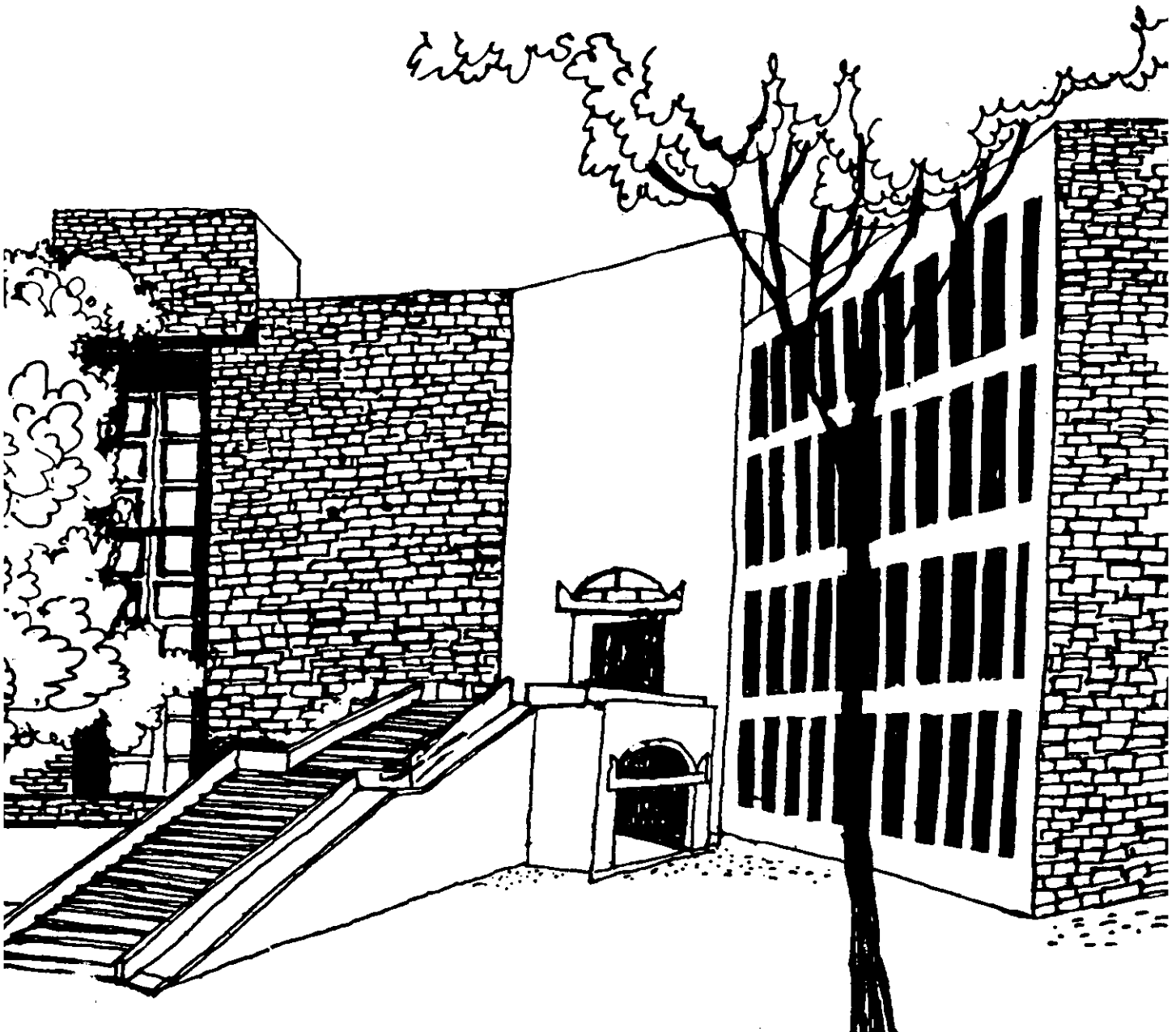




# Working Paper



REVITALIZING THE COOPERATIVE  
AGRICULTURE CREDIT STRUCTURE:  
A CASE STUDY OF KHEDA DISTRICT

By

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# REVITALIZING THE COOPERATIVE AGRICULTURE CREDIT STRUCTURE: A Case Study of Kheda District

S.P. Seetharaman  
Gurdev Singh  
U.K. Srivastava<sup>1</sup>

## Introduction

Twelve years from now the country would be celebrating the first century of the cooperative movement. During these nine decades the movement has undergone lot of changes. At the time of the golden jubilee of cooperative movement, state partnership in cooperatives was accepted to enable them to reach the socially and economically weaker sections of society. In the seventies, by promoting the multi agency approach to rural and agricultural credit, cooperatives were made to compete with commercial banks. Through the loan waiver scheme, an attempt has been made to redeem the rural lending agencies and farmers from the problem of mounting overdues. The government's latest policies aim at promoting privatisation and withdrawal of subsidy even from certain priority sectors like agriculture. It is in this rapidly changing economic environment that one should view the present role of cooperatives. If the cooperatives are to stabilise, grow and meet their commitments to members, they have to carefully chalk out new strategies of development. The recently introduced business development plan (BDP) as a strategy to revitalise cooperatives may not be adequate.

With a view to understand the current status and working of cooperative credit structure and to formulate the strategy they need to follow in the coming decade, Kheda District in Gujarat was selected. On the basis of insights developed, the strategy needed to strengthen the cooperative credit structure is discussed in this paper. Section I gives a brief review of the changes made for strengthening the cooperatives on the basis of the recommendations of various committees. Section II presents a brief performance review of cooperative credit in Kheda district and Section III the alternative strategies available to strengthen cooperative credit movement. The last is the concluding section.

## Section I Recommendations of Various Committees

The All India Rural Credit Survey Committee (1954) after detailed examination of the entire gamut of issues connected with rural cooperative credit including the social ethos of rural society, summed up their recommendations in the celebrated dictum that "Cooperation has failed, but Cooperation must succeed"<sup>2</sup>. The three major prescriptions to strengthen the cooperative credit movement were : (i) state partnership through contribution to the share capital of the cooperatives; (ii) effective integration of credit with marketing and processing; and (iii) management of cooperatives by adequately trained persons<sup>3</sup>. The All India Rural Credit Review Committee (1969) set up to evaluate the success of implementation of the recommendations of Rural Credit Survey Committee Report found that the same weaknesses such as mounting defaults, lack of trained personnel and the like, which had been the

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1 Dr. S.P. Seetharaman, Dr. Gurdev Singh and Dr. U.K. Srivastava are the Professors at the Centre for Management in Agriculture, Indian Institute of Management, Ahmedabad. The authors are grateful to Mr. M.M. Vyas, Managing Director, Gujarat State Cooperative Bank Ltd., Ahmedabad, Mr. R.B. Patel, Chairman and Mr. Ravjibhai Patel, Manager, Kheda District Central Cooperative Bank Ltd., Nadiad and their staff members for their insights and intellectual contributions besides the data and information. The support from Ms. Shruti Raval, Research Assistant is also duly acknowledged.

2 "Report of the Agricultural Credit Review Committee", Reserve Bank of India, 1989, p. 162.

3 *ibid.*, p.164

major malaise continued to be the bane of cooperative structure<sup>4</sup>. The Committee felt, it was necessary to ensure that the cooperative structure was not damaged and at the same time to ensure adequate flow of credit for agricultural production, multi-agency approach was recommended<sup>5</sup>.

The Working Group on Regional Rural Banks set up in 1975 found that the commercial banks' cost of credit was high and the cooperatives could not reach all the segments of borrowers and so the committee recommended setting up of state sponsored regionally based rural oriented commercial banks to be known as Regional Rural Banks<sup>6</sup>. While summarising the recommendations of various committees, the Agricultural Credit Review Committee (1989) stated that no credit system has been subjected to as much experimentation as the dictates of those outside as the cooperative credit system and each time the system has been made to follow newer prescriptions.

The same Committee (1989) found that the overdues at PACS level in 1986 were 41.8 per cent of the demand<sup>7</sup>. The Central bank's own resources and eligibility for refinances were limited, choking the flow of credit. The Committee found that out of the 352 District Central Cooperative Banks (DCCBs) 173 (nearly 50%), which were identified as weak in 1975-76 and placed under the scheme of rehabilitation, remained more or less stationary even in 1986<sup>8</sup>. The position of the State Cooperative Banks (SCBs) was also not found satisfactory by the Committee, on the basis of owned funds, deposit mobilisation, borrowing, loans and advance and overdues and the performance across the states was uneven<sup>9</sup>.

After a detailed analysis of the working of PACS, DCCBs and SCBs, the committee concluded that the cooperative banking system was inefficient, with high costs, low or negative profitability, inefficient service, and not self-reliant, not only as a result of the nature of agriculture enterprise in India, but due to other factors like politicisation, bureaucracy, mass supercessions, low margins and lack of professionalisation at all levels. The Committee's spirit of recommendations can be summed up in their own words, " the country should recapture the spirit of cooperation, its culture, its discipline and above all, its ethos and this cannot be achieved unless a mutually supportive and cohesive structure based on a strong foundation at the primary level drawing support and inspiration from the higher tiers which are professionally managed under dynamic and highly motivated leadership comes to be established"<sup>10</sup>.

The Committee recommended measures for improving the viability of PACS which covered issues like volume of credit and non-credit business, efforts for improving share capital, deposits, lending policies including introduction of cash credit system, preparation of normal credit statement, distribution of cash component, and recovery procedure. The second set of recommendations related to higher tiers, about their leadership role, deposit mobilisation, project oriented lending and rehabilitation of weak banks<sup>11</sup>. Before the implementation of this report, the rural credit system had the benefits and repercussions of the loan waiver scheme.

It is interesting to observe that several committees after detailed analysis of field data came to the conclusion that cooperative credit structure has failed to achieve the mission for which the cooperatives

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4 *ibid.*, p.164

5 *ibid.*, p. 165

6 *ibid.*, p.165

7 *ibid.*, p. 224

8 *ibid.*, p. 215

9 *ibid.*, p. 222

10 *ibid.*, p.185

11 *ibid.*, p. 267

were promoted but still like the 'phoenix' they have been resurrected with greater support.

The district central cooperative banks in the cooperative credit structure are expected to play the most important role of supplying credit for agriculture and rural development. It has the potential to prepare dis-aggregated crop specific plan or taluka or village specific plans. It can also plan for sectors like dairy, fishery, poultry, forestry, rural industries and Agro-processing. Through an appropriate networking, the DCCBs can bring all developmental agencies to work towards the districts' development. It has the unique advantage that it draws its staff, leadership and beneficiaries from the same region. This should enable it to conceive of a long term strategic development plan and ensure its implementation. But for achieving these, DCCBs should themselves be financially sound, managerially competent and most importantly be clear about their goals and missions. It is in this background the working of Kheda DCCB and its PACS is examined in the following sections.

## Section II Cooperative Credit in Kheda District

### Agricultural Development in Kheda

Kheda is one of the agriculturally well developed districts of Gujarat. About 76 per cent of the 698 thousand hectares of its geographical area was under cultivation and nearly half of it was irrigated by canals and wells in 1983-84. The district has a few big irrigation tanks. The average annual rainfall is 815 mm and it mainly occurs during June to September. The district has four main types of soil : i) *Goradu* soil in Anand, Borsad and Nadiad talukas, ii) black cotton soil in Balasinor, Kapadwanj and Thasra talukas, iii) Paddy land in Mehmedabad and parts of Mattar talukas and iv) *Bhatta* soil in remaining parts of the district. All the 10 talukas in the district except for small hilly areas in two talukas in the north has unbroken plains with gentle slope towards south-west.

Of the 212 thousand farmers 102 thousand had holding of less than one hectare. Another 53 thousand owned holdings between 1 to 2 hectares of land. The major crops of the area are bajra, wheat, paddy, cotton and tobacco. They together cover nearly three-fourths of the gross cropped area. Over the years cotton area has shifted to crops such as banana and sugarcane. Area under jowar has also increased during the last decade. The cropping intensity however was low (120 per cent). The average consumption of fertiliser in mid eighties was more than 80 kg. per cropped hectare. The average productivity of major crops is better than in many other districts. There were 22 regulated markets and each taluka had one or two market yards in addition to 428 unregulated markets. There were 301 cooperative marketing societies. The district had the highest number of tractors in the state. It had nearly 15 thousand oil engines and electric motors, over one million animals and 353 thousand poultry birds. The district was served by 275 branches of commercial banks (141 rural branches), 68 branches of DCCB (40 of which were located in rural areas) and 10 branches of the state land development bank. There were 46 urban cooperative banks<sup>12</sup>. The cooperative societies included 737 PACS, 101 primary non-agriculture credit societies, 870 milk societies, 617 housing societies, 58 lift irrigation societies, 5 cotton ginning societies, one sugar cooperative factory and 118 industrial cooperative societies in 1984-85<sup>13</sup>. The district has good network of roads and 90 per cent of the villages are connected with *pucca* roads. All inhabited villages are electrified. The district has a good network of post and telegraph offices, medical and veterinary facilities. Industrial areas have been developed at nine places in the district and there were more than three thousand small industrial units

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12 District Credit Plan, 1988-90, Kheda District (Gujarat), Bank of Baroda, Regional Office, Nadiad. P.5-10 and P.68-83.

13 Annual Credit Plan, 1990-91, Under Service Area Approach, Kheda District, Bank of Baroda, Regional Office, Nadiad. P.6

and four vocational training institutes<sup>14</sup>.

The district is not only endowed with natural resources of good soil and irrigation but also puts them to good use by adopting high value crops, and allied activities of dairy and poultry. Value addition is also taken up through processing of agricultural outputs in the small scale sector for crops like cotton and paddy. Dairy cooperative at Anand 'AMUL' is well known for its products in the country.

### Working of Kheda DCCB

It can be seen from Table 1 that Kheda District Central Cooperative Bank at Nadiad used to make small profit upto 1985-86, but during the last five years (1986-87 - 1989-90) the data indicates no profit and no loss situation. This is deceptive because of the following reasons:

- i) Interest income includes the interest on overdue accounts. Some of the overdue accounts were bad and doubtful ones. Their proportion had come down with the loan waiver but it has subsequently gone up because of farmers reluctance to repay.
- ii) Interest income also includes the interest which is not recoverable. This is because of the procedure followed. Bank branches treat each PACS as one account and therefore whatever recoveries made and credited are firstly adjusted against the interest due and the balance against the principal. The interest continues to accrue on the principal and the overdue interest capitalised after six months. At the PACS level the interest and principal of each member are credited appropriately in the members account separately. As such interest due from the members at the PACS level is much less than at the bank level. This is illustrated in Appendix 1 (Table 1). The table also shows the discrepancy between what is due from PACS at branch level and what is due to PACS from the members and this gap continues to increase. .

In view of these two reasons, the situation of no profit and no loss is deceptive and it does not indicate the extent of losses actually being incurred by the bank as a whole.

The situation is further aggravated because at the branch level the avenues of profitability are being further eroded. Let us illustrate the situation. Branches are supposed to pay 6.5% rate of interest on savings accounts. Recently the interest rate of short term deposits (46 days) was raised to as high as 13% (now 11%), therefore bulk of the deposits (which would have been in the savings accounts) have now been shifted to term deposits raising the weighted cost of capital for the bank.

The bank branches then lend to PACS at 9% or transfer the funds to banks head office at 9%. The branches are indifferent whether they lend to PACS or transfer the money to head office. In any case the interest paid turns out to be marginally less or equal to interest received (depending upon the composition of the deposits in terms of savings and time deposits). The establishment cost thus leads to losses at the branch level (Table 2 - an illustrative case of Pansora branch). This branch theoretically has other avenues of profitability in terms of:

- i) Lending for other trading activities like fertilizer sale or consumer stores or marketing of products etc. The branches can get upto 16% rate of interest in these activities. The weightage of these activities in the lending of the branch is, however, extremely small.
- ii) A large number of PACS are defunct and lending has stopped. The branches can, however, lend to individuals (as nominal members) from the defunct societies and they can charge 11% (which means some part of the margins available to PACS can be derived by the branches). All this requires that the bank is able to take a policy decision to support this course of action

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<sup>14</sup> "District Credit Plan, 1989-90, op.cit., P.68-83.

and branches take the initiative to identify and promote lending to individuals in the defunct and non-functional PACS.

The branch managers at present do not have any role in the development of business. It is also not the job of the inspectors attached to headquarters. The branch managers perceive their role is limited only to deposit mobilization and house keeping. All loans to PACS, including cash credit limits for other activities are processed at the headquarters and branches just open a savings account for each of the borrower and disburse the sanctioned amount as per the borrower's request for withdrawals. A large number of branches as a result have become financially non-viable with no effort to restore the financial viability (Table 3).

### Working of PACS

The performance of the PACS is shown in Table 4. In 1990-91 only 192 out of 700 PACS were viable. This viability was also getting eroded because of non recovery of loans. The margin provided by the bank between the borrowing rate of 9 per cent and lending rate could have provided a cushion if the recovery was over 80 per cent. But after the loan waiver, even the good PACS also have run into difficulty because their members felt that they have been punished for their good repayment performance otherwise they would also be eligible for write off of their dues. Even the societies having above Rs.30 lakh business have not been able to earn reasonable profits (Table 5) as envisaged in the Khusro Committee Report. The profit as a percentage of business in these societies is extremely small and here too incomes include accrued interest on the overdues with no provision for bad and doubtful debts. The profits from trading activities such as marketing of fertilisers, consumer store, etc. go to subsidise the losses in credit business. Over the years the overdues have also gone up.

The quality of the manpower (secretaries) is inadequate in all the societies. The monthly salaries of full time secretaries even in societies with more than Rs.30 lakh business ranged between Rs.400/- and 1,950/- in 1990-91. Therefore, the banks performance through PACS would worsen in years to come and the viability of PACS credit operations would get substantially eroded.

### Section III Measures for Revitalisation

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It is unrealistic to expect the weak Kheda DCCB to rehabilitate a large number of weak PACS. Under this condition there seems to be very few options available to strengthen the cooperative credit movement in the district. The options are:

- a) Examine the scope of amalgamating the weak with strong PACS, wherever they are physically close to each other. The amalgamated PACS, though to begin with may not be viable with the increase in membership, they will have the scope to increase its turnover and attain viability over a period of time.
- b) Retain the good working societies and hasten the process of liquidation of others. Encourage the good working societies to enroll as members all eligible borrowers from the liquidated societies. The differences between option (a) and (b) are substantial and qualitative, in nature. In proposal (a) the new society will not only inherit the assets and liabilities but also some of the social and political problems of the two societies. Such mergers can generate unintended tension among the old and new members. Whereas in proposal (b) those eligible to borrow from the liquidated societies are welcome to be members. The surviving society may look at this as an opportunity and a means to expand business. This process may help old as well as new members by better services. In other words, the surviving society has nothing to lose.
- c) The third proposal could be to allow the viable societies to continue. The eligible borrowers of the liquidated society are provided loan from the nearest DCCB branch. In this proposal the



responsibility for extending credit to the eligible members in the non-working, defunct and liquidated societies would rest with the Bank. The substantive argument in support of this proposal is that it opens a new line of credit to all eligible farmer members. But the major disadvantage of this proposal is that it may have a snow balling effect on the working of good cooperatives in the region. Another limitation of this proposal is the tentativeness about the scheme. Would DCCB be a temporary direct lending institution to farmers or would this become a regular feature? This uncertainty may demotivate the staff of DCCB and also the farmers.

- d) The fourth proposal is based on the field reality that credit activity at the PACS is declining and in fact eroding the profitability of other important activities. The scope for PACS to improve their working by their own efforts seem to be remote and the feasibility of DCCB playing the role of rehabilitator and provider of succour to PACS appear improbable. Therefore, there is need to take a strategic decision to save the primary societies so that the institution close to the farmers owned and managed by them is retained and the destabilising activity, credit is shifted. This can be achieved by delinking PACS from credit business and entrusting it with the DCCB. In this process all the PACS would be left with business related to marketing of agricultural inputs, outputs and consumer goods. They may also provide services like storage, farm machinery, custom hiring, pesticide spraying, etc. They would do all these business on cash and carry basis. For providing credit, the DCCB would be the sole cooperative agency in the district. Due to the strategic nature of this proposal it needs closer examination.

#### **Merits of Proposal (d)**

- i. In cooperatives, where members deliver their products, pay for the services and deposit their savings, they tend to take more interest in the management of the organisation and activities. Most successful primary societies would fall under this category. Conversely, if the cooperative society only distributes credit or other scarce inputs, the members as well as the leaders in such societies tend to become susceptible to external influences. They lack the necessary will to enforce discipline among members. Therefore, through distancing credit from the primary society, the possibility of the farmers managing the Primary Agricultural Societies (PAS) better appears logical. The commodity cooperatives also prove this point. They provide agricultural inputs to members and protect them from the risk of price and quality exploitation. Through farm guidance and supply of latest agricultural technology they save farmer members from productivity risks. By promoting insurance and building of special funds, they take care of asset related risks. Marketing and processing, the important value adding tasks undertaken by the cooperative, save them from market risks. The commodity cooperatives like milk, sugarcane, oilseeds expect their members to find credit for their production from other sources including cooperatives. They may extend support in recovery of loans but not always. So the village primary societies without the credit activity can be expected to render better service to farmers very close to their villages.
- ii. The cooperative leadership at the village level would not be involved in loan sanctioning and recovery tasks. Currently, the village leadership have taken responsibility for sanctioning of loan but not evinced equal enthusiasm in recovery. The full responsibility for lending as well as recovery would get combined and this should motivate the DCCB staff to take greater initiative and drive in developing credit business.
- iii. The unresolved problem of incompatible accounting system between the society and DCCB would get eliminated because of the proposed direct lending.
- iv. Financially direct lending would increase the margins for DCCB branch and thereby offer scope for its improved viability.
- v. The non-credit business of the DCCB is likely to expand with the strengthening of the PAS.

- vi. The village primary societies, it was shown, were cross subsidizing credit activity from the profits of the input marketing and other trading activities. This would not be necessary.
- vii. With the introduction of production oriented lending in 1954, most PACS took a limited view of their activity-mix. They were limiting input supply activity only to the extent of meeting the 'B' component of crop loan. Very few cooperatives took aggressive measures to expand their inputs business. The concept of preparing Business Development Plan (BDP) essential for any business organisation was never conceived as important. Under this proposal the planning process at PAS level may improve.
- viii. Since the PAS would be mainly engaged in activities involving cash transactions there should be no scope of bad debts.
- ix. In districts where commodity cooperatives exist at village and district levels, PAS can establish appropriate links with them. In the new role, the primaries which were so far credit driven and not member-needs driven, may become more sensitive to members' needs. Also, the DCCB in the new role would cease to be a refinancing agency, and become an active partner in agricultural growth.

### Feasibility of the Proposal

The merits listed show that the balance of benefits rests with proposal 'd'. If the branches of the DCCB are to be the focal point for distribution of credit, the first requirement would be the physical closeness of these branches to the farmers. Even now disbursement of credit is always done by the bank branches, implying that farmers even as of now visit the bank branch every time they have to draw from the loan sanctioned. Kheda DCCB has 68 branches in the district and assuming that 5 km. is a close enough distance for farmers to visit the branch, it can be seen in Map 1 that in Anand and Petlad talukas practically all villages fall within this distance. In Borsad, Matar, Mehmedabad and Nadiad talukas by increasing the distance by one more km. i.e. to six, 87 per cent of their area would be covered (Map 2). By further increasing the distance to seven kilometre as the service area of the branches in the remaining talukas of Balasinor, Kaparwanj, Khambat and Thasra the existing branches can cover 59 per cent of their area (Map 3). In Khambat and Balasinor, the density of population, number of village, irrigation, agricultural productivity are all low. These talukas do not have adequate rain, or irrigation facility and also have large areas under problematic soils. Therefore, to begin with, there may be no need to add new branches here. Map 4 (Maps 1, 2 and 3 combined) shows that the existing branches of Kheda DCCB can serve about 71 percent of the area of the district.

The second important factor is the bye-laws position for admitting individuals to the membership of DCCB. Even now there is a provision in Kheda DCCB to admit individuals as nominal members which would bring them under the cooperative legal procedure for recovery of loans. Structurally DCCBs are conceived as federal organisations and their basic constituencies are cooperative societies, within the district. It may not be necessary to make any change in the bye-laws.

The third factor is the procedure for lending. Currently, farmers give particulars about the proposed cropping pattern with area and the amount of crop loan (cash and kind component) required. While approving and recommending this loan, the primary society regulates the loan demand as per the scale of finance approved for the district. The PACS aggregates individual requirements at the society and then sends it for approval to DCCB. The bank after scrutinising the eligibility of the society and of individual members for loan, approves the loan and sends the loan approval to the nearest pre-determined DCCB branch and another to the primary society. Farmer members for drawing credit from the branches, get the approval of the primary society. In the proposed scheme, each bank branch in the district would have service area and the bank supervisor would prepare farmer-wise, village-wise, credit statement and forward it for approval to the DCCB. Once approved, the amount would be disbursed by the branch with the

knowledge of the bank inspector. In this scheme, the bank inspector would be directly held responsible for compiling credit needs of farmers, supervising withdrawal of credit and later shouldering the full responsibility for effecting recovery. The branch office will also be involved in these tasks. The number of eligible borrowers in the district was around 33,000 in 1991. On this basis, each branch will have to maintain about 500 accounts. In the commercial banks, the number of loan accounts handled by an agricultural officer in rural areas is reported to be about 1000-1500. In comparison to this the work load of DCCB branch to begin with would be much less. If computerisation is done at the branch level, monitoring of individual farmers' account would become relatively simple and easy. It appears that there should not be much serious problems in the DCCB and the branches assuming this role.

#### Section IV Conclusion

State partnership was designed to augment the capital base of cooperatives but in the process of implementation it made the cooperatives a tool in the hands of the state. Whenever there was a conflict of interest between members' and state policy, the cooperatives were made subservient to state's interest. One classic example is making the cooperatives the procurement agencies for government instead of allowing them to work as institutions to market the output of members. Universal membership in cooperatives to all those living within its area of operation, government directive on the constitution of managing committee, restrictions on the tenure of Chairman, limitation in the number of institutions in which a leader could hold position, supercession of elected board, nomination of board members from outside the area of operation of the society, are only a few examples to show how good leadership have been alienated from the cooperatives. In several states, state nomination to the board has degenerated to nominating political leaders of the party in power and thus the cooperatives at all levels have become insitutions only in form, with no inherent cooperative vitality or culture. Self respecting leaders who felt answerable to members have got replaced by leaders loyal to persons outside the cooperative movement. Self discipline, cooperative ethos, commitment to members have got eroded. It is, therefore, not surprising that members too have not developed any loyalty to the cooperatives and are bargaining for their share from the so called leaders. Credit cooperatives have become the major casualty in the whole process.

In the midst of this rapidly deteriorating PACS, in some parts of India, commodity based primary cooperatives are emerging as good examples of peoples' participation. It is possible to retain the good working village primaries only without credit activity. In the present environment any further delay in disregarding this field reality would only hasten the process of total collapse of cooperative credit movement. It is in the light of this situation the suggestion to segregate credit from PACS and entrusting it with the DCCB is proposed.

It is also relevant to point out that in the present stage of agriculture development farmers' need is not so much access to credit. What they need is access to newer technological inputs with support in storage, processing and marketing. Encouraging cooperatives to address to these emerging needs of members cannot be achieved by the present excessive preoccupation and concern on credit.

A word of caution may however be added. Merely divesting credit from the primary cooperatives may not be an end in itself. Simultaneous efforts in professionalising banking at DCCB level and ability to prepare business plan at the primary level are important. Though not directly relevant, it is equally important that the cooperative law of India, mainly conceived and continuously amended keeping cooperative credit movement in view needs to be thoroughly rehashed. The model cooperative bill has several good features that can go a long way in developing a sound cooperative movement. This bill needs to be speedily accepted and operationalised so that it can facilitate the growth of cooperative movement. It is time for cooperators to come to terms with field reality and initiate measures that can sow the seed for building a sound cooperative movement at least towards the end of the first century of the cooperative movement.

<b>Table : 1</b>											
<b>Profit &amp; Loss Account of Kheda DCB from 1980-81 to 1990-91</b>											
Particulars	1980-81	1981-82	1982-83	1983-84	1984-85	1985-86	1986-87	1987-88	1988-89	1989-90	1990-91
	(Rs.in Crores)										
<b>Expenditures:</b>											
Interest Paid	4.11	4.61	4.91	5.58	6.68	7.89	9.97	11.51	13.76	12.59	12.97
Overheads	0.86	0.96	1.06	1.24	1.39	1.54	1.73	1.99	2.22	2.60	3.01
Other Expenses	0.45	0.51	0.35	0.24	0.28	0.28	0.86	0.93	0.92	0.83	1.51
Total Expenditure	5.42	6.08	6.32	7.06	8.35	9.71	12.56	14.43	16.90	16.02	17.49
<b>Income:</b>											
Interest	5.89	6.55	6.80	7.55	8.86	10.24	12.45	14.31	16.76	15.85	17.45
Other Income	0.06	0.07	0.07	0.07	0.09	0.09	0.11	0.12	0.14	0.17	0.04
Total Income	5.95	6.62	6.87	7.62	8.95	10.33	12.56	14.43	16.90	16.02	17.49
Profit/Loss	0.51	0.54	0.56	0.56	0.60	0.62	0	0	0	0	0
Source: Compiled from annual report of the bank											

<i>Table 2</i>				
<b>Details of Income and Expenditure for Vansol Branch of Kheda DCCB (1987-88 to 1990-91)</b>				
<b>Particulars</b>	<b>1987-88</b>	<b>1988-89</b>	<b>1989-90</b>	<b>1990-91</b>
<b>Income:</b>				
Received Interest	109230	176941	201829	246019
Premium	1453	5100	6643	5291
Commission	375	875	1938	-
<b>Total Income</b>	<b>111059</b>	<b>182916</b>	<b>210409</b>	<b>251310</b>
<b>Expenditure:</b>				
Paid Interest	72265	148812	155394	190900
Salary	40119	110715	112042	152254
HRA	365	944	872	989
Medical allowance	600	1200	1200	1200
Building Rent	750	1500	1500	1500
Insurance	67	382	221	-362
Stationery	1114	2114	2306	1928
Post & Telegram	542	1671	1834	2015
Telephone	379	774	720	610
Miscellaneous	794	1557	1583	2193
LTC	1500	2250	2250	2250
<b>Total Expenditure</b>	<b>118495</b>	<b>271918</b>	<b>279921</b>	<b>356200</b>
<b>Total Loss</b>	<b>7437</b>	<b>89002</b>	<b>69512</b>	<b>104890</b>

Deposits, Advances etc, at the Kheda DCCB Head Office and Branches, (1986-87) as on 30-6-1987											
Sr. No.	Head Office & Branches	Date of Opening	No. of Affiliated Societies	Deposit	Amount Outstanding			Overdue		Profit	Loss
					Loan	Cash Credit, Overdraft	Loan	Unrenewed Cash Credit & Overdraft			
1	NADIAD	8-3-50	463	1990.94	119.55	219.17	41.28	54.96	33.04	-	
2	Chaklashi	22-8-59	12	55.41	38.38	-	-	2.98	0.31	-	
3	Mahudha	23-1-69	45	126.36	73.11	6.12	0.82	25.86	-	0.81	
4	Alina	28-6-69	12	36.85	42.91	-	-	4.47	0.61	-	
5	Palana	25-2-74	10	36.42	0.61	-	-	-	-	1.12	
6	Alindre(N)	28-11-74	4	30.13	8.98	-	-	6.58	-	0.01	
		<b>Total</b>	<b>546</b>	<b>2276.11</b>	<b>283.54</b>	<b>225.29</b>	<b>42.10</b>	<b>94.85</b>	<b>33.96</b>	<b>1.94</b>	
7	ANAND	20-1-51	182	1194.34	102.10	86.46	13.05	86.25	-	16.08	
8	Umreth	24-12-50	67	505.03	40.86	6.44	2.00	29.42	-	15.07	
9	V.Vidyanagar	14-6-59	51	251.89	10.81	5.01	-	4.70	-	2.89	
10	Ajarpura	28-6-69	6	32.18	3.93	-	-	-	-	0.14	
11	Khamnholaj	20-7-69	12	40.83	14.42	-	-	1.57	-	0.57	
12	Chikhodra	2-8-69	5	70.23	5.57	-	-	-	-	0.34	
13	Sarsa	3-8-69	12	58.26	43.80	0.55	-	13.31	1.47	-	
14	Vasad	2-11-69	11	49.81	18.36	0.15	-	7.08	-	0.35	
15	Napad	4-7-70	9	46.30	21.35	2.48	2.48	17.25	0.93	-	
16	Kunjarav	28-9-71	7	40.91	12.44	0.08	-	1.04	-	0.11	
17	Samarkha	22-6-72	8	28.23	5.36	-	-	0.38	-	0.27	
18	Bhalej	27-6-72	12	32.61	4.75	-	-	-	-	1.41	
19	Borivali	30-6-72	11	62.49	6.56	-	-	3.72	-	3.24	
20	Amul Dairy (Anand)	20-8-74	9	1696.14	12.29	-	-	-	-	1.15	
21	Vansol	24-3-76	6	17.50	10.98	-	-	5.23	-	0.27	
22	Bharoda	23-6-78	2	26.45	5.04	-	-	-	-	0.11	
		<b>Total</b>	<b>410</b>	<b>4153.20</b>	<b>318.62</b>	<b>101.17</b>	<b>17.53</b>	<b>169.95</b>	<b>2.40</b>	<b>42.00</b>	

Table 3

23	PETLAD	8-2-51	149	387.58	55.36	458.62	11.14	20.95	20.63	-
24	Mehelav	14-9-58	17	56.83	20.26	-	-	7.21	-	0.64
25	Nar	4-7-69	9	36.02	2.25	-	-	-	-	0.59
26	Sunav	16-7-69	7	87.11	0.94	-	-	-	-	2.23
27	Sojitra	17-5-75	23	87.57	9.62	0.37	0.31	6.88	-	2.62
28	Ashi	21-3-76	3	25.85	7.28	0.08	-	-	-	0.44
29	Dharmaj	13-10-76	8	138.75	1.55	-	-	0.62	-	4.39
30	Changa	20-10-76	6	20.10	0.60	-	-	0.38	-	0.79
31	Bandhami	5-2-77	6	63.09	9.23	-	-	1.80	-	0.32
32	Piplav	10-5-77	9	40.70	1.82	-	-	0.35	-	0.57
	<b>Total</b>		<b>237</b>	<b>943.60</b>	<b>108.91</b>	<b>459.07</b>	<b>11.45</b>	<b>38.19</b>	<b>20.63</b>	<b>12.59</b>
33	BORSAD	19-3-51	140	169.62	107.34	14.19	2.83	88.33	0.79	-
34	Anklav	14-10-58	43	75.53	183.24	4.25	4.25	162.87	3.74	-
35	Bhadran	17-8-69	27	188.11	61.25	0.01	-	38.32	-	4.02
36	Virsad	22-4-72	3	50.90	19.06	-	-	9.18	0.05	-
37	Kathana	15-12-73	11	15.64	7.44	0.11	0.13	3.96	-	1.95
38	Bamangam	29-12-74	4	14.51	7.94	-	-	-	-	0.21
39	Zarola	22-4-76	4	57.57	7.95	-	-	-	0.25	-
40	Kavitha	9-6-76	5	19.30	4.62	0.01	-	-	-	0.47
	<b>Total</b>		<b>237</b>	<b>591.18</b>	<b>398.84</b>	<b>18.57</b>	<b>7.21</b>	<b>302.66</b>	<b>4.83</b>	<b>6.65</b>
41	MEHMEDABAD	21-4-51	103	183.87	57.25	10.29	-	34.45	-	1.96
42	Mahij	19-1-69	16	34.15	25.74	0.01	-	9.70	-	0.58
43	Haldarvas	21-6-72	15	34.39	1.75	-	-	0.39	-	0.62
44	Aklacha	15-4-73	3	28.57	3.32	-	-	0.02	-	0.64
45	Kheda	3-6-74	34	108.15	66.83	0.01	0.01	54.01	-	0.09
46	Modaj	15-5-75	2	30.76	1.43	-	-	-	-	0.63
	<b>Total</b>		<b>173</b>	<b>419.89</b>	<b>156.32</b>	<b>10.31</b>	<b>0.01</b>	<b>98.57</b>	-	<b>4.52</b>
47	CAMBAY	25-11-50	161	496.67	663.29	1.10	0.37	471.85	10.53	-
48	Tarapur	24-11-59	36	233.42	323.00	-	-	193.62	4.84	-

49	Undel	6-6-70	3	38.15	10.73	-	-	1.30	-	0.39
		Total	200	768.24	997.02		1.10	666.77	15.37	0.39
50	THASRA	7-2-51	63	153.79	155.10		0.64	101.69	-	6.00
51	Dakor	27-1-55	69	235.50	258.01		0.40	255.50	1.67	-
52	Nesh	1-6-74	14	31.92	44.35		-	25.78	0.43	-
53	Sevalia	3-3-75	20	45.82	44.09		1.63	32.72	0.28	-
		Total	166	467.03	501.55		2.67	415.69	2.38	6.00
54	MATAR	13-3-51	57	114.66	144.75		7.94	63.04	0.08	-
55	Navagam	30-7-58	18	63.49	66.79		0.03	51.34	0.55	-
56	Limbari	4-6-67	17	114.88	77.12		-	13.05	-	1.46
57	Radhu	25-6-72	11	34.30	31.18		-	12.66	0.25	-
58	Alindra(M)	2-6-74	8	21.22	16.84		-	6.29	0.01	-
		Total	111	348.55	336.68		7.97	146.38	0.89	1.46
59	KAPADWANJ	2-4-51	195	182.32	239.73		2.12	124.43	1.87	-
60	Attarumba	12-2-56	30	39.22	44.98		0.02	34.51	-	0.79
61	Kathlal	20-7-69	34	51.44	98.39		5.45	49.90	2.92	-
62	Nirmali	4-4-74	12	14.23	7.34		0.01	5.81	-	0.85
63	Lasundra	16-5-75	8	17.47	72.95		-	64.95	1.73	-
64	Antisar	5-9-75	7	7.56	65.05		-	22.90	1.18	-
65	Telnar	24-2-77	2	17.70	13.41		-	13.29	-	0.03
		Total	288	329.94	541.85		7.60	315.79	7.70	1.67
66	BALASINOR	19-4-51	102	326.90	167.15		4.15	144.35	-	5.04
67	Birpur	16-2-56	59	153.52	31.67		2.45	10.60	-	4.63
68	Jetholi	30-6-74	11	13.86	19.32		0.37	17.28	-	1.27
		Total	172	494.28	218.14		6.97	172.23	-	10.94
		Grand Total	2540	10792.02	3861.47		840.72	2421.08	88.16	88.16



Table 4											
Working Status of PACS											
Particulars	1980-81	1981-82	1982-83	1983-84	1984-85	1985-86	1986-87	1987-88	1988-89	1989-90	1990-91
Viable PACS	229	202	196	186	191	169	169	184	218	190	192
Potentially Viable	186	159	159	159	154	244	244	241	214	266	266
Non-viable	226	275	270	291	284	196	179	165	161	137	125
Under Administration	55	36	36	29	26	27	15	14	15	9	7
Under Liquidation	15	23	23	37	45	67	76	62	72	68	60
Dues Assigned to Bank	37	53	64	44	37	30	55	72	58	35	50
Total	748	748	748	746	737	733	738	738	738	705	700
PACS Overdues to Bank											
No. of PACS	520	518	508	420	423	466	368	405	400	444	399
Amount (Rs Lakhs)	1491.63	1450.83	1472.29	1707.70	1961.25	2126.64	2312.79	2650.24	3294.10	4108.62	2641.29
Members Overdues to Society											
No. of Members	48519	43655	37870	37761	37082	33653	35092	34983	35728	41393	23199
No. of PACS	551	620	587	619	584	587	587	545	545	546	546
Amount (Rs Lakhs)	1183.30	1068.88	1031.88	980.59	1156.02	1104.64	1161.28	1177.72	1349.87	1769.82	1632.94

Source : Data from Kheda Bank

Table 5								
Details of Societies in Kheda District Whose Business is Above 30 Lakhs (1986-87 to 1990-91)								
Name of Society	Business (Thousands)				Salary (Rs.)	Overdue (%)	Profit/Loss ('000)	Profit/Loss (%)
	Loan	Fertilizer	Other	Total				
Year:1986-87 (738 Societies)								
Chaklasi	4399.51	2502.04	10609.44	17511	666	-	321.52	1.84
Mahudha	2062.76	1458.32	1006.69	4527.76	530	-	93.23	2.06
Alina	1217.20	1328.89	2151.06	4697.15	600	0.87	22.50	0.48
Aashi	162.60	2660.10	1338.90	4161.60	575	-	151.30	3.64
Limbasi	4836.67	4131.62	2991.00	11959.29	1025	3.38	174.25	1.46
Valasan	988.70	939.00	1219.67	3147.37	650	-	49.54	1.57
Bakrol	1231.48	1723.04	2002.52	4957.04	750	-	40.07	0.81
Chikhodra	741.40	916.00	1730.00	3387.40	650	-	78.00	2.30
Ajarpura	2192.73	1276.02	560.40	4029.14	750	-	62.74	1.56
Thamna	1456.00	1790.07	93.50	3339.57	725	-	115.19	3.45
Borsad	302.88	3578.00	1219.20	5100.08	1400	-	60.68	1.19
Year:1990-91 (700 Societies)								
Chaklasi	3296.63	3257.95	3216.48	9771.06	840	58.76	92.04	0.94
Pij	-	1925.77	1391.09	3316.86	700	-	52.01	1.57
Piplag	28.92	1427.88	2056.15	3512.95	1000	-	26.06	0.74
Aashi	-	2976.57	411.74	3388.32	1200	3.17	325.04	9.59
Dabhov	-	1800.00	1790.00	3590.00	400	-	45.87	1.28
Kasor	459.00	1582.00	1200.00	3241.00	700	-	48.29	1.49
Limbasi	1603.60	3202.70	561.80	5368.10	1950	35.30	625.10	11.64
Bakrol	1991.36	2301.49	2891.55	7184.41	1005	-	158.77	2.21
Khambhodaj	2115.18	-	4119.85	6235.03	600	5.62	176.80	2.84
Sundan	357.43	1207.77	1523.15	3088.35	500	8.96	50.15	1.62
Chikhodra	841.80	1118.59	1266.97	3227.36	850	4.94	122.54	3.80
Pansora	65.44	618.96	2772.43	3456.84	851	30.29	(26)	(0.75)
Ajarpura	356.37	1161.29	1948.60	3466.26	1100	15.35	102.83	2.97
Thamna	124.98	1963.56	951.05	3039.59	940	16.49	200.00	6.58
Oad	1288.43	2418.69	3995.93	7703.05	1450	-	135.69	1.76
Tarapur	576.10	1900.34	766.65	3243.09	605	19.25	53.20	1.64
Borsad	687.62	5091.29	1512.35	7291.26	1600	-	64.64	0.89
Virsad	1257.40	956.82	1404.59	3618.81	1125	-	32.40	0.90
Bhadran	2608.69	3815.20	3925.40	10349.29	1900	0.11	98.70	0.95

## Annexure 1

Analysis of Overdues of a PACS:  
A heuristic Illustration

Ref. Table 1.1

1. Overdues in the beginning of the period of analysis (assumed same for simplicity both at society and at bank level):

$$\begin{aligned} \text{Principal } X_0 &= \text{Rs. 20 lakhs} \\ \text{Interest } I_0 &= \text{Rs. 5 lakhs} \end{aligned}$$

2. Interest rate (a):  
i) charged from individuals = 11%  
ii) paid to bank by the society = 9%
3. At bank level interest is capitalised after 6 months default. We have assumed capitalisation from beginning of the next year.
4. Recovery of old overdues is assumed at the end of previous year (i-1) or in the beginning of the year (i). Thus after n years the overdues accumulate to

$$Y_n = X_0 + \sum_{i=1}^n Z_i + I_0 + \sum_{i=1}^n [Z_i \cdot a^{(n+i-1)}] + [X_0 \cdot a^n] - \sum_{i=1}^n I_i$$

- i) Amount recoverable from individuals at 11% after 10 years

$$Y_1 = 20 + 50.30 + 5 + 41.90 + 22 - 1.1 = 138.10 \text{ lakhs}$$

- ii) Amount payable to the bank at 9% after 10 years

$$Y_2 = 20 + 50.3 + 5 + 34.08 + 18 - 1.1 = \text{Rs. 126.28 lakhs}$$

- iii) Margin of the society lost  $Y_1 - Y_2 = 138.10 - 126.28 = \text{Rs. 11.82 lakhs}$

- iv) Amount overdue at bank level recoverable from society

$$Y_n' = (X_0 + I_0)(1+a)^n + \sum_{i=1}^n (Z_i - I_i)(1+a)^{(n+1-i)}$$

for  $n=10$  and  $a=9\%$

$$Y_3 = 25(1.09)^{10} + \sum_{i=1}^{10} (Z_i - I_i)(1.09)^{(11-i)} = \text{Rs. 153.356 lakhs}$$

- v) Difference between amount recoverable by the bank and payable by the society

$$Y_3 - Y_2 = 153.356 - 126.28 = \text{Rs. 27.076 lakhs}$$

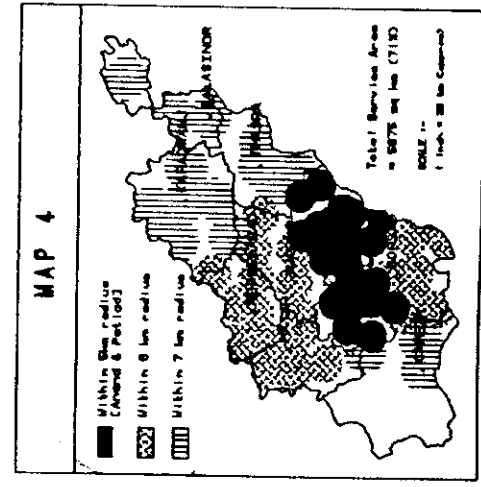
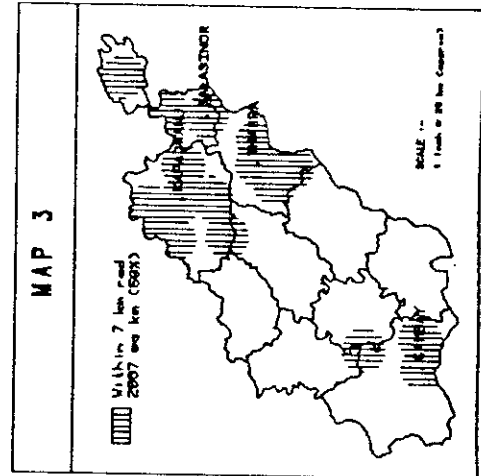
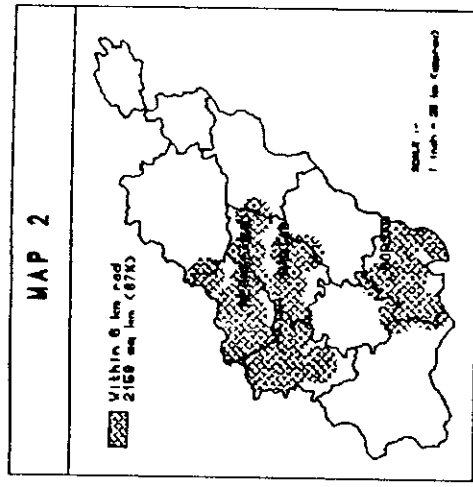
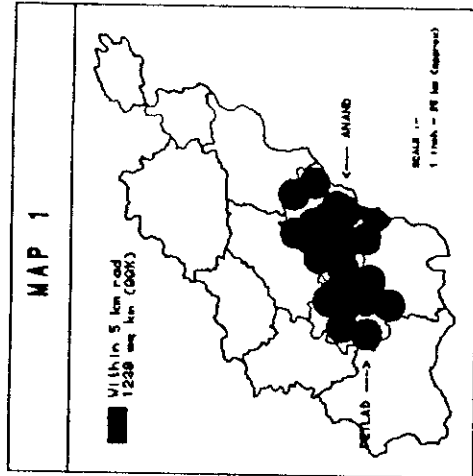
which is more than double the society's margin.

**Table 1.1**  
**Computation of Amount Recoverable and Payable for the Society**

Year (i)	Advances (Xi)	Default amount (Di) (at year end)	Old Overdue			Net overdue of principal (Di-Pi)=Zi	Cumulative overdues of principal including Xo	Interest on principal overdue at		Total interest overdue including Io net of repayment		Overdues with capitalisation of interest at 9%
			Principal (Pi)	Interest (Ii)	Total (Pi+Ii)			9%	11%	9%	11%	
1	15	5	0.8	0.3	1.1	4.2	24.2	2.178	2.662	6.678	7.362	31.501
2	17	9	0.7	0.3	1.0	8.3	32.5	2.925	3.575	9.503	10.637	43.055
3	20	13	0.6	0.2	0.8	12.4	44.9	4.041	4.939	13.344	15.376	60.032
4	18	13	0.4	0.2	0.6	12.6	57.5	4.975	6.325	18.119	21.501	78.558
5	17	13	0.2	0.1	0.3	12.8	70.3	6.327	7.733	94.346	29.134	99.471
6	3						70.3	6.327	7.733	30.673	36.867	108.423
7	4						70.3	6.327	7.733	37.000	44.600	118.181
8	5						70.3	6.327	7.733	43.327	52.333	128.817
9	5						70.3	6.327	7.733	49.654	60.066	140.511
10	10						70.3	6.327	7.733	55.981	69.799	153.356

Xo = Rs.20 lakhs, Io = Rs.5 lakhs

TALUKA-WISE SERVICE AREA COVERAGE  
 (at varying radii)  
 OF DCCB BRANCHES IN KHEDA DISTRICT



PURCHASED

APPROVAL

GRATIS, EXCHANGE

PRICE

ACC NO.

VIKRAM SARABHAI LIBRARY

I. I. M, AHMEDABAD.