

## CHAPTER – VI

### ECONOMIC IMPACT OF COOPERATIVE AGRICULTURAL CREDIT

#### 6.1. Introduction

Economic impact of cooperative credit for agriculture has many facets. But in this chapter the discussion is confined only to crop inputs and yields. Among crop inputs, only the doses of fertilizers are discussed because the cooperative credit was taken mainly for fertilizers. Thus the direct impact of cooperative credit is expected to be on fertilizer doses, which in turn is expected to affect yields of crops. The crops taken for discussion are cotton, rice, sugarcane, maize, wheat and gram. Finally, a brief analysis of household income and their sources is done in order to see whether the cooperative credit created increased proportion of their incomes from agriculture.

#### 6.2. Impact on Fertilizer Doses

In this section, the doses of Nitrogen (N) and Phosphorus (P) for members and non-members have been compared in order to see the difference, if any, between them. The data in the table 6.1 reflect that the members had applied slightly higher doses of fertilizer (N+P) than the non-members in all the crop zones except the barani zone. But the difference was not statistically significant. On overall basis, again the members were on the top but still the difference was not marked. As previously indicated (section 5.3.4.5) members had 73 per cent higher amount of loans than the non-members from all the sources of credit, but the difference in fertilizer dose was not that high. It, therefore, suggests that all the amount of cooperative credit was not used for the purpose for which the loan was taken.

It was observed during the field survey that the price of Nitrogenous fertilizers, when taken through cooperative loan, was significantly higher than the market price. Therefore, almost all the loans taken for Nitrogenous fertilizers were en-cashed. The price of DAP (Phosphetic fertilizer) was almost equal to the market price. Therefore, whenever the members wanted to utilize credit for fertilizer they preferred to have DAP from cooperatives and Nitrogenous from the market by en-cashing pay orders for Nitrogenous fertilizers. This might have depressed the level of Nitrogen on member's farm which is evident from the 'N' and 'P' data in Table 6.1. The 'N' and 'P' ratio for members is 1.6:1 and for non-members is 1.9:1.

Table 6.1. Fertilizer Utilization Pattern of Members and Non-Members

Zones	Members			Non-members			All		
	N	P	Sub-Total	N	P	Sub-Total	N	P	Sub-Total
Barani	21.37	17.17	38.54	27.18	22.17	49.35	22.75	18.35	41.10
Rice	33.92	16.06	49.98	32.08	16.60	48.68	33.36	16.22	49.58
Mixed	35.11	26.54	61.64	37.53	20.09	57.62	35.90	24.43	60.33
Cotton	38.71	19.86	58.58	36.67	16.29	52.96	38.00	18.62	56.63
Overall	34.91	21.10	56.01	35.26	18.11	53.36	35.02	20.14	55.16

### 6.3. Impact of Cooperative Credit on Crop Yields

Main objective of cooperative credit for farmers is to increase the level of inputs, mainly fertilizers, so that crop yields could be enhanced, which in turn can increase incomes of farmers. The farmers not only get credit from cooperation, they approach other sources also, like other institutional and non-institutional sources. Thus the members and non-members got loans from all the above sources [section 5.3 (d)].

The members got more than three time higher amount of loan from all the sources of credit for fertilizer [section 5.3. (d)] compared with non-members. It was, therefore, expected that the members would have higher yields of crops compared with the non-members.

Table 6.2 depicts the yields of major crops (i.e. cotton, rice, sugarcane, maize, wheat and gram) for the members and non-members. It is evident from the data that the members did not have superiority on the non-members in this regard. The members had slightly higher yields for cotton and maize, whereas the non-members had so for rice, sugarcane and wheat. However, the difference in yields was non-significant in all the cases, indicating thereby that both the categories had the same crop yields.

Table 6.2. Average Yield Per Acre of Major Crops

Crops	Members	Non-Members	All Farmers
Cotton	16.5	15.9	16.3
Rice	25.6	26.1	25.8
Sugarcane	400.0	404.7	401.3
Maize	14.9	13.5	14.5
Wheat	22.5	23.0	22.7
Gram	12.4	9.3	10.7

It has already been established that 73 per cent of cooperative loans were bogus (Table 5.3). Moreover, it was observed in the field that the rest of the loans, which were actually got were generally en-cashed. Therefore, only a negligible amount of loans was used for right purpose. The rest was used either for consumption purposes or investment in business. In this situation, it was least likely that the loans could have any marked impact on members crop yields and inputs.

### 6.4. Gross Income of Members and Non-Members

The proportion of income derived from farming activity is a good indicator to evaluate the dependence of a family on farming. Since the cooperative credit is meant for small farmers and their main dependence is on agriculture, it was expected that with cooperative credit their share of income from farming would be higher compared with the non-members. Table 6.3 gives information on income of the members and non-members. The data in the table provides evidence contrary to the expectations. The share of income from farming in the members category was 78 per cent as against 92 per cent for non-members. The members were earning more than 3 times higher income from off-farm sources than the non-members. It clearly suggests that members were not generally full-time farmers. They were businessmen and using funds of cooperatives to enhance their business instead of farming. This conclusion is in line with the general observation of the field team. This also confirms the information given in Table 4.2, which shows that only 17 percent of society operators were small

farmers. Others were businessmen, public servants and other influential persons. It is, therefore, evident that the credit given by cooperatives failed to achieve its objectives.

Table 6.3. Per Family Gross Income of Members and Non-members

Source	Members	Non-Members	All Farmers
On-Farm	32987 (78)	34228 (92)	33608 (85)
Off-Farm	9131 (22)	2986 (8)	6058 (15)
Overall	42118 (100)	37214 (100)	39666 (100)

*NOTE: Figures in parentheses are percentages.*

## 6.5. Conclusions

It is established in this chapter that the way the cooperative credit was being availed/used in Punjab, it had no impact on fertilizer use level and crop yields. Main reasons are:

- i) Presence of overwhelming majority of 'bogus' loans.
- ii) Use of cooperative loans for 'consumption' and 'business' purposes after their encashment.

For improving this situation, it is suggested that recommendations given at the end of chapter IV and chapter V may be adopted.

