# CHAPTER TEN

## SUMMARY, CONCLUSIONS AND POLICY IMPLICATIONS

This chapter presents a summary of important findings of this research endeavor. Based on them, policy implications are discussed and suggestions are put forth for improving the impact of credit on beneficiary households, especially on women.

The main objective of the study is to assess the impact of credit on beneficiary households (BHs) of Integrated Rural Development Programme (IRDP) with special reference to gender issues. An attempt is also made to develop profiles of borrowers, households, loans and activity financed with a view to lend visibility to the changing roles of women within households caused by credit effect.

The study has undertaken to develop appropriate impact indicators and methodology for assessing the socio-economic impact of Integrated Rural Development Programme on the beneficiaries with special focus on women.

A three staged sampling technique was adopted. Firstly, out of 12 talukas in the Vadodara district, Padra taluka was purposively selected. Secondly, from the sample taluka, two commercial bank branches having the first and second highest shares of IRDP beneficiaries in the taluka were identified. Lastly, 120 beneficiaries were selected purposively from the list of beneficiaries of sample bank

branches. Out of the 120 beneficiaries , 90 were females and 30 males. All the female beneficiaries (FBs) of the two sample banks were included in the sample and the male beneficiaries (MBs) were purposively selected to match with the economic activities of the FBs.

Primary data was collected from the beneficiaries by filling questionnaires by interview cum informal conversations with the respondents. The pre and post loan approach was followed for measuring the impact of credit. The analysis was undertaken separately for female and male beneficiaries and for the sample as a whole. Besides, the sample was segregated for one and two loan cases for capturing the economies of scale in milk production.

## 10.1 District, Village, Household, Beneficiary and Loan Profile

Detail profiles of the district under study and the sample villages, beneficiaries, beneficiary households and loans were prepared with a view to describe the geographical and socio-economic environment within which the credit intervention took place. These profiles serve several useful purposes. Firstly, they are of great help in efforts to replicate the credit intervention model in case of need. They are also useful in providing proper perspective to the credit impact studies at the household level. Lastly, they are useful to the lending institutions for taking informed policy decisions.

The study has reference to one district of Gujarat State of the Indian Republic. Vadodara district is served by two major rivers and four rivulets. However, the major sources of irrigation are tube and dug wells. The sample villages are representative of Rural Vadodara District. Agriculture forms the main occupation for 90 per cent of the village population. The village irrigation systems are largely similar to the district ones. Vested with sandy-loam soil the predominant crops grown are cotton, millets and orchid crops. Further, the villages are inhabited by different castes and they have a paternal family structure. An important feature of the sample villages is that all the villages have a different residential setup for the scheduled caste/scheduled tribes.

Primarily, majority of the BHs were agricultural wage labourers. The average household size was 4.7 with males being the principal earners and heads of the households. Out of the 120 BHs , 9 were female headed and 111 were male headed households. The BHs were essentially rural poor. This deprivation and under resourcement was reflected in the residential domains of the beneficiaries and their literacy status. Majority of the beneficiaries were living in semi-pucca to kuccha houses with the barest of necessities and were mostly illiterates. The illiteracy rate was more pronounced amongst the FBs. Further the average age of the beneficiaries was 37 years.

All the beneficiaries were financed for purchase of milch cattle (buffaloes) without any collateral, except a guarantor's signature. The average loan amount for the sample was Rs. 4000 with very little gender difference. Majority of the beneficiaries were identified for disbursal of loans either by the village pradhan or the gram sevaks but, the bank officials were in no way involved in selection, identification or preparation of projects. Further, all the beneficiaries were compelled to incur additional expenditure usually on transportation. All the beneficiaries had no immediate previous experience of tending to milch cattle. None of them were imparted any training in cattle tending or milk production. Usually the milch cattle purchased were of first and second lactation period. Only in case of non-availability and higher cost the animals with third and fourth lactation periods were purchased.

A study of the loan profiles of the sample beneficiaries indicated that 51 beneficiaries had received a second dose of assistance in which the share of FBs was 90 per cent.

Our analysis of the repayment performance of loans of the sample revealed that 34 per cent of BHs had repaid loans fully. The repayment ratio of FBHs was slightly higher (35.4 per cent), compared to MBHs (33.3 per cent), in spite of the fact that the incremental income resulting from loans was marginally higher for MBHs. Comparing the one

and two loan cases, there was hardly any difference in the repayment rate. The high rate of default is easily explained by extreme poverty of the beneficiaries, low returns on investment, very small size of the loan leading to insignificant impact on income and poor/ineffective linkage with factor and output markets.

## 10.2 Impact Analysis at the Household Level

### 10.2.1 INCOME IMPACT OF CREDIT

The impact of credit disbursed under the IRDP on BHs has been studied from following dimensions:

i) Income generated from asset/activity financed;

ii) Income streams from all the economic activities pursued by the BHs in the pre and post loan period; and

iii) The impact on the household income, analyzed with reference to the crossing of poverty line threshold.

Our analysis revealed that around 13 per cent of BHs in each category were wrongly identify as they were having annual income higher than the IRDP cut-off point of Rs. 4800.

Our expectation that rural credit disbursed under the program would lead to incremental income has been proved right. Credit has led to a definite and positive increase on the income of BHs in most of the cases. The average incremental income from the asset financed for the BHs was found to be Rs.2698 p.a. No significant gender differences were found in the incomes of the

households, as the average increase in income of FBHs and MBHs was Rs. 2697 and 2704, respectively. The one loan average income generation by MBHs was found to be Rs. 2355 and by FBHs, Rs.2052. For the two loan cases it was Rs. 4450 and Rs. 3314 for MBHs and FBHs, respectively. Hence, the income gender differential, in one loan cases, was much less (Rs. 303) than that of two loan cases (Rs. 1136). In both the cases, MBH's incremental income was higher than that of FBH's but the difference was substantial in two loan cases indicating higher economies of scale realized by MBHs. An another factor which could explain the difference is the higher labour participation by MBs' spouses compared to the spouses of FBs.

A study of the income generation streams of BHs in the pre loan period from various activities revealed that agricultural wage labour formed the main activity in terms of its income contribution to the household income. However, in the post loan period, with the introduction of the financed activity - milch cattle emerged as the main activity for majority of the BHs. Thus, the BHs were found to be maximizing the benefits by combining agricultural wage labour with milch cattle activity.

The total household income of sample BHs in the pre loan period was Rs. 2882 p.a.. For the MBHs and FBHs, it was Rs 2747 and 2927 respectively. In the post loan period the average income of BHs increased to Rs 5524 and the corresponding figures for MBHs and FBHs were Rs. 5410 and

5562 respectively. Hence, there was a rise of 91.6 per cent in the income in the post loan period compared to the pre loan period for the sample as a whole. For the MBHs and FBHs the corresponding figures were 97 and 90 respectively.

The household income of beneficiaries in the pre and post loan period was measured with reference to crossing of the poverty line threshold. Out of the total BHs, 33 per cent of the households were successful in crossing the poverty line threshold. Out of the 69 BHs receiving one loan, 21 per cent were able to cross the poverty line, for the MBHs and FBHs the percentages were 24 and 20 respectively. Out of the 51 BHs who received second loan, only 5 were MBHs. Out of these 51 cases 47 per cent had crossed the poverty line threshold, the figures in case of MBHs and FBHs were 80 and 43 per cent respectively.

The above findings reveal that it is absolutely necessary to provide credit which can finance the purchase of at least two milch cattle right in the first stage of credit intervention so that the BHs succeed in crossing the poverty line. This is more essential in case of FBHs due to the lower incremental income accrued to them.

### 10.2.2 EMPLOYMENT IMPACT OF CREDIT

The main concern of policy makers has been the efficient utilization of surplus/underutilized labour and thereby maximization of benefits for the rural households.

Credit disbursed leads to productive assets, the use of which in turn generates employment and brings about a change in the activities of the household members.

The employment generated from the asset financed has been measured with reference to:

i) The additional employment generated in terms of labour from the asset financed; and

ii) The change in activity-mix pursued at the household level.

On examining the effect of credit disbursed on the employment generation of BHs, it was found that the average employment created worked out to 1289 labour hours per annum for tending the cattle financed. The labour hours generated in case of one and two loans worked out to 1202 and 1408 labour hours p.a., respectively. These figures provide clear evidence of the more efficient use of labour in case of two milch cattle compared to one.

This finding is further substantiated by figures of labour hours generated by the two genders of BHs, desegregated by one and two loans. For the BHs with one loan, the employment generated for MBHs was 1362 and for FBHs was 1112 lab. hrs. The corresponding figures for BHs with two loans were 1536 and 1394 lab. hrs., respectively.

In the pre loan period, agricultural labour was the major activity of the BHs, however, in the post loan period milch cattle was given larger time share. The activity-

mix pursued indicated that BHs were combining working on agricultural wage labour with milch cattle activity.

### 10.2.3 PRODUCTION FUNCTION ANALYSIS

For a more scientific examination of the input output relationship existing in the sample household units, we used the statistical technique of production function. Though there are several limitations in this analysis, some important conclusions are arrived at which can be viewed as broader relationships. The results suggest that increase in labour hours put in increases the output. Labour is more productively used in case of MBHs compared to FBHs. This could be due to higher contribution of spouses in case of MBHs compared to FBHs. Comparing the one and two loan cases, the presence of increasing returns to scale was observered. The milk output was more than double in case of two loans compared to one loan category becouse the economies of scale in labour was more than double in case of two loans. Increasing labour productivity was the root cause of economies of scale.

### 10.2.4 CONSUMPTION IMPACT OF CREDIT

Changes in consumption of basic necessities by the family depend upon the incremental income generated by credit and also on the gender of the individual who controls the income.

Changes brought about in the consumption pattern by the incremental income were captured by enumerating consumption of various items viz., milk, cereals, vegetables, clothing and housing. Information regarding the consumption pattern was gathered on a three point scale of increased, decreased and no difference.

Results indicated that all the categories of BHs had experienced an increase in milk intake. However, it had not increased incase of females. Further, only a few BHs experienced a positive change in their cereals intake and still lesser in their vegetable intake. Considering the MBHs and FBHs the positive consumption impact was only slightly higher amongst the former. Lastly, in case of clothing and housing, very few reported any incremental impact of credit . Thus, the impact of credit had filtered only to the level of food.

### 10.3 Impact of Credit on Gender Roles

The changes in the gender roles within the BHs are captured by studying the:

i) Changes in the gender patterns of the economic activities and income within the household.

ii) Participatory role of women as income contributors in the household income.

Though a loan is given to a specific person who is responsible for its use, a look into our data on asset use led us to conclude that within a household there were usually

two persons (one male and female) working on the asset financed. Hence, the computed income was allocated amongst the household members on the basis of time spent(in terms of labour hours) by them on tending to milch cattle.

On analyzing the gender-wise work participation trends of BHs in the financed activity it was found that women within both the categories of BHs were actively working on milch cattle. Income generation patterns of the MBs and FBs showed that MBs with one loan were earning Rs.611 and those having two loans earned Rs.1185 while the FBs with one loan earned Rs. 1731 and those with two loans earned Rs. 2889.

Further, on considering the gender-wise income generation patterns of MBs' and FBs' spouses it was found that their average income from one loan was Rs. 1744 and Rs.321 respectively. Similarly for the two loan categories the income generated by MBs' and FBs' spouses worked out to Rs 2265 and 425 Rs. respectively.

Thus, women generated higher incomes from milch cattle activity, irrespective of the fact whether the loan was taken on her own name or her husband's. These findings indicate that gender roles continue to be highly stereo-typed in case of rural activities after credit intervention. Further, the gender of the beneficiary does not decide the labour participation. The relatively higher participation of women stemmed form the fact that cattle rearing is a

home based activity and it does not radically compete with the females' household work but helps to inter-weave production into their household activity schedule.

Male participation rate in tending to milch cattle was limited and was only evident during the lactation and lean period of the year when employment in agricultural sector was low. However, between the males of FBHs and MBHs, the MBs were found to be working more on milch cattle. The difference could be due to the psychological feeling of ownership and responsibility on MBH's part. All this explains the higher employment generation for the MBHs.

Analysis of the changes in labour participation of the two genders in agricultural wage labour showed a lower participation of women in the agricultural wage labour activity. This lower rate of participation of women was not out of choice or socio-cultural religious barriers or dogmas but mainly due to limited labour opportunities.

The credit intervention, leading to the financed activity in the post loan period, saw the FBs marginally withdrawing from the labour market more than their spouses. The substitution amongst the MBs' spouses was not noticed as their involvement in the pre loan period was already low.

Gender contribution pattern of household income indicated that males were the major contributors of the household income in the pre loan period when agricultural wage labour was the main activity of BHs. However, in the

post loan period with milch cattle emerging as the salient activity, females made major contribution to the household income.

**10.4 Decision Making Process in the Beneficiary Households**

Empowerment of women is directly dependent on the decision making role within the household. The status of women is measured often by their participation in decision making. This makes it pertinent to examine the participation of women in various important decision making areas within BHs.

Participation of women in taking decisions about loan, asset utilization , income and consumption were used as a yardstick to ascertain the degree of women's empowerment and status. Loan decisions were : work allocation, quantity of inputs, disinfection of sheds, veterinary services needed and vaccination of animals. Consumption decisions included decisions on the use of income, quantity and quality of food and clothing purchased and money spent on housing. The marketing decisions comprised of quantity of milk to be sold and selection of market place.

A study of the decision making patterns within the households by gender indicated the pre dominance of males in the loan decisions and of females in decisions relevant to asset utilization, income use, consumption and marketing of milk output. Savings and investment were 'a priori'

male decisions, while the place for marketing was jointly decided by the beneficiary and spouse. between the FBs and the spouses of MBs the power exercised by the FBs in decision making was found to be slightly higher. In majority of the decisions, women's role was more prominent than men's.

## 10.5 Female Headed Households

There has been a growing urgency for the recognition of the increase in the number and the plight of the Female Heads (FHs) who are faced with the multiple burden by the virtue of being poor, women and heads of the household.

In view of the present thrust on the FHHs, they have been studied not only in isolation but also in comparison to the FBHs. The study of the profiles indicated conspicuous presence of the FHHs amongst the backward classes and higher age groups. The FHHs had lower family size and proportion of earning members than the FBHs. The loan profiles indicated lesser financing of second loans and poorer repayment performance of the FHHs compared to the FBHs.

Income impact analysis of credit indicated a positive increase in the income from the asset financed for both the categories, however, a more favourable impact on the FBHs. The economic ramifications were insufficient for most of the FHHs to rise above the poverty line threshold.

A study of income and work participation patterns of the FHs in the two economic activities indicated their lower participation with a higher wage labour substitution than the FBs. This peculiar behavioral pattern of the FHs arose from its lower resource base and the subsequent additional responsibilities in inner household sphere and outer domain of work. However, their income contribution in the household was higher than the FBs and this assumes significance in view of their status as the principal earners.

A study of the consumption pattern of the FHHs showed that significantly lower number of FHHs had experienced any favourable change in their consumption pattern than the FBHs. Further, decision making pattern indicated predominance of FHs in all decisions than the FBs.

The above findings lead us to conclude that the basic nature and structure of the FHHs is different and poorer than the other households and hence suffers from serious deprivations and disadvantages. This very nature deters the FHHs from making the optimum use of the financial assistance and points out the need to give them special preferential treatment in poverty alleviation programs.

## 10.6 Policy Implications and Recommendations

1. Our findings reveal that only one fifth of the beneficiary households could cross the poverty line on receiving the first loan. However, nearly half could

cross it on receiving second loan. Hence, it is recommended that the first loan itself should be large to finance at least two buffaloes to ensure that the beneficiaries cross the poverty line. It is only with two buffaloes that the benefits of economies of scale will be available for increasing production and income.

2. The impact of credit on additional employment generated at the household level clearly indicates tremendous advantage in tending to two milch cattle compared to one. This finding thus strongly supports our above recommendation of doubling the first loan amount itself so that credit intervention gives at least two milch cattle to the BHs at a time. The present practice of financing only one buffalo on credit needs to be changed immediately as it leads to wasteful use of labour and very insignificant addition to household income.

The policy implication of the input output analysis is that credit intervention will have better results in terms of poverty alleviation when two or more number of cattle are financed.

3. Stricter enforcement of eligibility norm will avoid wasting of scarce resources channeled through poverty alleviation programme by ensuring that all the beneficiaries comply with the eligibility norm.

4. Credit intervention with reference to poor households can be expected to have a positive impact on consumption of only food items. Secondly, the consumption of item which is produced within the household increases much more compared to that of items procured from the market indicating the critical element of linking production and consumption within a household. This provides an important insight for designing poverty alleviation programs, viz., there is a strong link between the production and consumption within a household. It needs to be noted that mere availability of milk in the household does not necessary lead to higher consumption of milk in case of women.

5. In view of the fact that it is ultimately the women in all the categories of BHs who work on the financed activity ie.,milch cattle, the project staff should make realistic decisions on who in the household they should work/dicuss with concerning project activities.

6. The income realized from the asset financed should not be attributed to the beneficiary without understanding the micro-process of the households income and labour participation trend.

7. There is a need to separate income streams according to genders within the households to eliminate the misconception and gender bias of the policy planners.

8. The active involvement of women in the decision making process of the household and asset utilization holds relevance for policy makers as it erases the myth of women being mere workers. Further, it establishes women in the managerial role and hence increases her entitlement to the access of credit. More importantly, it pin points the urgent need to focus project activities more on women.

9. As the FHHs characteristically differ from the other households in their resource potential they suffer from higher deprivation. It is necessary for the policy makers to first prepare profiles and then frame policies and strategies in context of the profiles of FHHs for labour and income generation through credit intervention.

10. Further, the findings on FHHs also make it imperative for policy makers to treat them as a special category, impart professional training and necessary skill and information, supply them with modern inputs and marketing facilities, even frame an innovative credit program for them. They also need to be given higher credit doses than the Male Headed Households (MHHs) for a particular activity.