longer hours. Besides, the drip method also reduced the consumption of water and increased the yield significantly.

Syngenta develops new technology to grow cane

Syngenta, the Switzerland-based agri-business company, has launched a new technology to grow sugarcane. Called Plene, the technology is claimed to increase efficiency in planting, reduce labour and input costs besides increasing yield. "It will take at least two years for this technology to be introduced in India. We will have to localise it to suit Indian conditions," said Mr Daniel Bachner, Global Sugarcane Head of Syngenta. "The Plene technology

incorporates solutions to herbicides, insecticides and for deriving higher production," Mr Bachner said. "In normal circumstances, about 20 tonnes of sugarcane are used for planting on acre with the cane being 40 cm in size. However, in the case of Plene, only two tonnes of sugarcane will be needed and the size of the cane will be 25 cm," Mr Bachner said. The technology is claimed to result in uniform size cane that will be free of disease. Since planting under this technology will be done by machine, it will save labour costs significantly.

Slug caterpillar management in coconut

Among several pests that infest coconut trees the coconut slug caterpillar is the most serious one. The caterpillar is greenish brown in colour with broad anterior and narrow posterior. It has tiny bunches of minute hairs all over the body. Fully grown larvae feed on the leaf blades. Larval period lasts for 25-45 days. It pupates inside a round white shell like cocoon attached to the leaves. Pupation stage lasts for a fortnight. Brown coloured adult moths with wings emerge from the cocoon. Females are larger in size than males and deposit about 200 eggs in groups on leaves. The larvae feed by scraping the green leaf tissues. This causes drying and holes start appearing on the dried portion subsequently. The attack is mostly restricted to tall trees. Affected leaf fronds show a burnt appearance and in case of severe attack the whole tree looks dry.

Management

- Remove the affected leaves in the lower rows.

-Spray dichlorvos at 2 ml/litre of water with a pedal pump/rocker sprayer/tractor mounted power operated pump and spray gun to reach the tree top.

- Apply monocrotophos (10 ml + 10ml) as root feed.

- A waiting period of 45 days must be observed from insecticide application till harvest.

- Monitor the pest occurrence in new areas with the help of light traps to attract moths.

- Leaflets have to be observed for fresh incidence by cutting 1-2 leaf fronds in the garden.

Going non-Bt in Vidarbha

At a time when Bt cotton hybrids are ruling the roost, re-introducing non-Bt varieties may seem like a regressive step. But the Central Institute for Cotton Research (CICR), in tandem with the agriculture department of Maharashtra government and Centrally-sponsored Krishi Vigyan Kendras (KVKs), is undertaking an experiment called high-density planting system (HDPS) of non-Bt varieties in Vidarbha to provide rain-fed farmers with shallow-soil farms a "low-cost, low-risk and high-yielding" alternative.

HDPS is all about cultivating more plants per acre and reducing their foliage with growth regulators in order to achieve early maturity and neutralise extra-nutrient pressure on soil. While CICR is doing HDPS with the spacing of 45X10 cm as against the normal 60x30 cm on 160 acres spread over eight districts, Nuziveedu has shrunk its spacing from the recommended 120x30 cm, 150X45 cm and 180x30 cm for different conditions to about 120x30 cm on 10,000 acres in three districts. In addition to 7,500 rain-fed and 2,000 drip-irrigated acres, Nuziveedu is also undertaking HDPS with mulching (plastic film separation between rows to prevent weeds) over 500 hectares of drip-irrigated area.

The CICR has chosen three non-Bt varieties Suraj, PKV 081 and NH 651 for HDPS. And while the Maharashtra government is helping in implementing the CICR project, farmers in the Nuziveedu experiment are part of the Maharashtra government's new PPP initiative Integrated Agriculture Development programme where farmers will get government subsidy. Says CICR Director Keshav Kranthi: "Rain-fed Vidarbha's cotton productivity is low, about 3 quintals per acre despite Bt. Water and nutrient requirements during peak boll-formation phase are most critical for high yields. Boll formation and retention get negatively affected due to low soil moisture, especially of Bt, in shallow soils, resulting in low yields. HDPS of early maturing varieties take care of this problem. Good yields can be obtained with dwarf-compact plants at a density of 88,000 plants per acre, as against the Bt density of 5,000 plants, and with low input cost." Kranthi cites the example of Brazil that entirely grows HDPS non-Bt in conditions similar as Vidarbha with yields of over 22 quintals per acre.

Advantage mechanisation and women's group approach

Amidst reports of abandoning paddy cultivation due to high labour cost and labour scarcity in Kerala, records maintained by a leading paddy farmers' group named Avunjikad Padashekhara Samithy in Malappuram District point to a saving of ₹ 63,375 on cost of transplanting in an area of 15 acres for paddy.

The records reveal that the total expenditure of fully mechanised paddy cultivation for an area of 3 acres is ₹ 38,430 instead of ₹ 74,890 in conventional method making a saving ₹12,150 per acre. A study shows that the cost of transplanting using a transplanter is ₹36,000 and that of manual transplanting is ₹99,375.

On gaining experience in the field under the supervision of Krishi Vigyan Kendra (KVK) scientists, women trainees decided to organise themselves into a self help group (SHG). Thus, with the support and supervision of KVK, 11 women formed the group named 'Krishi Sahayi'. KVK Malappuram convinced the paddy growing farmers of the advantages of mechanisation over conventional methods utilising Krishi Sahayi and as a result many farmers who turned away from paddy cultivation came forward to cultivate the crop in their fallow lands. The group faced the constraint of repairing and servicing of machinery, costing a huge amount from their earnings.

"In order to solve this problem the KVK conducted a vocational training on repair, maintenance and servicing of the paddy transplanting machine for this group with which we could increase their confidence level and income," explains Dr. Habeeburrahman, Programme Co-ordinator. Over a period of three years, this group has done mechanized transplanting, harvesting and threshing in an area of more than 300 hectares.

Considering the demand, KVK took up a project on "Formation and strengthening of activity groups for mechanized paddy cultivation in all the 14 Blocks" in collaboration with district Panchayat, Department of Agriculture and Kudumbhasree mission under the 'Haritha Malappuram' programme by empowering the activity groups with machinery worth ₹3 lakh. With Krishi Shahayi as master trainers, KVK Malappuram became instrumental in the formation of 17 similar groups, resulted in bringing back 1,200 hectares under paddy cultivation in one year.

Controlling cashew stem borer

Cashew stem and root borer is a serious pest both in East and West coasts of India, capable of destroying an entire cashew tree. Adults are medium in size, dark brown in colour and measure 30-40 mm long. During the grub stages, the pest feeds inside the tree trunks or branches, boring tunnels causing the tree to wilt. Leaves turn yellow in colour, twigs dry up and the tree dies in 1-3 years depending on the extent of pest infestation.

Plantations over 15 years old are often infested with this pest. Infestation ranges from 4-10% in affected crops. Adult beetles lay dull white single eggs under loose bark of the stem and roots. Eggs hatch in 4-6 days. Grubs riddle holes into the stem and bore down into the root. Openings of tunnel are plugged with reddish mass of chewed fibre and excreta with exuding sap at the base of the stem. Larval stage lasts for 6-7 months. Full grown larva measures 7.5 cm long and is creamy white in colour with a brown coloured head. It pupates inside the bore hole in a thick calcareous cocoon. Pupal period lasts for two months. The pest completes one generation in one year.

Control measures

- Survey the plantations during fruiting season and eradicate severely infested trees.
- Adopt phyto-sanitation methods by completely removing the dead trees in advanced stages of infection.
- Cut and destroy damaged branches along with eggs and grubs.
- Train the newly planted grafts to bear branches at a height of 1metre above ground level. Use light trap at the rate of one per hectare to attract the pest.
- Swab the trunk with a mixture of coal tar and kerosene at the ratio of 1:2 or chloropyrifos 0.02% twice a year once during March-April and again during November-December. Root feeding with monocrotophos at 20 ml/tree is also promising.

GRAM : KISAN BANK

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MADHYA PRADESH STATE COOPERATIVE AGRICULTURE & RURAL DEVELOPMENT BANK LTD.

8, Arera Hills, Old Jail Road, Bhopal - 462 004.

- The MPSCARDB provides long term loans to agriculturists through its affiliated Dist. ARDBs in the State for various agricultural and rural development activities like Minor Irrigation Schemes, Dry Land Farming, Land Development, Wasteland Development, SGSY, Organic Farming Horticulture Development, Aromatic & Medicinal Plants, Farm Mechanisation, Diary Development, Fisheries, Poultry, Bio gas Plants etc.
- The Bank also disburses long term loans under Non-Farm Sector mainly for setting up of Cottage and Village Industries, SRTO, Establishment of Milk Chilling Plant, various service sector activities in rural areas, SRTO, Establishment of Milk Chilling Plant, various service sector activities in rural areas, for Clinic, Nursing Home and Pathology, Radiology etc.
- To facilitate availability of loans to farmers at nearby place, the affiliated 38 Distt. ARDBs have opend 272 Branches in the State.
- The Bank has, so far disbursed long term loans of Rs.2898.07 crores to 9.54 lakhs farmers from its inception in 1961.
- The Bank also accepts Term Deposits from Individuals & Institutions for the period of one year and above. All Distt. ARDBs in the State accept FD on behalf of MPSCARDB in various Schemes i.e. Fixed Deposit, Double Deposit, Recurring Deposit etc.

FINANCIAL PARTICULARS OF THE BANK AS ON 31ST MARCH 2012

(₹ in crore)

1.	Paid up Share Capital	:	41.24
2.	Reserve and other funds	:	463.26
3.	Debentures in circulation	:	846.86
4.	Fixed Deposit	:	91.23
5.	Loan disbursed During the year	:	56.03
6.	Loan outstanding	:	1129.23
7.	Investment	:	13.27
8.	Working Capital	:	1550.17

Prakash Khare
Managing Director

Kishan Singh Bhatol
Chairman