PART : I

BACKGROUND AND RESEARCH DESIGN

SECTION 1 BACKGROUND AND RATIONALE OF THE STUDY

SECTION 2 RESEARCH DESIGN

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SECTION I : BACKGROUND AND RATIONALE OF THE STUDY

I.1.1 Concept of Priority Sector

The concept of "priority sector" in the context of bank lending emerged for the first time in India with the introduction of social control over banks (16). The National Credit Council (NCC) as a part of the social control package, enumerated that the sectors and sections of the economy which did not have adequate access to bank finance but which, on account of their economic importance, deserved due recognisation from the banking system, should be treated as priority sectors, and that there should be a conscious and deliberate attempt to ensure that these priority sectors of the economy obtained adequate credit from the banking system (6).

This description of 'priority sector' (PS) was subsequently formalised in 1972 and at present Agriculture and Allied activities, Small Scale Industries, and Other Priority Sectors, constitute the total priority sector. For computation and analysis of priority sector advances, these concepts have been defined as given below :

$$TPS = Ag + SSI + OPS, \qquad \langle 1 \rangle$$

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where,
TPS = Total Priority Sector Advances,
Ag  = Advances to Agriculture and Allied Activities,
SSI = Advances to Small Scale Industries, and
OPS = Advances to Other Priority Sector.
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The three components of **TPS** have been defined as,

$$Ag = \sum_{i=1}^{2} Pi \qquad \langle 2 \rangle$$

where,

P1 = Direct Finance for Agricultural purposes, computed by,

$$P1 = \sum_{d=1}^{8} Sj \qquad \langle 3 \rangle$$

where,

S = purpose of advances,

d = 1 means advances for purchase of agricultural implements and machinery,

d = 2 means advances for development of irrigation,

d = 3 means advances for land reclamation and other land development schemes,

d = 4 means advances for construction of farm buildings and other structures on the farm,

d = 5 means advances for construction and running of storage facilities such as warehouses, godowns, silos and cold storage,

d = 6 means advances for production and processing of hybrid seeds,

d = 7 means advances for payment of irrigation charges, etc., and,

d = 8 means other types of direct finance to farmers.

P2 = Indirect Finance for Agricultural Purposes, computed by,

$$P2 = \sum_{i=1}^{4} Si \qquad \langle 4 \rangle$$

where,

    S = Purpose of advances
    i = 1 means credit for financing the distribution of fertilizers, pesticides, seeds, etc.,
    i = 2 means loans to electricity boards,
    i = 3 means loans to farmers through co-operative societies,
    i = 4 means other types of indirect advances for various specified purposes.

$$SSI = \sum_{s=1}^{2} Ls \qquad \langle 5 \rangle$$

where,

L1 = Loans and Advances given directly to the small scale industrial firms, and

L2 = Indirect finance to the small scale sector, computed by,

$$L2 = \sum_{Si=1}^{3} Li \qquad \langle 6 \rangle$$

where,

    Si = 1 means loans and advances given to agencies involved in assisting the decentralized sector,
    Si = 2 means loans and advances to government sponsored corporations and organizations providing funds to weaker sections,
    Si = 3 means loans for setting-up industrial estates.

$$OPS = \sum_{Ps=1}^{8} Aps, \qquad \langle 7 \rangle$$

where,

    Aps = Purpose of Advances for the Activity,
    Ps = 1 means advances to small road and water transport operators,
    Ps = 2 means advances granted to retail traders,

Ps = 3 means advances to small business firms,

Ps = 4 means advances to professional and other self-employed persons,

Ps = 5 means advances to state sponsored organisations for SC/ST,

Ps = 6 means advances to individual for educational purposes,

Ps = 7 means advances for housing-both direct and indirect,

Ps = 8 means pure consumption loans granted under consumption credit schemes.

I.1.2 Lending Targets

To facilitate the flow of bank credit to the priority sectors, the Government of India and the Reserve Bank of India (RBI) set the lending targets and issued necessary guidelines for the same to the commercial banks, from time to time. The existing frame of targets and guidelines requires that :

1. PS = .40 (NBC) by the end of March every year;

2. P1 = .18 (PS) by the end of march 1990;

3. WSA = .25 (PS) or .10 (NBC);

4. SCA = .30 (IRDPA), and

5. CD = 60 % or more,

6. DRIA=.001(TBA),

where,

PS = Total Priority Sector Advances,
P1 = Direct Finance for Agricultural Purposes,
NBC= Net Bank Credit,
WSA= Advances to Weaker Sections of the Society,
SCA= Advances to Persons belonging to Scheduled Castes and Scheduled Tribes under the Integrated Rural Development Programme (IRDP),
CD = Credit-Deposit Ratio in rural and semi-urban branches,
DRIA=Advances, under the Differential Rate of Interest scheme given at 4 per cent per annum rate of interest, with the stipulation that
TBA =Total Bank Advances

SCA = .40 (DRIA),
WB = .30 (DRIA),and
RA = .67 (DRIA),where SCA means DRIA to
         SC/ST beneficiaries, WB means   women
         beneficiaries, and RA means DRIA
         sanctioned by Rural and semi-urban
         branches.

Over and above the quantitative specifications, it has also been expected of banks that they will allot a significant share of their total PS Advances to the beneficiaries of the 20 point economic programme.

Further, for the purpose of PS Advances, **weaker sections of the society will mean and include** :

    i) Small and marginal farmers with land holding of 5 acres or less, landless labourers, tenant farmers and share croppers ;

    ii) Artisans (irrespective of location) or small industrial activity(viz.,manufacturing,processing, preservation and servicing) in villages and small towns with a population not exceeding 50,000 involving utilisation of locally available natural resources and/or human skills, where individual credit requirements do not exceed Rs.25,000.00 are to be considered as part of weaker sections ;

    iii)Beneficiaries of Integrated Rural   Development Programme (IRDP) ;

    iv)Scheduled Castes and Scheduled Tribes;

    v)Beneficiaries of Differential Rate of Interest (DRI) scheme ;

vi)Beneficiaries of Self-Employment Programme for Urban Poor (SEPUP).

I.1.3 Growth In Advances

As a result of the policy based regulatory and facilitating measures, there has been a phenomenal growth in the priority sector advances during the post nationalisation period. Table 1 depicts this growth with end of June 1969 as the base point and the end of June 1988 as the terminal point.

Table I.1 : GROWTH IN PRIORITY SECTOR ADVANCES OF PUBLIC SECTOR BANKS IN INDIA

| SECTOR | JUNE 1969 | | | JUNE 1988 | | |
	AOS * Rs. Cr.	SHARE IN Priority Sector Advances (%)	Total Bank Credit (%)	AOS * Rs. Cr.	SHARE IN Priority Sector Advances (%)	Total Bank Credit (%)
Agriculture	162	36.73	5.37	12111	41.43	18.94
S.S.I.	257	58.28	8.52	10874	37.20	17.00
Other Priority Sector	22	4.99	0.07	6245	21.37	9.77
Total Priority Sector	441	100.00	14.62	29230	100.00	45.70
Total Bank Credit	3016	-	-	63950	-	-

* Amount Outstanding

Source : Reserve Bank of India Report on Trend and Progress of Banking in India, 1988-'89 (July-June).

It may be observed on the basis of the above analysis that,

(i) the outstanding advances of public sector banks to priority sector registered a 66 fold growth demonstrating a structural change in the credit portfolio of banks with an

upward shift in the share of 'total priority sector advances'
in the 'total advances' from 14.62 per cent to 45.70 per
cent;

(ii) A componential analysis of priority sector advances
reveals that in the total advances of banks, the share of
agricultural advances increased from 5.37 per cent to 18.94
per cent, SSI advances increased from 8.52 per cent to 17.00
per cent, and other priority sector advances increased from
0.07 per cent to 9.77 per cent, and

(iii) Within the priority sector advances also, structural
changes are visible as the share of small-scale industries
declined from 58.28 per cent to 37.20 per cent, while the
share of agricultural advances increased from 36.73 per cent
to 41.43 per cent and that of Other Priority Sector Advances
increased from 4.99 per cent to 21.73 per cent.

I.1.4 Recovery Problem

With increased emphasis on the deployment of credit to
priority sector, the need, urgency and importance of
recycling of funds hardly calls for any emphasis. However,
the poor recovery of loans adversely affects the recycling of
loanable funds.As per the latest data available the recovery
in direct agricuLtural advances was 57.1 per cent in June
1987 as compared to 56.5 per cent, 54.2 per cent, 51.6 per
cent and 53.2 per cent in June 1986, 1985, 1984 and 1983,
respectively. The funds blocked up in the SSI units were Rs.
626.52 crore (64388 units), Rs. 788.30 crore (81647 units),
Rs. 954.65 crore (97890 units) and Rs. 1184.22 crore

(128687 units) in the year, 1983, 1984, 1985 and 1986, respectively. The recovery data for `other priority sector' from secondary sources are not available. The following table depicts the recovery position in Gujarat State and Valsad and Surat Districts of Gujarat State, in respect of the total priority sector advances of commercial banks covered in the sample.

Table I.2 : **YEARWISE RECOVERY OF PRIORITY SECTOR ADVANCES (RECOVERY AS PER CENT TO DEMAND)**

Year +	Gujarat State	Valsad District	Surat District
1982	N. A. *	52.09	42.99
1983	N. A.	46.01	48.47
1984	N. A.	43.91	43.96
1985	47.16	41.10	40.35
1986	39.77	44.01	45.67
1987	44.92	44.48	43.69
1988	42.29	43.19	43.32

Source   :   Personal Survey
+ Year ended June
* Not Applicable

It is evident from the table that the recovery of priority sector advances is very poor and a huge amount of money is continuously blocked in overdues. In other words, **the growth in priority sector advances is continuously accompanied by large overdues**. According to the guidelines given by the Reserve Bank of India in July 1985, **the following advances are treated as overdue** :

1.   Where a loan has remained unpaid though due for repayment.

2.   All advances irrespective of their nature, viz.loans, overdrafts, cash credits, etc. Which

have been recalled by the bank, but not repaid.

3. In the case of term loans, the amounts of instalments which have become due and remained unpaid.

4. Advances which are treated as bad/doubtful of recovery or in respect of which suits have been filed.

5. Entire amount of advances to sick industrial units which are not considered as potentially viable.

6. Borrowal accounts irrespective of their nature, viz. overdfraft, cash credit etc. where the interest has not been paid and where there are practically no operations or where there are excess drawings over the drawing power/drawing limit continuously for a period of six months or more,i.e, stagnant accounts.

Accordingly, in this study the concept of `overdue´ has been used as per the above guidelines, as the banking industry has accepted and put into practice the same concept (5).

The poor recovery and the mounting levels of overdues in priority sector lending in India depict an alarming situation, which has adversely affected the overall performance of banks. It is precisely due to high overdues level that the recovery is very poor as a result the loanable resources are freezed and they are prevented from drawing the needed amount of refinance from re-financing institutions,

viz. NABARD, IDBI, etc. Further, the poor recovery comes in the way of Bank Management to take quick decisions with respect to lending policy, procedures, systems and methods and it also shakes the confidence of general public and particularly the depositors in the financial soundness and viability of the banking system. It also adversely affects the productivity of the operational staff and keeps them busy in unproductive and non-remunerative work, increases the cost of credit operations significantly due to disproportionate litigation and follow-up costs and ultimately creates fear-psychosis in the minds of branch managers. Some times it also causes non-cordial relations between the Banks and their clients.

Thus, the situation necessitates that the factors responsible for the poor recovery must be carefully identified and suitable measures for improving the recovery of banks' loans must be taken at the earliest. This may be possible only if an investigation at the grass-root level is conducted in a systematic manner using appropriate research and statistical techniques. Such an investigation, based on the latest data is not available especially in the context of priority sector advances for determining the critical factors responsible for overdues and for identifying suitable measures to improve recoveries, covering, lending banks as well as the defaulters and non-defaulters at the grass-root level. A review of the relevant research studies confirms the above observation and provides a justification for this study.

I.1.5 Survey of Existing Research

The recovery aspect of lending has neither been considered strategic or a policy issue nor could it find an appropriate place in the business policy guidelines of the Chairman and Managing Director of any bank upto the early eighties (7). It was the growing involvement of huge funds in sick accounts that compelled bankers to consider `recovery` as a key performance area of senior and top management. Accordingly, this aspect has drawn the serious attention of bankers and academic scholars resulting into a number of studies taken up by scholars and banks themselves to get an insight into the complexities of non-performing assets and recovery management. Some of such studies have tried to identify different factors adversely or favourably affecting the recovery performance of banks, especially in the area of priority sector lending.

There is no unanimity among researchers on the factors which most directly and effectively influence the loan recoveries and different studies have laid different emphasis on different recovery factors. For instance BOB (1), BOB (2), Udapa KD and Rao Dinkar (8) have highlighted wilful defaults and inadequacy of co-ordination between banks and Government Agencies as important factors responsible for poor recoveries in the area of priority sector lending, while Rayajiwala P. C. (14) assigns the responsibility for mounting overdues in priority sector advances to poor and imbalanced scheme designs and procedures. As distinct from these two findings,

is a finding in a study of NABARD (8) where profitability of the activity financed has been identified as the most important recovery factor. In the same study, the second most important factor identified as a recovery factor was the rapport maintained by bank staff with the borrowers suggesting indirectly that a close follow-up is an important recovery factor. As against the above referred studies, NIBM (9) and SBI(18) studies have blamed the subsidy programmes and involvement of Government Agencies in lending as fectors responsible for deterioration in the quality of lending and consequently recoveries. The spatial distance between the locations of bank offices and the location of beneficiaries has also been identified as a critical recovery factor; the longer the distance between the beneficiaries' place and the lending branch of a bank, the higher is the level of overdues and the lower is the recovery.

A comprehensive list of factors responsible for the poor recovery has been brought out by BOB (1) (2) (3) (4), Patel K.A. (11), PNB (12), RBI (15), Sharma, Jain and Koshta (17). According to these studies, the recovery factors could be classified into four groups. In the first group, unexpected and uncontrollable exigencies faced by the borrowers have been highlighted. Examples of such exigencies are natural calamities and unexpected competition compelling the borrowers to sell their products at uneconomic prices, which affect the recovery adversely. The factors in the other three groups are reasonably controllable at the level of the

borrowers or lending bankers.

It has been highlighted by these studies that, non-serious attitude of the borrowers towards repayment of loans coupled with misutilisation of advances emanating from social exigencies, pressing consumption needs and pressures from non-institutional creditors to liquidate their loans have been responsible for poor repayment performance on the part of the borrowers. So much so, that in a large number of cases even the assets financed by banks were liquidated by the borrowers before maturity of the loan and that too without the knowledge of the lending bankers.

These findings of all the studies referred above resemble with the findings of Udapa K. D. and Rao Dinkar (19) that wilful defaults significantly influence effective recoveries. The other factors adversely affecting the recoveries are related to the organisational and functioning aspects of priority sector lending. These factors include lack of integrated approach in lending on the part of bankers, inadequacy of the amount of loan sanctioned to meet the genuine business needs of the borrowers, fixing short repayment period than norms, failure to disburse the loan amount timely, and extreme paucity of staff for monitoring the recoveries alongwith inadequate support in recovery-follow-up from the Government Agencies, which recommended the sanction of loans to a large number of borrowers under different socially oriented schemes of lending introduced by the Government.

A critical perusal and review of the research studies referrred to above reveals that most of these studies were not scientifically designed. The concepts used were not defined precisely and the opinion surveys were not properly structured and scaled, the data analysed were not adequately tested, and samples were not drawn through the appropriate statistical techniques. Also most of the findings were just in the form of generalised observations made without testing the statistical significance of findings and without using appropriate statistical or economatric methods. In none of the studies, factor analysis was attemped and no analysis could adequately bring out the elasticity in recoveries to different recovery factors.

As a result, the required insight to improve the deteriorating recovery performance of banks in the priority sector lending could not be made available by these studies. Also, these studies have neither challenged any existing theories nor adequately contributed to the academics. Thus, it can be concluded that the scope of empirical research in credit management with special reference to recovery management has not been fully exploited and there is a gap in the needs and the existing stock of knowledge in this area. It is necessary, therefore, that this gap must be bridged by scientifically designed extensive emperical researches. This study is an attempt in this direction.

SECTION II : RESEARCH DESIGN

I.2.1 Objectives of The Study

The main objectives of the study are to :

    (1a) ascertain the recovery of priority sector advances, viz.,i) Agricultural advances (ii) SSI advances(iii) Other Priority Sector advances (iv) Total Priority Sector advances; and

    (1b) identify specific factors influencing the recovery of priority sector advances to each sector and the total.

    (2) Evaluate the implementation of the guidelines issued by the Reserve Bank of India in respect of recovery of loans to priority sector; and

    (3) Suggest measures for improving the recoveries in respect of Priority Sector Advances.

I.2.2 METHODOLOGY

I.2.2.00 Spatial Coverage

The study is confined to two districts of Gujarat State, viz., Valsad and Surat. The name of Valsad district was Bulsar earlier and still many people call it by old name. However, while in the title of the thesis, it is mentioned as Bulsar, in view of the change in the name of this district in offical records, we have also used the new name, i.e. Valsad in the entire thesis. The selection of these two districts for field work was purposive, keeping in view their suitability for the study and the convenience factor. The suitability of these two districts may be supported by the following :

    (1) In terms of natural endowment and climatic factors, both the districts have common characteristics;

    (2) Both the districts are very well covered by the branches of the public sector banks;

    (3) Both the districts are well developed in terms of agriculture, SSI and other Priority Sector Components;

(4) Public sector banks have, by and large, achieved
their targets, as per the guidelines of the
Reserve Bank of India, relating to advances to the
target groups under the priority sector;

(5) In both the districts, the public sector banks
have been facing a serious problem of recovery and
non-performing assets;

(6) The socio-cultural profile of population in both
the districts is comparable, with a large segment
of the total population belonging to the weaker
sections of the society.

Thus, in view of the above factors, it was felt that these
two districts could meet the needs of the research study in
terms of the required data. Also, the two districts appeared
suitable for a comparative analysis also.

Over and above the suitability factor, the convenience factor
also played a decisive role in the identification of these
two districts for field work. The researcher belongs to the
area and is well acquainted with a large number of
beneficiaries under the priority sector advances programme of
the public sector banks. It was expected that in view of the
personal contact, the beneficiaries would share the
information and views freely with the researcher.

Further, the local branches of the public sector banks in
these two districts responded favourably to help in the
investigation. Thus, these two districts were identified in
view of the `suitability' and `convenience' factors.

I.2.2.01 Institutional Coverage

All the public sector banks except the Regional Rural Banks,
located in these two districts which, have been financing
priority sectors have been covered. However, in view of their

separate identity and differences in their size and resources, organisational structures, commitments and thrusts, these banks have been grouped under five categories, for the purpose of selection of branches and beneficiaries for collection of primary data through survey. The stratification has been done as given below:

Table I.3 : STRATIFICATION OF BANKS WITH IDENTIFICATION CODES

Stratum Code	Identification Factors/ Characteristics	Name of the banks
Bank I	Lead Bank	Bank of Baroda *
Bank II	Largest Bank Group	State Bank of India State Bank of Saurashtra
Bank III	Convener Bank for State Level Bankers' Committee	Dena Bank
Bank IV	Bank having their Head Offices in the western region to which the identified districts belong.	Bank of India, Central Bank of India, Union Bank of India, Bank of Maharashtra
Bank V	All other banks having their branches in the identified districts,but having a relatively very small share in the total priority sector advances given by all the banks taken together in the district.	Syndicate Bank, UCO Bank, Indian Overseas Bank, Punjab National Bank, Indian Bank, Canara Bank, New Bank of India, Allahabad Bank, United Bank of India,Corporation Bank, Andhra Bank, Vijaya Bank, Punjab & Sind Bank Oriental Bank of Commerce

* As a matter of chance, Bank of Baroda was found to be the lead bank in both the identified districts.

The performance data of these banks as at the end of December 1988 is given in Table I.4

Table I.4 : NO. OF BRANCHES AND BUSINESS OF COMMERCIAL BANKS IN VALSAD AND SURAT DISTRICTS AS ON 31ST DECEMBER 1988

(Rs. in Lakhs)

Name of Bank/ District	No of Branches	Deposits	Total + Advances	Priority Sector Advances			
				Ag. Advances	SSI Advances	Other Priority Sector Advances	Total * Priority Sector Advances (5+6+7)
1	2	3	4	5	6	7	8
Bank I							
Valsad District	75	30115	10200	2583 (37.23)	3471 (50.05)	883 (12.72)	6937 (68.00)
			(33.87)				
Surat District	82	27169	12371 (45.53)	2427 (34.84)	3567 (51.20)	972 (13.96)	6966 (56.30)
Bank II							
Valsad District	29	7586	5857 (77.20)	677 (20.00)	2320 (68.55)	387 (11.45)	3384 (57.77)
Surat District	33	10980	6656 (60.61)	746 (20.38)	2345 (64.07)	569 (15.55)	366098 (54.00)
Bank III							
Valsad District	28	5678	2034 (35.82)	479 (40.50)	398 (33.64)	306 (25.86)	1183 (58.16)
Surat District	35	8704	3510 (40.32)	1034 (48.77)	969 (45.70)	117 (5.53)	2120 (60.40)
Bank IV							
Valsad District	31	12461	4331 (34.75)	1746 (51.44)	1317 (38.80)	331 (9.76)	3394 (78.36)
Surat District	48	18969	7942 (41.86)	2441 (45.52)	2058 (38.38)	863 (16.10)	5362 (67.51)
Bank V							
Valsad District	26	6044	2143 (35.46)	498 (40.10)	496 (39.93)	248 (19.97)	1242 (57.95)
Surat District	45	19752	6658 (33.70)	281 (11.06)	1872 (73.72)	386 (15.22)	2539 (38.13)
Total							
Valsad District	189	61884	24565 (39.70)	5983 (37.06)	8002 (49.57)	2155 (13.37)	16140 (65.70)
Surat District	243	85574	37137 (43.39)	6929 (33.55)	10811 (52.36)	2907 (14.09)	20647 (55.59)

+ Figures in parenthesis in column 4 indicate the percentage to the deposit.
* Figures in parethesis in column 8 indicate the percentage to the total advances.

It is evident from the above data that in Valsad district, all the five banks have achieved the targets fixed for lending to priority sector. The performance of Bank IV was the best in achieving the target, followed by Bank I, and the perfomance of Bank II, Bank III and Bank IV was almost at the same level. In Surat district, except Bank V, all other banks have achieved the priority sector lending targets. The performance of Bank V was very poor and this bank did not adhere to the guidelines given by Reserve Bank of India in respect of priority sector advances. Performance of Bank IV was best followed by Bank III, Bank I and Bank II.

The performance of Bank II was much above the prescribed norms in respect of credit deposit ratio followed by Bank III, Bank V, Bank IV and Bank I in Valsad district and Bank I, Bank IV, Bank III and Bank V in Surat district.

It is also evident that the banks in Valsad district performed better than that of Surat district in achieving the priority sector lending targets, whereas the banks in Surat district performed better than that of Valsad district in respect of credit deposit ratio.

For the purpose of primary inquiry from beneficiaries under various credit schemes relating to the priority sectors, 20 branches of banks in Valsad district 10 branches for Agriculture and Other Priority Sector and 10 branches for SSI, and 23 branches of banks in Surat district were selected. However, in Surat district, out of the 23 branches, 13 branches were identified for drawing sample of

Agricultural and Other Priority Sector beneficiaries and the other 10 branches were marked for SSI beneficiaries. Borrowers from each branch, for personal interview and collection of data, were identified through purposively stratified random sampling technique which covered all the priority sector activities. The following table depicts the sample.

Table I.5 : SAMPLE BRANCHES

| Bank | Branches Located in | | | |
| | Valsad District | | Surat District | |
	Ag. & OPS	SSI	Ag. & OPS	SSI
Bank I	IB4, IB8, IB9~,IB14~, IB17, IB18.	IB1, IB2, IB9~,IB14~, IB15, IB16.	IS4, IS5, IS7, IS8, IS15, IS19, IS23.	IS3, IS10, IS11,IS17, IS20.
Bank II	II B3	I B10	II S6, II S16	IS12, IS21
BankIII	III B5	III B11	III S2, III S9	III S22
Bank IV	IV B6	IV B12	IV S18	IV S13
Bank V	V B7	V B13	V S1	V S14
Total==>	10	10	13	10

~ Common in Ag. & OPS and SSI

B = Valsad	S = Surat	IB1 = Bilimora
IB2 = Chanod	IIB3 = Chikhli	IB4 = Dharampur
IIIB5 = Kharel	IVB6 = Kolak	VB7 = Munsad
IB8 = Unai	IB9 = Pardi	IIB10 = Valsad
IIIB11 = Valsad	IVB12 = Valsad	VB13 = Valsad
IB14 = Valsad-m	IB15 = Vapi-Ind-e	IB16 = Vapi-iii-p
IB17 = Umargaon	IB18 = Unai	VSI = Hazira
IIIS2 = Kamrej	IS3 = Khatodra-S	IS4 = Kim
IS5 = Madhi	IIS6 = Mahuva	IS7 = Mandvi
IS8 = Mosali	IIIS9 = Nizar	IS10 = Parsi Sheri-S

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IS12  = Udhna       IVS13 = Surat       VS14  = Surat
IS15  = Songadh     IS16  = Valod       IS17  = Vania Sheri-S
IVS18 = Vyara       IS19  = Uchhal      IS20  = Udhna
IIS2  = Udhna       IIIS22 = Udhna      IS23  = Umbhel
IS11  = Sayedpura-S
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I.2.3 Data Collection

Data relevant to the study were collected from various published and unpublished sources, viz., reports, minutes of the meetings and personal discussions. In this endeavour, the data were collected from the records of banks and the same were supplemented by primary data collected through field surveys. For opinion survey, selected Bank Managers, Field Officers and Borrowers, were contacted and their experiences, views, etc. were recorded using structured questionnaires. The data collected for the study were pertaining to the period 1984-1988

Facts and data were collected on various aspects under different categories as given below :

Category I : **Demand, Recovery and Overdue amounts pertaining to all the banks in Gujarat State.**

Category II : **Facts and data pertaining to all the banks in Valsad and Surat Districts in Gujarat for**
(1) Profile of the districts
(2) Sector-wise Outstanding Credit
(3) Sector-wise Demand
(4) Sector-wise Recovery
(5) Sector-wise Overdues
(6) Number of Branches

Category III : **Facts and Data pertaining to the identified Bank branches**
(1) Number of years completed
(2) Total staff
(3) Total Outstanding Credit
(4) Sector-wise Outstanding Credit

(5) Sector-wise Demand
(6) Sector-wise Recovery
(7) Sector-wise Overdues and their Ageing
(8) Inspection and Follow-up

Category IV   : **Facts and Data pertaining to Sample Beneficiaries from the Identified branches.**
(1) Age
(2) Education
(3) Family size
(4) Number of earning members
(5) Income-Expenditure gap
(6) Land holding
(7) Non credit input services
(8) Scheme for finance
(9) Amount sanctioned or disbursed
(10) Outstanding credit
(11) Demand
(12) Recovery
(13) Overdues and ageing
(14) Asset condition
(15) Number of visits by Bank staff

I.2.4 Methods of Data Analysis

The data collected on various aspects have been summarised and analysed using appropriate statistical techniques which include **Pareto analysis, Analysis of variance, Critical difference analysis, Correlation and Regression, Chi-square test** etc.

Some of the statistical methods employed are common to some of the categories as described above under data collection. The purposes and the relevant statistical techniques used are summarised below.

1. Overall Assessment of Bank Performances :

(a) **Pareto Analysis** to compare the performances of the Banks and the two districts.

(b) **Analysis of variance** to test the differences in recovery between banks and between years for each of the district.

(c) **Test of significance** to compare the overall performances of the two districts with respect to recovery.

(d) **Critical difference analysis** to categorise the Banks into `Best´and `Poorest´ groups.

2. **Study of Relationship between Outstanding credit and demand : Correlation and Regression analysis**

   (i) to examine if there was any association between outstanding credit and demand - separately for Valsad and Surat; and

   (ii) to obtain Regression equation in case of significant association.

3. (a) **Analysis of Ageing Patterns of Overdues and its Effect on Recovery** : bank-wise and district wise comparison for identified branches.

   (b) **Correlation and Regression Analysis** : to examine the association between `ageing over three years´ and `recovery´ for identified branches.

4. **Analysis of Scheme wise Demand and Recovery for Sample Beneficiaries**

   (a) **Pareto analysis** to compare the scheme - wise performances, and

   (b) **Pareto analysis** to identify the major reasons for default

5. **Study of Relationship Between Recovery and Possible Influencing Factors**

   (a) **Simple and Multiple Regression analysis (by Step-wise method)**

      (i) to find out the significant independent or controllable factors.

      (ii) to establish linear multiple regression equations.

6. **Analysis of the Reasons of Default** as opined by the sample beneficiaries separately for each district

   (a) **Pareto analysis** to identify the major reasons.

7. **Analysis of the Factors for Poor Recovery** - Perception of Bank officers

(a) **Pareto analysis** to identify the major factors for poor recovery on the basis of a **scoring procedure** adopted for the ranked data.

8. **Critical Scrutiny** of the information gathered about involvement of Bank officers in lending and follow-up operations.

The above mentioned analysis have been done for the sectors Agriculture, Small Scale Industries (SSI), Other Priority Sector (OPS) and Total Priority Sector (Priority Sector as a whole).

In addition to the above, the following analysis have also been done :

1. Testing **(by Chi-square method)** the hypothesis that Recovery is associated with follow-up work in the form of (a) stock inspection, and (b) Capacity Utilisation in SSI

2. **Graphical analysis** of Time series data on Recovery (%)

3. **Graphical analysis** of Time series data on Outstanding Credit, Demand, Recovery and Overdue amounts for the Total Priority Sector.

Important terminologies used in the analysis are defined below :

(i) **DEMAND** : It means the `accumulated demand´ for a given year (from 1 July to 30 June) which is calculated as:

previous year´s overdue + current year´s demand.

(ii) **CONTRIBUTION TO DEMAND FOR EACH BANK GROUP :**

This is equal to $\dfrac{\textbf{Demand amount for a bank}}{\substack{\textbf{Total demand amount} \\ \textbf{for all the banks}}} * 100$

(iii) **RECOVERY** : Amount of recovery during the year against demand

(iv) **RECOVERY PER CENT** : This is equal to

$$\frac{\text{Demand}}{\text{Recovery}} * 100$$

(v) **CONTRIBUTION TO RECOVERY** : This equal to

$$\frac{\text{Recovery amount for a bank}}{\text{Total recovery amount for all the banks}} * 100$$

(vi) **OVERDUE** : This is equal to

Demand minus Recovery.