

CHAPTER - 1

RESEARCH DESIGN

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1.01 Rationale of the Study

The DRI scheme¹ has been in operation for over the last twelve years from December, 1972 to December, 1984. A decade's progress from December, 1972 to December, 1982 given in Appendix - Tables 1-1 to 1-9 (Graphs 1 to 5) indicates that the total DRI advances of all the twenty-two public sector banks, have reached a peak level of Rs.311.50 crores as per the latest data available, at the end of December, 1982. In view of the stipulation, that a minimum of 1 per cent of the aggregate advances of banks should be extended to the DRI beneficiaries, expansion in commercial bank credit is expected to be around Rs.500 crores by December, 1985 under the scheme. In view of the involvement of this large amount of fund and also in view of the priority status given to the scheme, taking it as a measure of bringing a large number of people belonging to the target groups above the poverty line, the scheme and its implementation over the years deserves a research probe mainly to ascertain its viability and efficacy.

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1. The main features of the scheme issued in the latest guidelines are provided in Appendix I, and the evolution of the scheme since 1972 to 1982 has been given in Appendix II.

1.02 Survey of Existing Studies

Since the introduction of the scheme, a number of studies have been conducted by various organisations including banks, to find out the efficacy of the DRI scheme. Out of these, twenty-one studies have tried to find out the impact of the scheme, on the living conditions of the beneficiaries (Appendix III). While a majority of the studies conducted by the commercial banks have mainly suggested improvements called for on the implementation of the scheme by the concerned bank which has conducted the study. Two studies, viz., one conducted by the National Institute of Bank Management (NIBM), and the other conducted by the Reserve Bank of India Research Cell, M.S. University, Baroda, throw more insight into the overall efficacy of the DRI scheme. The common recommendations made by these studies are given in Appendix - IV. It may be pointed out that none of these studies have attempted in detail on the expenditure analysis and capital inadequacy aspects of the borrowing under the DRI scheme. Further, none of these studies have attempted to find out the net investible surplus available to the beneficiaries out of the loan amount disbursed. Most of these studies have not analysed the impact of the DRI lending from the point of income effect, employment effect, social change and value added.

Further, the relationship between various operating expenses, and the scale of operations has not drawn the attention of the researchers so far. These and some other aspects of the scheme provide a sufficient scope for a research probe, based on primary data, in a scientific manner. Hence this study.

1.03 Main objects of the study

The main objectives of the study are :

- I. to ascertain whether the scheme has actually benefitted the eligible people under different target groups, and the extent and the magnitude of the benefits accrued to the people belonging to the different strata in the eligible target groups,
- II. to ascertain the extent and the magnitude of the total operating expenditure and the net investible funds available for creating the term assets investments,
- III. to assess the income effect, employment effect, and social change,

IV. to ascertain the value added during the post-DRI loan period at the individual beneficiary level, at the activity² level, and at the aggregative level of all activities selected by the study.

1.04 In other words, this study based on the Benefit/cost approach, is intended to highlight the strong and the weak operational elements of the scheme and point out in more scientific and objective terms the benefits accrued to the target groups, in relation to the costs and suggest suitable measures to strengthen the scheme and further improve its efficacy.

1.05 Hypotheses Tested

Against the policy objectives of the scheme as discussed in Appendix I and II, of this Chapter, the actual qualitative implications of the implementation of the scheme are identified mainly with a view to facilitating an assessment of the achievements of the policy against the objectives with which they were initiated and also to justify the continuance or otherwise of the DRI scheme in the present, or modified form. Accordingly, the following hypotheses are formulated and tested.

- (i) The DRI scheme has benefitted the target groups only,

2. The word activity and occupation has been used synonymously in this study.

- (ii) The net benefit to the (target groups) beneficiaries under the DRI scheme is positive at the individual occupational level as well as at the aggregative level of all occupations.
- (iii) The net investible resources available to the beneficiaries have been adequate to create term asset investment. As a corollary to the main hypothesis, the following sub-hypothesis are postulated.
 - (a) The size of loan amount disbursed under the scheme has not been, a 'dependent variable' of the servicing cost, operating expenses, and consumption expenditure which are 'independent variables'.
 - (b) The inadequacy of the net investible funds arising out of the hypothesis (a) above has constrained the efficacy of the scheme.
 - (c) The net income effect at the individual beneficiary level is positive.
 - (d) The net income benefit in each and every occupational group is positive, and
 - (e) The net income effect at the aggregative

level of all occupational groups is positive.

Further, as corroborative and determining factors of positive income effect, the following sub-hypotheses are also postulated.

- (f) The employment effect at the individual occupational level is positive,
- (g) The employment effect at the aggregative level of all occupations is positive,
- (h) The additional asset creation/generation effect at the individual beneficiary level is positive,
- (i) The additional asset creation/generation effect at the aggregate level of all occupations is positive,
- (j) Social change effect at the individual beneficiary level is positive,
- (k) Social change effect of all occupations at the aggregate level is positive.

1.06 Coverage of the Study

For the purpose of the study, eight out of nineteen districts in the Gujarat State have been selected. Coverage of the districts has been deliberate and purposive to ensure inclusion of beneficiaries as well as non-beneficiaries, in sufficient numbers, from well-developed, developing and undeveloped regions, having different potentials for productive endeavours. Similarly, the coverage of the financing institutions has also been deliberate and purposive. Their branch offices have also been selected from well-developed, developing and undeveloped districts, and their selection has been based on the performance with regard to implementation of the DRI scheme. The institutional competence in the implementation of the scheme depends among other factors, on the natural endowment and traditional craftsmanship/skills available in a particular region. The following matrix provided in Table 1-1 indicates the coverage of districts, financing institutions, and the beneficiaries as well as the non-beneficiaries, for the purpose of the study.

1.07 Selection of Districts

Out of eight selected districts, it can be seen from Table 1-1 that one has been well-developed, two were developing, five were undeveloped; of these five, two districts, namely, Sabarkantha and Dangs districts have been especially selected since they are predominantly inhabited by tribals. Further, of these five undeveloped districts, two have been particularly chosen, namely, Surendranagar and Junagadh from the Saurashtra region, and one from the Kutch and Bhuj region, which are traditionally considered as economically backward areas. Thus, out of the total of eight districts selected, first five have been from the Gujarat region. The rest three districts have been from Saurashtra, Kutch and Bhuj regions, respectively.

1.08 Selection of Financing Institutions

The four financing institutions, namely, the State Bank of Saurashtra, (2) Dena Bank, (3) Bank of Baroda and the Tribal Development Corporation (TDC)³ were

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3. TDC - Tribal Development Corporation has been established by the Gujarat State Government to promote socio-economic conditions of the tribals exclusively in the tribal belts in various districts, and various schemes/programmes are implemented either through state budgetary sources or from Centrally sponsored schemes/programmes which form part of the Sixth Five Year Plan for which the Central Government makes special allocation to the Corporation or by way of consortium formed by the commercial banks who provide lump-sum finance to the Corporation, especially for the DRI scheme/IRD programme.

TABLE 1-1

GEOGRAPHICAL AND INSTITUTION-WISE
COVERAGE OF BENEFICIARIES AND NON-BENEFICIARIES

Districts	Ahmedabad (Well Developed District)	Gandhinagar Mehsana (Developing Districts)	Sabarkantha Dangas (Undeveloped Tribal Districts)	Surendra- nagar (Undeveloped Districts)	Junagadh (Undeveloped Districts)	Kutch (Undeveloped District)	Total Eight Districts
(G U J A R A T R E G I O N)							
(SAURASHTRA REGION)							
(From KUTCH AND BHUJ REGION)							
State Bank of Saurashtra	xx (B-121/31)	x (B-78)	x (B-28)	xxxxx (B-19/17/ 21/11/23)	xx (B-23/13)		11
Dena Bank		x (B-20)	x (B-22)		xx (B-9/11)	x (B-19)	5
Bank of Baroda		x (B-65)	x (B-35)			x (B-14)	3
Tribal Development Corporation			x (B-73)				1
(Total)	B 152 NB 43	B 85 NB 23	B 123 NB 52	B 91 NB 55	B 56 NB 47	B 33 NB 62	20
Four institutions	195	108	175	146	103	95	(Total) Branch Offices

Footnotes : WD - Well Developed B - Beneficiaries x - Number of Branch Offices
 D - Developing NB - Non-Beneficiaries
 UND - Undeveloped

deliberately selected, having branch offices in well developed, developing and undeveloped districts referred to above. It can be seen from Table 1-2 that in all,

total twenty branch offices have been selected inclusive of one branch office of the Tribal Development Corporation, at Khedbrahma in Sabarkantha district. This has been with a view to covering the beneficiaries under the indirect⁴ as well as under the direct financing system⁵. Consortium finance has been given to Tribal Development Corporation by commercial banks to advance loans under the DRI scheme. Since the disbursements of loans and implementation of the scheme has been done by the TDC through its branch office, it has also been treated as a financing institution for the purpose of this study. It can be seen from Table 1-3 that out of the 20 branch offices selected, one was the rural project office of the TDC. Of the 19 branch offices

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4. Indirect Financing : Under the indirect financing the beneficiaries are financed through the channel of another agency/institution, for instance, TDC referred to above, or Scheduled Caste Economic Development Corporation, State Housing Board or Voluntary bodies set-up to promote the interest of the weaker sections of the society who are provided consortium finance by the commercial banks by grouping together.
 5. Direct Financing : Under the direct financing the beneficiaries are financed directly through the branch offices of the scheduled commercial banks, either to individuals or to group of individuals whose applications are forwarded by the State Government agencies/departments.

TABLE 1-2

DISTRICTWISE SELECTION OF BRANCH OFFICES

Names of Financing Institution	Ahmedabad (Gujarat Region) (Well Developed)	Gandhinagar (Developing Districts)	Mehsana (Tribal Districts)	Sabarkantha (Tribal Districts)	Dangs (Saurashtra Region)	Surendra- nagar (Saurashtra Region)	Junagadh (Saurashtra Region)	Kutch (Kutch and Bhuj Region)
(Names of Branch Office and Type)								
1. State Bank of Saurashtra	Bhadra X Kankaria X	Urban X Branch	Kalol (Semi-urban Branch)	Khedbrahma (Rural Branch)	Ahwa Town (Rural Branch)	Limdi X Chokila X Sayla X Sarla X Mulji X	Junagadh X Town X Veraval X Town X Rural X Branch X	Semi-urban Branch X
2. Dena Bank		Gandhinagar Town (Semi-urban Branch)		Khedbrahma (Rural Branch)			Junagadh X Town X Veraval X Town X (Semi-urban Branch) X	Kutch Town (Semi-urban Branch) X
3. Bank of Baroda		Gandhinagar Town (Semi-urban Branch)						Nakhtr (Rural Branch)
4. Tribal Development Corporation				Khedbrahma (Rural Branch)				
TOTAL	TWO	TWO	ONE	THREE	ONE	FIVE	FOUR	TWO

TABLE 1-3

TYPE-WISE/DISTRICT-WISE DISTRIBUTION OF BRANCH OFFICES

Serial Number	Type of Branch Office	Financing Institutions Selected	Village/Area	District
i.	Semi-urban	Bank of Baroda	Gandhinagar Town Area	Gandhinagar
ii.	Semi-urban	Dena Bank	Gandhinagar Town Area	Gandhinagar
iii.	Rural	State Bank of Saurashtra	i. Muli Village	X
iv.	Rural			X
v.	Rural		ii. Sayla Village	X
vi.	Rural			X
vii.	Rural		iii. Sarla Village	X
				Surendra-nagar
			iv. Limdi Village	X
				X
			v. Chotila Village	X
viii.	Semi-urban	State Bank of Saurashtra	Kalol Area	Mehsana
ix.	Urban	State Bank of Saurashtra	i. Bhadra Area	X
x.	Urban			X
			ii. Kankaria Area	X
				X
xi.	Rural	Dena Bank	Khedbrahma Village	Sabarkantha
xii.	Rural	State Bank of Saurashtra	Khedbrahma Village	Sabarkantha

TABLE 1-3 (CONTINUED)

Serial Number	Type of Branch Office	Financing Institutions Selected	Village/Area	District
xiii.	Rural Project Office	Tribal Development Corporation	Khedbrahma Village	Sabarkantha
xiv.	Semi-urban	State Bank of Saurashtra	Veraval Town Area	Junagadh
xv.	Semi-urban	State Bank of Saurashtra	Junagadh Town Area	Junagadh
xvi.	Semi-urban	Dena Bank	Junagadh Town Area	Junagadh
xvii.	Semi-urban	Dena Bank	Veraval Town Area	Junagadh
xviii.	Rural	Bank of Baroda	Ahwa Town Area	Dangs
xix.	Rural	Bank of Baroda	Kutch Town Area	Kutch
xx.	Semi-urban	Dena Bank	Kutch Town Area	Kutch

(Footnote: Of the total 653 beneficiaries covered, the semi-urban branches covered 36.44 per cent; the urban branches covered 23.27 per cent and the rural branches covered 40.29 per cent, respectively. The highest number of beneficiaries were thus covered from the rural branches by this study.)

of the commercial banks, 9 were rural branches, 8 were semi-urban branches and the remaining two were urban branches. Further, of the nineteen branch offices of the commercial banks, the largest number of branches were from the State Bank of Saurashtra i.e., 11 branches, followed by the Dena Bank - 5 branches, and the remaining 3 branches were of the Bank of Baroda respectively (Table 1-3). Similarly, of the eight selected districts having branch offices in the well-developed, developing and undeveloped districts referred to above, it can be seen from Table 1-3 that in 8 districts selected, the large number of branches were from Surendranagar district. The bias in the sample in favour of the State Bank of Saurashtra has been due to greater response received and the Surendranagar district has been on account of the diversity of activities covered by this bank in this district (Appendix V).

Coverage of branches

<u>Financing Institutions</u>	<u>Branches</u>
State Bank of Saurashtra	11
Dena Bank	5
Bank of Baroda	3
Tribal Development Corporation	1
Total	<u>20</u> =====

Type-wise Branch Offices

<u>Rural</u>	<u>Semi-Urban</u>	<u>Urban</u>	<u>Total</u>
10	8	2	20 =====

1.09 Selection of Activities/Occupations

The selected financing institutions provided the list of activities/occupations (Statement - I) which are covered under the DRI scheme. From this list, 18 major and 14 minor activities were selected deliberately for the purpose of this study. It may be defined that the major activities, in the context of this study, are those which are largely financed, and the potentials for such activities are also vast whereas the minor activities are those where sporadic lending is undertaken by the financing institutions and the potentials of covering large number of beneficiaries in such activities is limited in the selected areas covered by the study. The major and minor activities purposively selected are given in Table 1-4. It may be mentioned here that the activities finally grouped in the rural sector have been fourteen whereas the total number of activities covered in the urban sector have been five in this study. Further, the total number of beneficiaries selected in the rural sector have been 463 and in the urban sector have been 190. This has been discussed in detail in the subsequent paragraphs.

TABLE 1-4Selected Activities covered under the Study

Activity Number	Major Activities	Activity Number	Minor Activities
	(1)		(2)
(I)	<u>Rural Sector (1 to 14)</u>		
1.	Agriculture	1.	Masonry
2.	Handloom Weaving	2.	Carpentry
3.	Fishery	3.	Soap-making
4.	Dairy	4.	Doll-making
5.	Sheep-rearing	5.	Watch-repairing
6.	Basket Weaving	6.	Agarbatti-making
7.	Leather Work	7.	Radio-repairing
8.	Vending Cutlery	8.	Stove repairing
9.	Pan Bidi Shop	9.	Umbrella repairing
10.	Retail Trade	10.	Bee-keeping
11.	Pumpsets (Farming)	11.	Brick-making
12.	Cycle Rickshaw Pulling	12.	Kite-making
13.	Camel Cart Pulling	13.	Ambar Charkha
14.	Bullocks (Farming)	14.	Upholstry repairing
(II)	<u>Urban Sector (15 to 19)</u>		
15.	Tailoring	(1 to 14 Grouped as Miscellaneous activities)*	
16.	Vending Cloth		
17.	Vending Glasswares		
18.	Vending Fruits & Vegetables		
19.	Miscellaneous Activities*		

Footnote: Number 19 covers activities 1 to 14 of Col.2

1.10 In view of a very small size of sample(number)of beneficiaries covered in each activity included in the selected fourteen minor activities referred to above, these were lumped together and termed as miscellaneous group of activities for the purpose of the study. All these activities, major as well as minor, have been selected by the purposive sampling method from the branch offices of the selected financing institutions of well-developed, developing and the undeveloped districts referred to earlier.

1.11 Selection of Beneficiaries

For selecting the sample of beneficiaries, a two stage sampling design has been adopted. In the first stage, the chosen branch offices of the financing institutions selected from the well-developed, developing and undeveloped districts, were requested to select at random, in all 100 beneficiaries from the different chosen activities referred to in paragraph 1.09 of this Chapter, from the records maintained by them in their ledgers under the DRI scheme⁶.

6. Upon checking the records of the bank branches/project offices of the TDC, it was observed that all the schemes covered under the priority sector were maintained in one ledger only. However, they reported that the concerned officers who were looking after all these schemes were familiar with the beneficiaries covered under the DRI scheme.

Although, the limit of 100 beneficiaries was laid down to a particular branch office, it was not strictly adhered to by the branch offices of the financing institutions. They stated that under the DRI scheme, they financed in greater numbers under a particular activity where the potentials have been large or the response from the beneficiaries has been encouraging. However, to begin with, the total size of the sample was restricted to 2,000 beneficiaries.

1.12 Stratified Sampling

In the second stage, a sample of 1,000 beneficiaries out of 2,000, was selected by the method of simple random sampling. These 1,000 beneficiaries were then classified, according to 19 occupations/activities referred to in paragraph 1.09 of this Chapter. Scrutiny of data once again with the financing institutions revealed that 61 beneficiaries covered in these 19 strata formed activity-wise were financed in the IRD programme also, hence these 61 beneficiaries were omitted from our sample, prior to the conduct of the field survey⁷. Thus, the size of the sample was restricted to 939 beneficiaries for the purpose of the survey.

7. The double financing of beneficiaries occurred since the financing institutions had kept one ledger only for all the schemes covered under the priority sector programme, as referred to earlier.

1.13 Field Survey

An exhaustive questionnaire was prepared covering in detail the different aspects of the DRI scheme and to collect primary data on the status of the beneficiaries as well as non-beneficiaries⁸. This questionnaire was circulated to the respective financing institutions well in advance, with a view to incorporating information/data unfurnished by the financing institutions as well as to check the correctness of the data/information already furnished by them. During the field survey, the additional information on the related issues/problems pertaining to a particular activity/occupation or relevant to the institutions/beneficiaries interest was also noted. The direct personal investigation method adopted helped to elicit more information on the relevant aspects of the DRI scheme, and also on related matters, directly, or indirectly which had a bearing on the implementation of the scheme. During the course of the field survey 152 villages were visited in all the selected eight districts (Chart I). The beneficiaries as well as the potential

8. Non-beneficiaries here relate to those categories of borrowers who are potential but could not avail of loans under the DRI scheme on account of either ignorance/denial/lack of communication/shyness to approach authorities or ineffective extension work on the part of the financing institution or due to apathy of not being sponsored by the voluntary organisations, in view of not approaching them at an appropriate time.

non-beneficiaries interviewed in different villages are given in Table 1-5 from which it can be seen that the highest number of villages/areas covered were from Ahmedabad, followed by Surendranagar and Gandhinagar, respectively. The information regarding number of villages visited in each district and total villages/areas covered in different districts is given in Appendix VI. From Table 1-5, it can be observed that in Ahmedabad, the large number of villages/areas were visited and also largest number of beneficiaries and non-beneficiaries were covered due to its proximity. Next to Ahmedabad, was the Surendranagar district where in all 22 villages were visited, and the beneficiaries and non-beneficiaries were the third largest of the sample covered owing to greater response received from the financing institutions selected. In Sabarkantha though 13 villages were visited, the second largest sample was interviewed in this district, in view of the cluster approach adopted by the Tribal Development Corporation, respectively in selecting beneficiaries having activities such as dairying and fishery under the DRI scheme as well as due to excellent responses extended by concerned financing institutions from this district. However, by and large, fair representation of the beneficiaries/non-beneficiaries and that of the villages was from all the districts. Although, the smallest number of villages were covered in Mehsana district, the

TABLE 1-5
COVERAGE OF BENEFICIARIES AND NON-BENEFICIARIES & VILLAGES IN THE SELECTED DISTRICTS

DISTRICTS	Ahmedabad	Surendra- nagar	Gandhinagar	Junagadh	Kutch	Dangs	Sabar- kantha	Mehsana
Villages	Total Sample Inter- viewed	(Well developed district)	(Un- developed districts)	(Developing district)	(Undeveloped Districts)			(Develop- ing district)
Number of villages covered	152	34	22	20	20	15	13	8
Number of beneficia- ries covered	<u>152</u> (653) (23.27)	91 (13.93)	85 (13.01)	56 (8.57)	33 (5.05)	35 (15.35)	123 (18.83)	78 (11.94)
Number of non-bene- ficiaries covered	<u>43</u> (399) (10.77)	55 (13.78)	23 (5.76)	47 (11.77)	62 (15.53)	73 (18.29)	52 (13.03)	44 (8.57)
Total sample	<u>195</u> (1052) (18.35)	146 (13.87)	108 (10.26)	103 (9.79)	95 (9.03)	108 (10.26)	175 (16.63)	122 (11.59)

(Figure in brackets indicate percentages to the total).

(Figures in brackets underlined is the total sample interviewed).

number of beneficiaries interviewed in different activities was quite sizeable as compared to the other districts covered (Appendix VII). Thus, it can be seen from Table 1-6 that out of the total size of sample of 939, the sample interviewed during the field survey was 653 beneficiaries, of which 463 beneficiaries were covered in the rural sector, comprised of activities ranging from 1 to 14, and 190 beneficiaries were covered from the urban sector comprised of 1 to 5 activities, respectively. Thus, the total sample interviewed represented almost 70 per cent of the 939 beneficiaries selected from different activities. Further, it may be pointed out that 15 per cent of the beneficiaries were not interviewed owing to their non-availability at the time of field visits and another 16 per cent were rejected during the course of the field survey, due to technical reasons. Thus, of the total sample 653 beneficiaries interviewed, almost 71 per cent were represented from the rural sector, whereas 29 per cent were from the urban sector. These beneficiaries interviewed were given loans during 1978 to 1981. Since the survey was finally completed in December 1983, these beneficiaries were given sufficient period after the disbursement of the loans from the respective years. The financing institutions had also phased the repayment period from 12 to 48 months depending upon each activity and their method of appraisal and the quantum of

TABLE 1-6

SIZE OF SAMPLE OF BENEFICIARIES (MALE AND FEMALES INTERVIEWED, NOT INTERVIEWED AND REJECTED)

ACTIVITY NUMBER	I	II	III	IV	V	VI	VII	VIII	IX	X	XI	XII	XIII	XIV	I	II	III	IV	V	VI
	AGRI- CUL- TURE	HAND- LOOM WEAVING	FISHERY	DAIRY	SHEEP REARING	BASKET WEAVING	LEATHER WORK	CUTLERY SHOP	PAV- BIDI SHOP	RETAIL TRADE	FOOD- SERV- (TAM- ING)	CYCLE RICK- SHAW PULLING	CAMEL CART PULLING	BULL- OCKS (FARM- ING)	TAIL- ORING	VENDING CLOTH	VENDING GLASS- WARE	VENDING FRUITS AND VEGE- TABLES	VENDING MISCEL- LANEOUS GROUP	ALL ACTIVITIES
1. BENEFICIARIES (INTERVIEWED GONE SAMPLE)	41 (60.0)	45 (84.0)	50 (90.0)	62 (75.0)	25 (65.0)	15 (82.0)	22 (70.0)	12 (54.0)	15 (63.0)	33 (82.0)	27 (66.0)	31 (53.0)	45 (69.0)	40 (81.0)	18 (60.0)	128 (84.0)	5 (18.0)	6 (18.0)	33 (63.0)	553 (69.0)
OF WHICH																				
(1) MALES	40	40	50	25	25	11	20	11	15	30	27	31	45	40	7	77	5	6	30	560 (60.0)(a)
(11) FEMALES	1	5	NIL	12	NIL	4	2	1	NIL	3	NIL	NIL	NIL	NIL	11	51	NIL	3	3	93 (9.0)(a)
2. BENEFICIARIES (NOT INTER- VIEWED DUE TO NON-AVAILAB- ILITY)	13 (18.0)	6 (11.0)	2 (4.0)	10 (12.0)	11 (29.0)	2 (12.0)	4 (13.0)	1 (5.0)	4 (17.0)	2 (5.0)	7 (17.0)	13 (22.0)	11 (17.0)	5 (11.0)	5 (17.0)	13 (9.0)	9 (34.0)	11 (35.0)	7 (14.0)	136 (15.0)
3. BENEFICIARIES (REJECTED FOR TECHNICAL REASONS)	15 (22.0)	3 (5.0)	4 (6.0)	11 (13.0)	2 (5.0)	1 (6.0)	5 (16.0)	9 (41.0)	5 (20.0)	5 (13.0)	7 (17.0)	15 (25.0)	9 (14.0)	1 (2.0)	7 (23.0)	11 (7.0)	13 (48.0)	15 (47.0)	12 (23.0)	150 (16.0)
4. TOTAL (ORIGINAL RANDOMLY SELECTED SAMPLE)	69 (100)	54 (100)	56 (100)	83 (100)	38 (100)	18 (100)	31 (100)	22 (100)	24 (100)	40 (100)	41 (100)	59 (100)	65 (100)	46 (100)	30 (100)	152 (100)	27 (100)	32 (100)	52 (100)	939(a)(o) (100)

(II) - URBAN SECTOR - (190 BENEFICIARIES)

(I) - RURAL SECTOR - (463 BENEFICIARIES)

FOOTNOTES : (a) FIGURES IN BRACKET INDICATE PERCENTAGES TO THE TOTAL

(b) FIGURES ARE ROUNDED OFF WHEREVER NECESSARY

(c) OUT OF THE TOTAL 1000 BENEFICIARIES EARLIER RANDOMLY SELECTED, FURTHER SCRUTINY OF THE DATA REVEALED THAT THE FINANCING INSTITUTIONS SELECTED FOR THE STUDY HAD ALSO COVERED 61 BENEFICIARIES UNDER ANOTHER SCHEME, NAMELY, IED PROGRAMME, HENCE THESE 61 BENEFICIARIES WERE EXCLUDED FROM EACH STRATA, PRIOR TO THE CONDUCT OF THE SURVEY.

loan disbursed under each activity. The scope of the study was also extended to other potential beneficiaries. They were eligible for loan under the DRI scheme but could not avail of it for certain reasons, are termed as 'Non-beneficiaries' for the purpose of this study. The size of the sample of 'Non-beneficiaries' was restricted to 399 persons (Appendix VII) which were covered from the major as well as minor activities selected for the study. The size of the sample was restricted to 399 persons on account of their non-availability under a particular chosen activity at the time of the field survey. Therefore, the total size of the sample was confined to 1052 persons, comprised of 653 beneficiaries and 399 non-beneficiaries. Thus, the sample of the study ultimately related to the erstwhile beneficiaries who availed of the loans and the present (potential) non-beneficiaries who were eligible for the loan under the DRI scheme.

1.14 Sample Size of Non-Beneficiaries

In addition to the beneficiaries during the field survey 'non-beneficiaries' were also interviewed in the same villages/areas. The intention was to interview 500 'non-beneficiaries' from various major and minor occupations, in the neighbourhood of beneficiaries areas/villages, to gather impressions/awareness/difficulties faced by them, particularly to get

the bank loan. The size of the sample was, however, restricted to 399 persons. This was on account of non-availability of them in a particular chosen occupation, at the time of the field survey, especially, their shyness/inhibitions perpetuated by the poverty or the pressures put on them by the local leadership present or social customs, especially in cases of women, prevented them, to participate fully.

1.15 Activity-wise Beneficiaries
Sample Interviewed

Activity-wise sample interviewed is given in Table 1-7. Data indicates that the highest number of beneficiaries interviewed of the total sample selected activity-wise were from fishery activity (90 per cent), followed by bullocks (farming) (87 per cent), handloom weaving (83 per cent), basket weaving (83 per cent) respectively. The lowest number of beneficiaries interviewed were from cycle rickshaw pulling (53 per cent), vending cutlery (55 per cent), agriculture (60 per cent), sheep-rearing (66 per cent), respectively. All these were from the rural sector. Similarly, from the urban sector, the largest number were interviewed of the total sample selected under each activity were thus from the vending cloth (67 per cent) and the rest were the lowest number of beneficiaries interviewed - miscellaneous group of

TABLE 1-7

CORE SIZE OF SAMPLE ACTIVITY-WISE INTERVIEWED

Acti- vity Number	Sample Size	Occupation/ Activity	Acti- vity Number	Sample Size	Occupation/ Activity
(1)	(2)	(3)	(4)	(5)	(6)
[Rural Sector]			[Urban Sector]		
(I)	41 (60)	Agriculture	(I)	18 (10)	Tailoring
(II)	45 (83)	Handloom weaving	(II)	128 (67)	Vending Cloth
(III)	50 (90)	Fishery	(III)	5 (3)	Vending Glasswares
(IV)	62 (75)	Dairy	(IV)	6 (3)	Vending Fruits & Vegetables
(V)	25 (66)	Sheep-rearing	(V)	33 (17)	Miscellaneous Group of Activities*
(VI)	15 (83)	Basket weaving			
(VII)	22 (71)	Leather work			
(VIII)	12 (55)	Vending Cutlery			
(IX)	15 (62)	Pan Bidi Shop			
(X)	33 (82)	Retail trade			
(XI)	27 (66)	(Pumpset) Farming			
(XII)	31 (53)	Cycle rickshaw pulling			
(XIII)	45 (69)	Camel Cart pulling			
(XIV)	40 (87)	Bullocks (Farming)			
[Total 463 (iii) Fourteen Number of Acti- vities]			[Total 190 (iv) Five Number of Acti- vities]		
Benefici- aries (1)			Benefici- aries (2)		
Average (72) (i)			Average (65) (ii)		
[(i) + (ii) Average Total (70 per cent) Number of Beneficiaries Interviewed]					

(a) Figures in brackets indicate the percentages of beneficiaries interviewed to the total size of the sample under each occupation selected (Rounded of)

(b) [Total number of activities covered (i) + (2)] - [Total Nineteen Activities]

(c) [Total size of the sample - 463 (iii) - Rural plus 190 (iv) - Urban - Total 653 beneficiaries interviewed]

(d) Sample of beneficiaries selected under 14 minor activities are grouped together and termed as "Miscellaneous Group of

activities (17 per cent), tailoring (10 per cent), vending glasswares (3 per cent) and vending fruits and vegetables (3 per cent), respectively.

1.16 Distribution of Beneficiaries
Sample Activity-wise/Agency-wise

Out of the 653 beneficiaries in different activities agency-wise covered were highest (69 per cent) from the State Bank of Saurashtra region, having 6 lead districts and the remaining 31 per cent from the other financing institutions. Data provided in Appendix VIII, reveals that out of the 580 beneficiaries covered under direct financing, the highest were also from the State Bank of Saurashtra (385); followed by the Bank of Baroda⁹ (114), and the remaining were from the Dena Bank¹⁰ (81) respectively. Only 73 beneficiaries were covered under the indirect financing which were provided by the Tribal Development Corporation.

Distribution of the sample activity-wise/district-wise indicated in Appendix V, reveals that the financing agencies advanced loans to the beneficiaries in the areas/

9. The Bank of Baroda is having 6 lead districts in the North and South Gujarat.

10. Dena Bank is having 7 lead districts in the South Gujarat region.

districts which have large potentialities to pursue the occupations. Vending cloth activity in Ahmedabad district; Fishery activity in Sabarkantha district; Dairy activity in Sabarkantha, Mehsana and Gandhinagar districts, respectively, and Handloom weaving activity in Surendranagar and Gandhinagar districts are illustrative.

1.17 Selection of Bank/Project Officials

A short but qualitative questionnaire was also canvassed to the bank/project officials (including the officials of the State Governments and allied Corporations) who were directly or indirectly concerned with the extension of the DRI scheme. This was followed by the direct personal investigation method to obtain more clarity on the particular item covered under the DRI scheme. The size of the sample was confined to 103 officials which also included the field level staff who were directly/indirectly concerned with the implementation of the scheme. All were personally interviewed during the course of the field survey. This enabled us to cover indirect aspects of the DRI scheme, since they had relevance in regard to the implementation of the scheme. It can be seen from Appendix IX that though, the size of the sample initially drawn was 113, 10 officials did not participate, for the reasons best known to them. However, this did not affect the quality of our study since the impressions/information provided by the officials

interviewed was more than adequate and qualitative. In view of the small size of the simple code number¹¹ was accorded to each person selected, in order to maintain secrecy as well as to cull out frank opinion on the implementation of the scheme. This has improved the quality of our survey and the results obtained, which have direct bearing on the policy formulation.

1.18 Techniques of Analysis

In order to assess the size and structure of total operating expenditure/costs, the data was collected directly from the beneficiaries during the field survey. To analyse the structure of the total expenditure the components of costs considered are :

- (i) Servicing cost,
- (ii) Operating expenses.

To examine the relationship between the operating costs and the scale of operation, a cross section analysis of data is attempted to by using Regression Analysis (Ordinary Least Square - OLS), to help us presage about the level and significance of this relationship. Thus, in order to empirically verify the relationship between the various operating costs and the loan amount, the following

11. Simple code method was adopted by ascribing X 1, X 2, X3, X 4, X 5, etc. to each person selected while canvassing the schedule prepared for the purpose of this exercise.

is the form of the regression equation used, assuming that the loan amount has a functional relationship with these variables

$$LA = a + bx \dots \dots \dots (1)$$

$$\text{Log}LA = a + b \log X \dots \dots (2)$$

Where the X are different variables.

1.19 Discount Measures

Three discounting measures commonly known as (i) Benefit/Cost Ratio, (ii) Net Present Worth, (iii) Internal Rate of Return to evaluate the scheme were applied. The Sensitivity Test, to evaluate the efficacy of the loans under the DRI scheme was also applied. The basic underlying idea in applying these measures is to test the economic and financial viability of each activity covered by the scheme. The mathematical reasoning of each measure is as follows.

$$\begin{aligned} (1) \quad \text{Benefit/Cost Ratio} &= \frac{\sum_{t=1}^n \frac{B_n}{(1+i)^n}}{\sum_{t=1}^n \frac{C_n}{(1+i)^n}} \\ & \quad \text{(BCR)} \\ (2) \quad \text{Net present worth} &= \sum_{t=1}^n \frac{B_n - C_n}{(1+i)^n} \\ & \quad \text{(NPW)} \end{aligned}$$

$$\begin{array}{l} \text{(Non-mathematical} \\ \text{formulae)} \end{array} \quad \text{i.e.} \quad = \quad \frac{\text{Present Worth of Benefits}}{\text{Present Worth of Costs}}$$

$$(3) \quad \begin{array}{l} \text{Internal Rate of Return} \\ \text{(IRR)} \end{array} = \sum_{t=1}^n \frac{B_n - C_n}{(1+i)^n} = 0$$

$$\begin{array}{l} \text{(Non-Mathematical} \\ \text{formulae)} \end{array} \quad \text{i.e.} \quad = \quad \begin{array}{l} \text{Lower} \\ \text{discount} \\ \text{rate} \end{array} + \begin{array}{l} \text{Difference} \\ \text{between} \\ \text{the} \\ \text{discount} \end{array} \quad \begin{array}{l} \text{(Present} \\ \text{Worth of} \\ \text{cash flow} \\ \text{at the} \\ \text{lower} \\ \text{discount} \\ \text{rate} \\ \text{Absolute} \\ \text{difference} \\ \text{between} \\ \text{the present} \\ \text{Worths of} \\ \text{cash flow} \\ \text{at the} \\ \text{two dis-} \\ \text{count} \\ \text{rates)} \end{array}$$

Where, B_n = Benefits in each year

C_n = Costs in each year

n = number of years

i = interest (discount) rate

1.20 Limitations of data

Uniformity of data posed the problem, since it was collected from the different financing institutions spread over the various geographical locations in the State. Furthermore, the financing institutions did not collect all the relevant information regarding the primary data required on the status of the beneficiaries. To maintain the quality of

data uniformly, during our survey the required information/data on the various aspects of beneficiaries profile was collected. One major constraint faced in this regard was the illiteracy of the beneficiaries. However, the omissions/discrepancies/additions to data and information were carried out to our satisfaction which improved not only the standard of our survey but also ensured the quality required for the purpose of the study.

1.21 Scheme of Presentation

With a view to achieve the objectives of the study, the main and sub-hypothesis have been tested and the analysis of data along with the findings have been presented in the following order :

The Second Chapter : deals with the implementation aspect of the scheme with the help of the primary data generated by the study by conducting field survey as well as obtaining certain data/information from the financing institutions. The profile of beneficiaries and non-beneficiaries, in both the rural and the urban sectors has been analysed. An analysis of other related issues has also been undertaken with the help of the opinion survey carried out in this study.

The Third Chapter : deals with the analysis of total operating expenditure incurred by the beneficiaries, and the net investible funds/resources available to the beneficiaries for creating term assets and investments under the scheme.

The Fourth Chapter : deals with the analysis of the generation of gross as well as net income during the Pre and Post-DRI loan period. The techniques of the Benefit/Cost Ratio, the Net Present Worth and the Internal Rate of Return have been applied to evaluate the efficacy of the DRI scheme. The Sensitivity test has also been carried out to test as to what may happen to the scheme/activity, if something goes wrong, by way of less yields and increased costs, under uncertain conditions, during the period of the implementation of the scheme. Further, from the primary data generated, income effect, employment effect, and the social change has also been evaluated.

The Fifth Chapter : deals with the value added during the Post-DRI loan period at the aggregative level. An analysis has been undertaken individual beneficiary-wise and activity-wise also. The comparative picture of the rural and the urban sectors has also been presented.

The Sixth Chapter : summarises the main findings of the study and offers suggestions for improving the efficacy of the scheme further.