

Impact of Credit on Wheat Cultivation in Kadipur Block of District-Sultanpur (U.P)

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ABSTRACT

Seeing the credit need in agriculture and importance of the study, the investigations on "Impact of Agricultural Credit on Crops Production in Block-Kadipur, District-Sultanpur" was conducted.

Kadipur block Sultanpur district was selected purposively seeing the convenience of investigator. Hundred respondents were selected randomly from 5 villages and categories in four group on the basis of holding size. Primary data were noted from official records of block and district head quarter. Average, percentage and Cobb-Douglas function were used for analysis of data. The study pertains to the agriculture year 2012-13. The main objectives of the investigation were to study the farm structure credit need, cost of credit, adequacy and repayment capacity, economics of major crops production, resource use efficiency and income and employment generated with the self of financial assistance.

The average holding size, on borrower farms was higher than non-borrower, rice, wheat, moong and green fodder were the major crops of cropping pattern and cropping intensity on borrower farms was also higher than non-borrower.

Borrower sample farmers received higher input : output ratio, gross income and net income the extent of 81.39 and 50.85 percent than that of non-borrowers in case of rice cultivation. Similar result was also found in case of wheat cultivation. Lastly the study supports the positive and effective impact of agricultural credit on crops production.

Keywords: Agricultural Credit, Crops Production, Rice, Wheat, Moong and Green fodder

INTRODUCTION

The credit work is derived from the Latin word *creditum*, which means faith or believes. Borrower can obtain fund from lender at given terms and conditions for certain period after which the borrowed amount should be returned to lender. The system by which goods

or services are provided in return for deferred rather than immediate payment. Credit may be provided by the seller or by a bank or finance company. Credit is the reputation for financial soundness which allows individuals or companies to obtain goods and services without payment.

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Farm finance assumes vial importance in the agro-socio-economic development of the country. Its catalytic role strengthen the faring business and augments the productivity of scarce resources. Muniraj (1987) quoted that farm finance is the money extended to the farmer to stimulate the productivity of the limited farm resources. It is not more loan or credit of advance, it is an instrument to provide the well being of society. Farm finance is not just a science to manage the money, but is an applied science of allocating scarce resources to derive the optimum output. For agricultural development the Indian agriculturists need huge financial assistance. The All India Rural Credit Review Committee (1969) estimated that the short term credit requirements in 1973-74 were likely to be of the order of Rs. 2000 crore while the medium and long term credit need for the fourth plan period were estimated to be of the order of Rs. 500 crore and Rs. 2000 crore respectively. The National Commission on Agriculture had worked out that the credit requirements by 1985 would be Rs. 7878 crore for short term loan, Rs. 8265 crore for medium and long term loan and Rs. 402 crore for implements and machinery.

Desai also had estimated the requirements of short term credit for agricultural production in India for various years. He made alternative assumption about the credit need of the farmer. It was estimated to be of the order of Rs. 29464 crore in 1984-85. These were expected to go up to Rs. 34156 crore to Rs. 40567 crore and to Rs. 49356 crore in the year 1990, 1995 and 2000 A.D. respectively. Dantwala, with still more conservative assumptions, estimated the total short term credit requirement for agricultural production to be of the order of Rs. 35889 crore for the year 1999-2000 (at 1984-85 prices).

According to the Agricultural Credit Review Committee (1989) the total short term credit requirements for agricultural production for the year 1999-2000 were expected to be of the order of Rs. 39834 crore.

These estimates were made about two decades back. The need for rural credit has in fact gone up after the economic reforms. However, it is clear that, even the earlier estimates for the present period, far exceed the present actual supply of institutional credit the most suitable form of rural credit.

Importance of rural credit in developing economy is crystal clear from facts mentioned here. No doubt agricultural finance has increased the production and productivity of agricultural and raised the standard of living of weaker section of the society. Since no any systematic study so far has been conducted to asses the impact of credit on agriculture and rural development in the study area. Thus the study on Impact of credit on wheat cultivation in Kadipur block of district Sultanpur was carried out with following specific.

MATERIALS AND METHODS

Stratified purposive and random sampling technique was used to select the district, block and villages. Kadipur block of district Sultanpur was selected purposively. Form this block

5 villages were taken randomly and from the selected Villages 50 borrower and 50 non borrower respondents were choosen through proportionate allocation to the population and categorised as marginal, small, medium and large farmers. Simple tabular and functional analysis were applied to draw the inferences and present the result. The study pertain to the agriculture year 2011-12.

RESULT AND DISCUSSION

(1) Economics of wheat cultivation on borrower sample farms :

Economics of wheat cultivation on sample borrower farms was analysed and presented in table-1. It is revealed from the table that the per hectare total costs of cultivation on over all farms was Rs. 29413.41, which was highest on marginal group of farms i.e. Rs. 31514.12, followed by small, medium and large size of farm, as it were Rs. 30903.96, Rs. 26849.69 and Rs. 23320.84 respectively. Maximum costs of cultivation on marginal farms was

occurred due to more expenditure done on manure and fertilizer. Per hectare costs of cultivation was found of apposite relation with size of holding. As farm size increases cost of cultivation decreased. As far as the percent share of different constituents of total costs in concerned, rental value of land was found of maximum share i.e. 27.10 percent followed by manure & fertilizer, costs of seeds, and charge paid for tractor-operation; corresponded to 15.84, 13.87 and 13.86 percent respectively.

Among different variable inputs comparatively higher expenditure on seeds and fertilizer shows the awareness of the sample borrower farmers towards better utilization of the credit advanced and to harvest the better yield.

The study further revealed that the gross income per hectare of wheat on borrower samples farms was Rs. 44071.77 on overall farm, which was highest on marginal farms i.e. Rs. 47160.00 followed by small, medium and large farms corresponded to Rs. 45208.80, Rs. 40961.40 and Rs. 36924.00 respectively. The net income per hectare were also found of same trend, but cost of production per quintal was highest i.e. Rs. 808.60 on small farms followed by marginal, medium and large size group of farms. Corresponded to Rs. 789.49, Rs. 766.86 and Rs.766.86 and Rs. 709.58 respectively. The input : output ratio on overall farms came to 1:1:49, which was highest on large farms i.e. 1:1:58 followed by medium, marginal and small farms, respectively.

Table 1: Per hectare costs and return of wheat in the study area (Rs/ha)

(A) Borrower						
A	Particulars	Size group of cost	Overall		Marginal average	
			Sample farms	Small	Medium	Large
1	Seed	4113.79(13.05)	4717.55(15.26)	3608.14(13.43)	2978.00(12.77)	4079.15(13.87)
2	Manure & Fertilizer	6778.99(21.51)	3730.98(12.07)	3178.19(11.84)	3145.79(13.49)	4657.89(15.84)
3	Irrigation	3396.98(10.78)	3404.88(11.02)	1303.43(4.86)	1391.82(5.97)	2783.97(9.47)
4	Plant protection chemical	1150.00(3.65)	2258.67(7.31)	1949.04(7.25)	736.52(3.16)	1596.91(5.43)
5	Hired human labour	2811.39(8.92)	2174.46(7.04)	2460.18(9.16)	2950.75(12.65)	2558.15(8.69)
6	Tractor power	3046.09(9.67)	4953.92(16.03)	4908.82(18.28)	3654.92(15.67)	4078.03(13.86)
7	Working capital	21297.24(67.58)	21240.46(68.73)	17407.80(64.83)	14857.80(63.71)	19754.10(67.16)
8	Interest on working capital	372.70(1.18)	371.71(1.20)	304.64(1.14)	260.01(1.12)	345.69(1.18)
9	Land rent	8000.00(25.39)	8000.00(25.89)	8000.00(29.79)	8000.00(34.30)	8000.00(27.10)
10	Cost B	29669.94(94.15)	29612.17(95.82)	25712.44(95.76)	23117.81(99.13)	28099.79(95.53)
11	Family labour	1844.48(5.85)	1291.79(4.18)	1137.25(4.24)	203.03(0.87)	1313.61(4.47)
12	Cost C	31514.42(100.00)	30903.96(100.00)	26849.69(100.00)	23320.84(100.00)	29413.41(100.00)
B Income measures						
1	Gross income	47160.0	45208.80	40961.40	36924.00	44071.77
2	Family labour income	17490.06	15596.63	15248.96	13806.19	15971.98
3	Net Income	15645.58	14304.84	14111.71	13603.16	14568.36
4	Costs of production (Rs/qt)	789.49	808.60	766.86	709.58	781.17
5	Input : Output	1:1:49	1:1:46	1:1:53	1:1:58	1:1:49

(Figures in parentheses indicate the percent to total)

2. Economics of wheat cultivation on non-borrower sample farms :

Per hectare costs and income analysis of wheat cultivation on non-borrower sample farms was done and result is presented in Table-1. It is revealed from the table that the overall farm total cost of cultivation per hectare was Rs. 22900.34, which was maximum on marginal farms i.e. Rs. 25050.60 followed by small, medium and large size group of farms corresponded to Rs. 22897.41, Rs. 21039.49 and Rs. 18546.43 respectively. The per hectare total costs of production on marginal size of sample farms was exceeded because of excess expenditure on seed, manure & fertilizer and tractor charges compared to other farm categories. The major constituents of the total cost of cultivation were rental value of owned land which accounted form highest percent share i.e. 34.93 percent followed by manure & fertilizer, seed, tractor charges and irrigation corresponded to 13.99, 13.42, 11.85 and 8.60

percent respectively. The study further revealed that the non-borrower farmers were also interested to harvest the better yield, as they allocate comparatively higher cost for seed and fertilizer. At last it is concluded from the table that the per hectare cost of wheat cultivation had the indirect relation with size of farms.

The Table-2 also presents the income measures received from per hectare of wheat cultivation on non-borrower sample farms. It is depicted that a maximum of Rs. 31883.00 was received as gross income on marginal farms followed by medium, small and large size group of sample farms which corresponded to Rs. 29182.50, Rs. 28582.50 and Rs. 25550.00. The overall gross income per hectare was computed to Rs. 29789.54 on non-borrower sample farms. The input : output ratio was highest on medium farm i.e. 1:1:38 followed by large marginal and small farms and on overall farm it was 1:1:30.

Table 2: Per hectare costs and return of wheat in the study area (Rs/ha)

(B) Non-borrower						
A	Particulars	Size group of cost	Overall		Marginal average	
			Sample farms	Small	Medium	Large
1	Seed	3580.17(14.29)	4069.41(13.41)	2855.19(13.57)	1794.71(9.68)	3072.06(13.42)
2	Manure & Fertilizer	4025.53(16.07)	2132.34(9.31)	2644.48(12.57)	2567.08(13.84)	3202.81(13.99)
3	Irrigation	2360.57(9.42)	2414.16(10.54)	1182.68(5.62)	1183.85(6.38)	1969.92(8.60)
4	Plant protection chemical	912.97(3.65)	99.54(4.37)	881.97(4.19)	482.60(2.60)	854.11(3.73)
5	Hired human labour	1683.51(6.72)	1995.43(8.71)	1252.76(5.95)	1816.14(9.79)	1683.34(7.35)
6	Tractor power	2923.12(11.67)	2253.19(9.84)	2925.68(13.91)	2377.58(12.82)	2715.71(11.85)
7	Working capital	15485.87(61.82)	12864.07(56.18)	11742.76(55.81)	10221.96(55.11)	13497.95(58.94)
8	Interest on working capital	271.00(1.08)	225.12(0.98)	205.49(0.98)	178.88(0.96)	236.21(1.03)
9	Land rent	8000.00(31.94)	8000.00(34.94)	8000.00(338.02)	8000.00(43.14)	8000.00(34.93)
10	Cost B	23756.87(94.84)	21089.19(92.10)	19948.25(94.81)	18400.84(99.21)	21734.16(94.91)
11	Family labour	1293.72(5.16)	1808.22(7.90)	1091.23(5.19)	145.59(0.79)	1166.18(5.09)
12	Cost C	25050.60(100.00)	22897.41(100.00)	21039.49(100.00)	18546.43(100.00)	22900.34(100.00)
B Income measures						
1	Gross income	31883.00	28582.50	29182.50	25550.00	29789.54
2	Family labour income	8132.40	7493.31	9234.25	7149.16	8055.36
3	Net Income	6832.40	5685.09	8143.01	7003.57	6889.18
4	Costs of production (Rs/qt)	758.34	802.45	673.23	674.83	737.59
5	Input : Output	1:1:27	1:1:25	1:1:38	1:1:37	1:1:30

(Figures in parentheses indicate the percent to total)

3. Impact of credit :

The comparison of economics of wheat cultivation on borrower and non-borrower farms is also presented in Table-2 to see the impact of credit on crop production. It is revealed from the table that financial assistance helped the borrower sample farmers to spent 68.32 percent more on variable inputs, which offered the higher gross income and net income accounted for 67.59 and 47.00 percent respectively was compared to non-borrower sample farmers. The input : output ratio was also higher than the non-borrower sample farm which accounted for 87.25 percent.

It is concluded that financial assistance has positively increase the income per hectare on borrower farms, which shows the impact of credit. Gupta *et al.* (1998) had also found the same result in his study, as he reported that net profit per hectare of paddy on the beneficiaries farms was high against the non-beneficiaries.

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