

Impact of Primary Agricultural Cooperative Societies's on Farmer's Economy of Panchmahal District of Middle Gujarat, India

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Abstract

Utilization of credit for which it is provided is an important element in agriculture development. In this regards, it is necessary to understand the credit utilization pattern of farmers and efficiency of PACs. In tribal area of Panchmahal district, at the village level more than 100 PACs covering some villages or group of villages are working and providing crop production loans to their farmer members. Considering the above the study was confined to total 168 respondents (84 borrowers and 84 non-borrowers). The study revealed that due to availability of crop loan the total cropped area of both the categories (marginal and small) of farmers of borrower groups was higher as compared to non-borrower group, also the intensity of cropping was higher that is, 246.77 and 243.83% for marginal and small borrower farms as compared to non-borrower farms. Probably this may be due to more investment in irrigation system enabled the borrower farmers to raise more crops in a year than non-borrower farms. The study also showed the overall percentage increase in the employment was 8.21 and 9.29 % respectively in situation of before and after finance, while borrower farmers have obtained and used bank credit for improving their irrigation system There was also an increase in value of assets for irrigation facilities, farm building, live stock and land due to loan availability from PACSs. It is also found from the study that overall 29.76% of the total borrowers was found defaulted. The percentage of over dues to demand was maximum in small farmers, followed by marginal farmers. The most important contributing factors for mounting up of defaulters and over dues of credit were low productivity/ income (20.24%), followed by failure of crops (17.86%) and high family expenditure (15.48%) (Kaur et al., 2002).

Keywords: Primary Agricultural Cooperative societies (PACs), cost structure, returns, production pattern, finance

1. Introduction

The element of agriculture development is utilization of credit. The limited availability of credit and its lack have been acknowledged as the most limiting factor in the modernization of agriculture (Goyal & Pandey, 1987).

Modern agriculture on scientific lines is credit intensive in nature since the use of different types of agriculture inputs like fertilizers, machinery and other inputs required a large amount of credit. Thus credit plays a dynamic role in the development of agriculture (Kaur et al., 2002).

The Panchmahal district located at Gujarat Plains and Hills Region with latitude 22° 49'15.10" N, Longitude 77°45'01.67" E, and altitude 187.6 M. average rainfall is 753 mm. In Panchmahal district of Gujarat at the village level above 100 PACSs covering some villages or group of villages are working and providing crop production loans to their farmer members through three tier system. Considering the above facts, the present study entitled "Impact of PACs finance on Marginal and Small Farmer's Economy of Panchmahal District of Middle Gujarat" was conducted with following objectives.

- 1) To study the impact of PACSs on investments and returns of farmers.
- 2) To compare the cropping intensity on borrower and non-borrower farms.

- 3) To study the effect of PACSs finance on consumption pattern of the borrowers and non-borrowers.
- 4) To examine the impact of institutional finance pattern on generation and distribution of employment and repayment and overdue performance of borrowers and its reason.

1.1 Importance of the Problem

This study conducted to know the impact of Primary agriculture co-operative society's system in Panchmahal district of Gujarat. And how the beneficiaries used this loan amount for agricultural production use and how their standard of living i.e Income, Employment etc., even also understand the level and problems of overdues which will use for policy makers. This study was conducted under the Aanand Agriculture university, and this was the master research in department of agricultural economics.

1.2 Hypotheses and Their Correspondence to Research Design

The present study conducted to know the mis-utilization of credit and impact of the PACs finance, how the rural economy and standard of living of rural people improved by state and central government financial policy, obstacles of finance and requirement of refinance.

2. Method

The multi stage stratified random sampling technique was used to select the ultimate sampling units. Among different districts of Middle Gujarat, Panchmahal district constitute highest percentage of total short term loan disbursed by PACSs was purposively selected.

2.1 Subsections

In case of selection of sample farmers the farmers who got loan from PACs are selected as beneficiaries and those who did not selected as non-beneficiaries.

2.2 Participant (Subject) Characteristics

Considering the size of population and resources, the study was confined to marginal farmers and small farmers, the marginal farmers who have land holding less than one hectare while the small farmers who have land holding 1 to 2 hectare.

2.3 Sampling Procedures

The multi stage sampling method was used for selection of PACs on the base of higher term loan disbursed, while in case of sample farmer's purposive sampling method was used for the present study.

2.3.1 Sample Size, Power, and Precision

From the total population 168 sample farmers were selected from this 84 borrowers and 84 non-borrowers, total 12 villages were selected from Panchmahal district and 14 sample farmers were selected from each villages (7 borrowers and 7 non-borrowers).

2.3.2 Measures and Covariates

Primary and secondary data were utilized for the present study. Primary data in respect of input use, cost structure and returns from the crops, was collected by survey method adopting personal interview of the selected respondent with the help of framed questionnaire. At the time of survey, the aim and objectives of the study was explained to the respondent with a view to obtain correct information. But, care has been taken to cross check for the accuracy. The data was collected for the agricultural year 2009-10. The Secondary data was collected from the publications and records of Directorate of Agriculture, Government of Gujarat, Gandhinagar, research report etc.

3. Methodology

3.1 Statistics and Data Analysis

Estimation of cost

(A) Cost A_1 : It includes

- 1) Value of hired human labour.
- 2) Value of hired and owned bullock labour.
- 3) Value of hired and owned machine labour.
- 4) Value of seed (both own seed and purchased).
- 5) Value of manures (owned and purchased).
- 6) Cost of fertilizers.

- 7) Plant protection charges (insecticide/pesticide).
- 8) Irrigation charges.
- 9) Land revenue.
- 10) Interest on working capital.
- 11) Miscellaneous expenses.
- 12) Depreciation.

Family labours will be charged at the rate of hired labour charges prevailing in the region. Owned bullock labour is taken on the basis of hire rate prevailing in the village.

(B) Cost A₂: Cost A₁ + rent paid for leased in land.

(C) Cost B₁: Cost A₁ + interest on fixed capital (excluding land)

(D) Cost B₂: Cost B₁ + rental value of owned land + rent for leased in land.

(E) Cost C₁: Cost B₁ + imputed value of family labour.

(F) Cost C₂: Cost B₂ + imputed value of family labour.

(G) Cost C₃: Cost C₂ + 10 per cent of cost C₂ as management cost.

Cost of production

$$\text{Cost of production } \text{"/} \text{ qtl} = \frac{\text{Cost of cultivation}}{\text{Quantity of main product}}$$

Income measures: Following income measure will be used:

(i) Gross income: it is the total value of main product and by-product.

$$GI = (Q_m \times P_m) + (Q_b \times P_b)$$

Where,

GI = Gross income

Q_m = Quantity of main product

P_m = Price of main product

Q_b = Quantity of by product

P_b = Price of by product

(ii) Returns over variable cost (RVC):

$$RVC = \text{Gross income} - \text{Cost A1}$$

(iii) Farm business income (FBI):

$$FBI = \text{Gross income} - \text{Cost A2}$$

(iv) Family labour income (FLI) or return to family labour and management:

$$FLI = \text{Gross income} - \text{Cost B2}$$

(v) Net income (NI):

$$NI = \text{Gross income} - \text{Cost C2}$$

(vi) Returns to Mgt:

$$GI - \text{Cost C3}$$

(vii) Returns per rupee (RPR):

$$RPR = \frac{\text{Gross income}}{\text{Cost C2}}$$

4. Result and Discussion

4.1 Structure of Farm Assets

The structure of farm assets including land, farm building, livestock, farm implements and irrigation facilities in case of borrowers and non-borrower farmers at two points of time *i.e* with PACSs finance and without finance is given in Table 1.

Table 1. Per farm assets structure (₹ per farm)

Particulars	Marginal			Small			Total		
	B	NB	% change	B	NB	% change	B	NB	% change
Farm Implements	980	820	16.33	1026	875	14.72	2006	1695	15.50
Farm Building	195	159	18.46	300	249	17.00	495	408	17.58
Irrigation Structure	1280	919	28.20	1508	1090	27.72	1809.39	1440.84	20.39
Land	1383	1280	7.45	1408	1307	7.13	2791	2588	7.23
Livestock	2020	1736	14.10	2123	1928	9.19	4143	3664	11.56
Total	5858	4914	16.11	6365	5449	14.39	11244.39	9795.84	12.88

(B = Borrower, NB = Non-borrower).

Table 1 shows that the value of fixed capital per farm comes to about ₹ 5858 and ₹ 6365 in case of marginal and small borrower farmers and ₹ 4914 and ₹ 5449 in case of marginal and small non-borrower farmers with an overall of ₹ 11244.39 and ₹ 9795.84 on borrower and non borrower farms (12.88 % increased). The highest increase in value of assets recorded in case of the farm assets structure was about 20.39% for irrigation structure, followed by farm building (17.58%), farm implements (15.50%), live stock (11.56%), and land (7.23%). Thus, the extent of increase in assets was mainly due to loan availability from PACSs for both the categories of farmers.

4.2 Cost Structure Analysis

The details regarding a comparative cost structure showing factor wise distribution of total cost for borrower and non borrower paddy and maize producers of Panchmahal district is presented in Tables 2 & 3.

It is evident from Table 2 that the cost C_1 of paddy production per hectare was as high as ₹ 19256.90 and ₹ 18444.25 in case of marginal and small borrower farmers as against ₹ 15039.75 and ₹ 15664.71 for marginal and small non-borrower farmers. Thus, cost of paddy production (₹) was significantly higher by 21.90% and 14.91% on borrower farms as compared to non-borrower farms of marginal and small group. Similarly as can be observed from Table 3 that the cost C_1 of maize production per hectare was ₹ 5496.61 and ₹ 5379.39 on marginal and small borrower farmers while, the corresponding figures for non-borrower farmers was ₹ 5185.76 and ₹ 5276.11, respectively. Thus, in case of maize crop also total cost was subsequently higher on marginal and small farms of borrowed group as compared to non-borrowed group.

Tables 2 and 3 revealed that irrespective of farm size and type, expenditure, seeds and plant protection chemicals were the major important components of operational cost, similarly rental value of own land, interest on working capital and depreciation charges were the major component of fixed cost.

Table 2. Cost structure of paddy production for the borrower and non borrower farmers of Panchmahal district (₹ per ha.)

Sr. No.	Items	Marginal			Small		
		B	NB	% change	B	NB	% change
A	Operational cost	13112.96	10208.68	-	12249.12	10609.33	-
1	(A)Hired labour	1850	1250.15	15.69	2095.08	1790.68	14.53
	(B)Family labour	2020	1703.08	24.55	1308.80	1290.03	1.43
	Total	3910	2950.23	11.52	3503.88	3080.71	12.08
2	Bullock labour	260.45	230.45	27.87	190.36	172.82	9.21
3	Seeds	2025.84	1461.29	21.38	1975.08	1481.30	25.00
4	Fertilizers and Mannures	4957.46	3897.58	21.30	4950.52	4083.11	17.52
5	Plant protection chemicals	432.12	340.08	25.06	480.85	400.30	16.75
6	Irrigation charges	989.80	741.77	5.82	932.80	890.45	4.54
8.	Interest on working capital	350.82	330.41	12.10	320.39	300.29	16.60
9	Misc. expenditure	226.47	253.87	22.91	240.24	200.35	18.28
B.							
10	Rental value of own land	5163.47	4147.04	19.66	4999.65	4330.10	13.39
11	Interest on fixed capital	980.47	684.03	30.23	950.48	800.56	15.77
	Total (B)	6143.94	4831.07	21.37	5950.13	5130.66	8.66
	Cost C1	19256.9	15039.75	21.90	18276.26	15664.71	14.91

(B = Borrower, NB = Non-borrower).

Table 3. Cost structure of maize production for the borrower farmers of Panchmahal district (₹ per ha.)

Sr. No.	Item	Marginal			Small		
		B	NB	% change	B	NB	% change
A	Operational cost	3893.28	3673.76	5.64	3780.72	3693.78	2.30
1	Hired labour	510	506	0.78	520	512	1.54
	Family labour	550	520	5.45	530	496	6.42
	Total	1060	1026		1060	1008	
2	Bullock labour	130	118	9.23	126	122	3.17
3	Seed	770	740	3.90	743	738	0.67
4	Fertilizer and Mannure	873	823	5.72	855	838	1.99
5	Plant protection chemicals	95.14	90.03	5.37	96.08	92.18	4.06
6	Irrigation charges	574	490	14.63	548	539	1.64
8.	Interest on working capital	332.08	329.09	0.90	333.08	330.21	0.86
9	Misc. expenditure	59.06	57.64	2.40	29.56	26.39	10.72
B.							
10	Rental value of own land	1433.33	1350	5.81	1416.67	1408.33	0.59
11	Interest on fixed capital	170	162	4.71	182	174	4.40
	Total (B)	1603.33	1512	5.70	1598.67	1582.33	1.02
	Cost C ₁	5496.61	5185.76	5.66	5379.39	5276.11	1.92

(B = Borrower, NB = Non-borrower).

4.3 Returns From Major Crops

The results about the estimated of different cost like cost-A, Cost-B, Cost-C₂, yield, gross income and net profit realized from paddy and maize crops on marginal and small borrower and non-borrower farms are presented in Tables 4 & 5.

Table 4. Economics of Paddy production (₹ / ha.)

Sr. No.	Item	Marginal			Small		
		B	NB	% change	B	NB	% change
1	Estimates of different cost						
	Cost-A	12073.43	9189.63	23.89	12135.80	10074.86	16.98
	Cost-B	17236.90	13336.67	22.63	17135.45	14404.96	15.94
	Cost-C ₁	19256.90	15039.75	21.90	18444.25	15694.99	14.91
	Cost-C ₂	21182.59	16543.73	21.89	20288.68	17264.49	14.90
2	Yield	2028	1484	26.82	3045	2545	16.42
3	Gross Income	30980.42	24882.28	19.68	29997.92	25980.32	13.39
4	Net profit	9797.83	8338.55	14.89	9709.25	8715.83	10.23

(B = Borrower, NB = Non-borrower).

Table 5. Economics of maize production (₹ / ha.)

Sr. No.	Item	Marginal			Small		
		B	NB	% change	B	NB	% change
1	Estimates of different cost						
	Cost-A	3513.28	3315.76	5.62	3432.72	3371.78	1.76
	Cost-B	4946.61	4665.76	5.68	4849.39	4780.11	1.43
	Cost-C ₁	5496.61	5185.76	6.15	5379.39	5276.11	1.92
	Cost-C ₂	6046.27	5704.34	5.66	5917.33	5803.72	1.91
2	Yield	707.35	589.95	16.60	235.88	161.23	23.17
3	Gross Income	8100	7700	4.94	8000	7800	2.5
4	Net profit	2053.73	1995.66	2.83	2082.67	1996.28	4.15

(B = Borrower, NB = Non-borrower).

The data contained in above tables reveal that estimated cost-C₂ of in case of marginal and small farms of borrower groups Paddy production was higher by 21.90 per cent and 14.91 per cent as compared to non-borrower groups. The corresponding figures for maize production was substantial higher by 5.66 per cent and 1.92 per cent on marginal and small farms of borrower group compared to non-borrower group. So it could be inferred from this that PACs played an appreciable role in providing finance which has resulted higher costs, higher yield and higher net profit to their borrowers. The net profit realized from paddy production on marginal and small borrower farms was ₹ 9797.83 and ₹ 9709.25 as compared to ₹ 8338.55 and ₹ 8715.83 of non-borrower marginal and small farms, which was higher by 14.89% and 10.23% on the respective farms.

Similarly the net profit realized from maize production was ₹ 2053.73 and ₹ 2082.67 in case of marginal and small borrower's farms as compared to ₹ 1995.66 and ₹ 1996.28 for borrower farms, which was higher by 2.83% and 4.15%.

Thus a significant difference between the profit realized by the borrower and non-borrower farmers was noticed. Thus finance given by PACs to their members ultimately resulted in to higher gross income and net profit for the members.

4.4 Overdues

The amount of loan that is due to a particular date but has not been paid by that date is called 'overdue'. Overdues are otherwise known as arrears, defaults, or out of time repayment and borrowers against whom overdues stand are categorized as defaulters. The magnitudes of overdue has been a major set-back, clogging the credit pipelines and hence, prevents the recycling of credit. The details of the overdues are presented in Table 6.

Table 6. Proportion of overdues on different farm size groups (₹ in 000')

Particulars	Borrower		All farms
	Marginal	Small	
No. of overdue borrowers	12.00	13.00	25.00
% of overdue borrowers to total borrowers	25.53	35.13	29.76
Loan advanced	273.66	573.30	846.96
Collection	194.45	396.84	591.28
Amount of overdues per borrower	79.21	176.46	256.67
% of overdues to total loan amount	28.95	30.78	30.29

It is evident from the Table-6 that overall 29.76% of the total borrowers was defaulter and its percentage varied from 25.53% on marginal farms to 35.13% on small farms. Table also revealed that overall 30.29% of total amount was recorded as overdue amount and its percentage varied from 28.95% on marginal farms to 30.78% on small farms.

In order to study overdues in relation to size of holdings, the overdue amount per hectare are arrived and presented in Table 7.

Table 7. Overdues in relation to the size of holdings of the selected borrowers (Value in ₹)

Particulars	Borrower		Total
	Marginal	Small	
Total overdues	79210	176460	256670
Over dues per defaulter	6600	13570	20170
Over dues per ha.	2720	2660	5580

The results of above table indicated that amount of overdue per defaulter was ₹ 6600 and ₹ 13570 for marginal farmers and per hectare overdues was ₹ 2720 and ₹ 2660 for marginal and small farms. The results are telling that small farmers did not use their loan amount for agricultural purpose compare to medium farm group.

4.5 Intensity of Cropping

Intensity of cropping for the borrower and non-borrower farmers has been worked out and presented in Table 8.

Table 8. Intensity of Cropping for borrower and Non-borrower farmers

Sample farmers	Net cultivated area per farm	Gross cropped area per farm	% GCA to NCA
Borrower			
Marginal	0.62	1.53	246.77
Small	1.46	3.56	243.83
Non-borrower			
Marginal	0.58	1.11	191.38
Small	1.45	3.02	208.27

4.6 Employment

It is evident from the Table 8 that the intensity of cropping was higher on both the categories of farms. It was 246.77% and 243.83% for marginal and small borrower farms as compared to 191.38% and 208.27% for non-borrower farms. This may be due to more investment in irrigation facilities enabled the borrower farmers to raise more crops in a year than non-borrower farmers.

Today, unemployment is the greatest problem which our country faces seriously. Employment generation has got an important place as social objectives in our planning. Use of PACSs credit has increased the total employment as well as caused an inter-activity shift in resource use. The overall as well as in different categories of farmers labour employment increased after borrowing. The detail of same is given in Table 9.

Table 9. Per farm impact of finance on employment at two points of time (Man days)

Category	Employment		Absolute change
	Before	After	
Agricultural purpose			
Marginal	1580.00	1864.00	284.00 (15.24)
Small	1870.00	2195.00	325.00 (14.81)
Non agricultural purpose			
Marginal	400.00	500.00	100.00 (20.00)
Small	490.00	550.00	60.00 (10.91)
Over all Marginal (A+B)	2170.00	2364.00	194.00 (8.21)
Overall Small (A+B)	2490.00	2745.00	255.00 (9.29)

Figure in parentheses indicates percentage of increment.

It is evident from the Table 9 that about 15 per cent more of employment increased in both the group *i.e* agricultural and non agricultural purposes. in case of marginal farmers it is higher, while the same was more for non-agricultural purposes in case of small farms. The overall percentage increase in employment was 8.21 and 9.29 on marginal and small farm.

4.7 Effect of PACSs Finance on Consumption Pattern of Respondents

The consumption pattern of respondents before and after providing credit is given in Table 10.

Table 10. Category wise consumption pattern of respondents before and after finance (In ₹)

Particular	Marginal		Small		All Categories	
	Before	After	Before	After	Before	After
Consumption needs	4383.8 (68.92)	5623.09 (70.54)	4793.40 (68.39)	5834.43 (67.26)	4588.6 (68.64)	5728.76 (68.83)
Medical needs	950.95 (14.95)	1038.57 (13.03)	1011.43 (14.43)	1253.81 (14.45)	981.19 (14.68)	1246.19 (14.97)
Educational needs	329.35 (5.18)	396.90 (4.98)	403.57 (5.76)	489.90 (5.65)	366.46 (5.48)	443.40 (5.33)
Domestic & Other social needs	696.90 (10.95)	913.28 (11.45)	800.11 (11.42)	1096.43 (12.64)	748.51 (11.20)	1004.86 (12.07)
Total	6361.00 (100)	7971.84 (100)	7008.51 (100)	8674.57 (100)	6684.76 (100)	8323.21 (100)

Figure in parentheses indicate percentage to the total.

Table 10 clearly reveals that the family expenses had increased after availing credit assistance in case of both the categories of farms in Panchmahal district. Overall, it has increased from ₹ 6684.76 to ₹ 8323.21, while on marginal it has increased from ₹ 6361.00 to ₹ 7971.84 and the corresponding figures for small farms are from ₹ 7008.51 to ₹ 8674.57 after availing loan facilities from PACSs. In absolute terms, under all the four heads of expenses had increased, but in relative terms the increase was observed under consumption and medical needs in both the categories of farms. Both the categories of farmers were spending highest percentage of income on consumption needs, followed by medical needs, domestic & other social needs and educational needs.

4.8 Repayment Capacity

The repayment capacity of a borrower is measure of his ability to ensure the return of funds acquired for purpose of investment and consumption. It is not sufficient just to analyze the productivity alone or additional returns that would accrue due to the borrowed funds. It should be based on an estimate of anticipated income from all sources of borrowers during the year. The annual cash expenses, returns, outstanding debts and repayment capacity of various categories of sample farmers are given in Table 11. (Khandhar, 1980)

It is evident from the Table 11 that the average amount of loan due for repayment during 2009-10 worked out to be ₹ 3405/- for marginal farms and ₹ 2490/- for small farms with an average of ₹ 2644.50. The repayment capacity of the sample farmers was worked out by subtracting the total farm operating expenses excluding the cost of inputs acquired by using the crop loans, other outstanding debts due for repayment and the family living expenses during the year from the total cash income of the households. The amount of loan due for repayment during the year was estimated by adding all the short term crop and domestic loans, further the data contained in Table 11 clearly show that the total amount of loans due for repayment exceeded the repaying capacity for all the categories of farmers. It may therefore, be concluded that the majority of farmers were under heavy debt burden.

Table 11. Repayment capacity of borrowers (₹ per ha.)

Sr. NO.	Particular	Borrower		Total
		Marginal	Small	
1	Net farm income	17698	16980	13339
2	Off farm Income	980	1500	1240
3	Total cash income	18378	18480	14579
4	Net farm income	4298	4590	4015.5
5	Cash family expenses	10000	10876	9933
6	Total cash expenses	14293	15900	10694.5
7	Average amount of crop loan	5823	15494	10658.5
8	Total amount of loan taken	2,73,660	5,73,300	4,23,480
9	Amount due for repayment during the year 2008-09	79210	176460	127835
10	Repayment capacity	3405	2490	2644.5

4.9 Factors Influencing Overdues

Based on the answers of the sample farmers and the officials of the lending institution to the questions asked pertaining to the socio-economic factors associated with overdues, the perception of defaulters is worked out and presented in Table 12.

Table 12. Perception of the sample borrowers regarding reason for overdues

Sr. No.	Reasons	Borrower		Total
		Marginal	Small	
1	Non-marketing of produce	1.00 (2.73)	2.00 (5.41)	3.00 (3.57)
2	Higher family expenditure	8.00 (17.02)	5.00 (13.51)	13.00 (15.48)
3	Repayment of old debt	3.00 (6.38)	4.00 (10.81)	7.00 (8.33)
4	Failure of crops	9.00 (19.15)	6.00 (16.22)	15.00 (17.86)
5	Social obligations	6.00 (12.77)	2.00 (5.41)	8.00 (9.52)
6	Willful defaulter	2.00 (4.26)	1.00 (2.70)	3.00 (3.57)
6	Low productivity/Income	10.00 (21.28)	7.00 (18.91)	17.00 (20.24)
7	High cost of Inputs	2.00 (4.26)	2.00 (5.41)	4.00 (4.76)
8	Malpractices	1.00 (2.73)	2.00 (5.41)	3.00 (3.57)
9	No intension to repay	3.00 (6.38)	3.00 (8.11)	6.00 (7.14)
10	Unemployment	1.00 (2.73)	2.00 (5.41)	3.00 (3.57)
11	Political interference	1.00 (2.73)	1.00 (2.70)	2.00 (2.38)
	Total	47.00 (100.00)	37.00 (100.00)	84.00 (100.00)

Figure in parentheses indicates percentage to the total.

Table 12 indicates that these perception on an average as well as for marginal and small farmers, the most important contributing factor to the mounting up of defaulters and overdues of credit is due to low productivity/income (20.24%) followed by failure of crops(17.86%) and higher family expenditure (15.48%). Next prime reason goes to the other perceptions viz, Social obligation (9.52%) and repayment of old debt (8.33%) etc.

5. Conclusion

Because of the help of finance assistance by the PACSs in Panchmahal district the net profit realized from paddy production on marginal and small borrower farms was ₹ 9797.83 and ₹ 9709.25 as compared to ₹ 8338.55 and ₹ 8715.83 of non-borrower marginal and small farms, which was higher by 14.89% and 10.23% on the respective farms. Similarly the net profit realized from maize production was ₹ 2053.73 and ₹ 2082.67 in case of marginal and small borrower's farms as compared to ₹ 1995.66 and ₹ 1996.28 for borrower farms, which was higher by 2.83% and 4.15%.

The study also reveals that the family expenses had increased after availing credit assistance in case of both the categories of farms in Panchmahal district. Overall, it has increased from ₹ 6684.76 to ₹ 8323.21, while on marginal it has increased from ₹ 6361.00 to ₹ 7971.84 and the corresponding figures for small farms are from ₹ 7008.51 to ₹ 8674.57 after availing loan facilities from PACSs while, average amount of loan due for repayment during 2009-10 worked out to be ₹ 3405/- for marginal farms and ₹ 2490/- for small farms with an average of ₹ 2644.50, same as overall percentage increase in employment was 8.21 and 9.29 on marginal and small farm.

The central and state government policy to finance the rural farmers was resulting positive. But there is still requirement to improve some of the obstacles which are listed below.

6. Suggestions

- 1) Linkage between extension agencies, marketing agencies and credit institution for the productive use and effective supervision of credit should be established.
- 2) Follow up and supervisions of the credit must be done by the PACSs authority for proper utilization of the credit.
- 3) Group finance, group guarantee training to the borrower about proper utilization and recycling of the funds, recovery campaign etc. should be initiated by the PASCs to reduce the over dues.
- 4) The borrower should be properly educated about their responsibility in prompt repayment and recycling of funds of the institution.

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