

**CHAPTER -4**

*Impact of KCC Scheme  
On the Sample Farmers*

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### **IMPACT OF KCC SCHEME ON THE SAMPLE FARMERS**

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#### **4.1 Introduction:**

In this chapter an attempt has been made to study the impact of KCC on cultivation method, cropping pattern, agricultural credit supply, cost of inputs and agricultural income. In order to increase agricultural income and productivity, input supply plays an important role. Easy availability of loan, cost of loan, and limit of the loan per acre affects the agricultural production. Before introduction of Kisan Credit Cards, farmers were facing various difficulties like complicated procedure, high cost of loan, high processing charges, time consuming etc. But after the introduction of Kisan Credit Cards, Mini Kisan Banks found easy to supply of credit due to direct loan facilities to the farmers. Mini Kisan Banks supplied the loan in terms of 60% cash and 40% in kind inputs like fertilizers, pesticides seeds etc.

To assess the impact of KCC, primary data has been used from 100 sample respondents. The following tables' Table 4.1 to Table 4.11 shows the impact of KCC on various aspects of farmers.

#### **4.2 Methods of Cultivation:**

Before introduction of Kisan Credit Cards, farmers were applying traditional type of agriculture with the help of instruments and application like wooden, plough, bullock's etc. because of poverty of the farmers. But after the effective implementation of credit supply under KCC scheme, the farmers were able to purchase the inputs required to increase the agriculture production and productivity.

Table 4.1 indicates method of cultivation. The number of responses including use of equipments like, fertilizers, pesticides, seeds together has increased from 294 to 408, registering the marginal growth of 114 point. From this it was noticed that method of cultivation has changed rapidly after the supply of credit in terms of cash and kind to the farmers.

**Table No. 4.1****Method of Cultivation**

Sr. No.	Items	Before KCC Scheme		After KCC Scheme	
		No. of Respondents	Percentage (N = 100)	No. of Respondents	Percentage (N = 100)
1	Use of equipments	34	34.0	45	45.0
2	Use of chemical fertilizers	94	94.0	99	99.0
3	Use of org. fertilizers	16	16.0	92	92.0
4	Use of pesticides	97	97.0	100	100.0
5	Use of seeds	53	53.0	72	72.0
	<b>Total</b>	<b>294</b>	<b>-</b>	<b>408</b>	<b>-</b>

Note: Multiple choice was permitted.

N= No. of total farmers

**4.3 Cropping Pattern:**

Cropping pattern means the proportion of area under different crops, the rotation of crops and area under double cropping and multiple cropping was followed. It also indicates the product mix or the crop mix that the cultivator gets from the land. Any change in cropping pattern reflects the increase in income. There has been a positive correlation between the level of economic development and the cropping pattern. With this modern technology in farm operation lesser land has been used for the food requirements and more areas was diverted to commercial crops.

Table 4.2 indicates cropping pattern. Before introduction of KCC scheme, nearly 65 per cent of the farmers were taking single crops and remaining 35 per cent farmers were engaged double and multiple cropping. But due to availability of credit supply from the MKBs under KCC scheme, nearly 65 per cent of the farmers were engaged in double and multiple crops as against 35 per cent before KCC scheme.

**Table No. 4.2**  
**Cropping Pattern**

Sr. No.	Items	Before KCC Scheme		After KCC Scheme	
		No. of Respondents	Percentage (N = 100)	No. of Respondents	Percentage (N = 100)
1	Single crops	65	65.0	35	35.0
2	Double crops	25	25.0	45	45.0
3	Multiple crops	10	10.0	20	20.0
	<b>Total</b>	<b>100</b>	<b>100.0</b>	<b>100</b>	<b>100.0</b>

Source: Field work

#### **4.4 Documents of Credit Supply of MKBs (PACs):**

Earlier loan sanctioned was complicated and many documents were required for it, but KCC scheme loan provides timely and adequate credit facility with limited documents to the farmers. The 60 per cent loan in terms of cash and 40 per cent loans in terms of kind were supplied to the farmers. Now the loan process has become very easy to the beneficiaries.

**Table No. 4.3**  
**Documents of supply of MKBs (PACS)**

Sr. No.	Items	Before KCC Scheme		After KCC Scheme	
		No. of Respondents	Percentage (N = 100)	No. of Respondents	Percentage (N = 100)
1	More documents	95	95.0	9	9.0
2	Time consuming	80	80.0	12	12.0
3	Inadequate credit supply	77	77.0	15	15.0
4	Complicated process	99	99.0	32	32.0
5	Easy loan required	05	5.0	95	95.0
6	Timely & adequately credit	20	20.0	78	78.0

Note – Multiple choice was permitted.  
N= No. of total farmers.

Table 4.3 indicates documents required for credit supply to the farmers. Before KCC scheme, majority of the farmers responded that the loan procedure was highly complicated, time consuming and inadequate credit supply. But after the KCC scheme reverse position was found in the sanctioning of loan. Nearly 95 per cent and 78 per cent beneficiaries were responded that, availability of easy loan and adequate credit as against 5 per cent and 20 per cent before KCC scheme.

#### **4.5 Cost of Inputs:**

Input determines the quality and quantity of output in a farm sector. The land resources are limited. Hence, the additional production will have to be achieved by increasing of the productivity of land, i.e. possible by increasing in the use of agricultural inputs like, seeds, fertilizers, pesticides, chemicals, equipments etc. These inputs are inter-linked and inter-dependend on the other. The use of inputs depends of the cost of inputs.

##### **4.5.1 Use of Seeds:**

Seed is an important input. Improved seeds always help to increase the agricultural production. Hence, distribution of quality issues has received the highest important. The country has become self sufficient of food grains because of improved seeds. The government has also started research farms and also introduced high yielding varieties of seed.

Table 4.4 show the beneficiaries incurred the cost of the seeds. Before the KCCS, majority of the farmers spent less amounts to purchase in the seeds because of lack of income. But after the scheme, farmers were able to spent more on purchase of seeds because of easy availability of credit supply under the KCC scheme. Hence, average spending on the seeds has increased from Rs. 8170 to Rs. 9216 registering the marginal rate of Rs. 1046 points.

**Table No. 4.4**  
**Cost of Seeds**

(Cost - per Hectare)

Sr. No.	Cost of Seeds (In Rs.)	Before KCC Scheme		After KCC Scheme	
		No. of Farmers	Percentage	No. of Farmers	Percentage
1	100 – 5,000	40	40.0	33	33.0
2	5,000 – 10,000	27	27.0	27	27.0
3	10,000 – 15,000	16	16.0	19	19.0
4	15,000 – 20,000	15	15.0	17	17.0
5	20,000 – 25,000	1	1.0	2	2.0
6	25,000 – 30,000	1	1.0	2	2.0
	<b>Total</b>	<b>100</b>	<b>100.0</b>	<b>100</b>	<b>100.0</b>
	<b>A.M.</b>	<b>8170</b>	<b>-</b>	<b>9216</b>	<b>-</b>

Source: Field work

Note – A.M. = Arithmetic Mean.

#### 4.5.2 Use of Pesticides:

Pesticides and chemical are used to control the insects and rodents. The pesticide protects the crops. There are also losses in the field as well as in the store rooms. Hence, losses can be minimised through pesticides.

**Table No. 4.5**  
**Cost of Pesticides**

(Cost- per Hectare)

Sr. No.	Cost of Pesticides (In Rs.)	Before KCC Scheme		After KCC Scheme	
		No. of Respondents	Percentage	No. of Respondents	Percentage
1	0	2	2.0	0	0.0
2	0 – 1,000	20	20.0	16	16.0
3	1,000 – 5,000	75	75.0	77	77.0
4	5,000 – 10,000	3	3.0	6	6.0
5	10,000 – 15,000	0	0.0	0	0.0
6	15,000 – 20,000	0	0.0	1	1.0
	<b>Total</b>	<b>100</b>	<b>100.0</b>	<b>100</b>	<b>100.0</b>
	<b>A.M.</b>	<b>2575</b>	<b>-</b>	<b>3015</b>	<b>-</b>

Source: Field work

Table 4.5 highlights the cost of pesticides incurred by the farmers in study area. Due to change in cropping pattern use of pesticides have also changed. The average cost of pesticides has increased Rs. 2575 to Rs. 3015 after KCC scheme. Cost of pesticides has increased by Rs. 440 during the period.

#### 4.5.3 Use of Chemical Fertilizers:

Chemical fertilizers improve the agriculture production. Constant uses of lands incur loss of its fertility. Chemical fertilizers are applied to increase the fertility of land. Fertilizers are costly inputs. Hence, the use of fertilizers in land is essential.

**Table No. 4.6**  
**Cost of Chemical Fertilizers**

(Cost -per Hectare)

Sr. No.	Cost of Chemical Fertilizers (In Rs.)	Before KCC Scheme		After KCC Scheme	
		No. of Respondents	Percentage	No. of Respondents	Percentage
1	100 – 5,000	59	59.0	50	50.0
2	5,000 – 10,000	20	20.0	23	23.0
3	10,000 – 20,000	14	14.0	19	19.0
4	20,000 – 30,000	4	4.0	4	4.0
5	30,000 – 60,000	3	3.0	4	4.0
	<b>Total</b>	<b>100</b>	<b>100.0</b>	<b>100</b>	<b>100.0</b>
	<b>A.M.</b>	<b>7454</b>	<b>-</b>	<b>8650</b>	<b>-</b>

Source: Field work

Table 4.6 indicates use of chemical fertilizers. Out of 100 sample farmers, 59 farmers incurred loss of Rs. 5,000 on chemical fertilizers before the KCC scheme. After the KCC scheme majority of the farmers started to use chemical fertilizers.

The overall cost incurred by the farmers has increased from Rs. 7454 to 8650 with marginal increase of Rs. 1196 .



#### 4.5.4 Use of Organic Fertilizers:

Organic fertilizers also play an important role for agriculture production. Use of organic fertilizers also depends upon livestock population. Organic fertilizers help to increase the fertility of land.

**Table No. 4.7**  
**Cost of Organic Fertilizers**

(Cost - per Hectare)

Sr. No.	Cost of Organic Fertilizers (In. Rs.)	Before KCC Scheme		After KCC Scheme	
		No. of Respondents	Percentage	No. of Respondents	Percentage
1	0 – 1,000	11	11.0	6	6.0
2	1,000 – 5,000	84	84.0	89	89.0
3	5,000 – 10,000	5	5.0	5	5.0
	<b>Total</b>	<b>100</b>	<b>100.0</b>	<b>100</b>	<b>100.0</b>
	<b>A.M.</b>	<b>2945</b>	<b>-</b>	<b>3070</b>	<b>-</b>

Source: Field work

Table 4.7 indicates cost of organic fertilizers. The overall use of organic fertilizers has increased from Rs. 2945 to Rs. 3070 after the KCC scheme. The use of organic fertilizers has increased due to increase in livestock population of the sample beneficiaries.

#### 4.5.5 Use of Electricity Charges:

The electricity is important in providing the irrigation water for accelerating the productivity. The sufficient electricity is not available in villages. Despite 100% electrification there is a frequent shortage of power supply.

Table 4.8 depicts cost of electricity charges which is used to produce agriculture. It is used to produce agricultural production. Out of 100 beneficiaries, 73 to 74 farmers paid the electricity charges in the range of Rs. 5,000 to Rs. 10,000 during both the period. The average electricity charges have marginally increased from Rs. 1075 to Rs. 1290 during the period registering the absolute increase of Rs. 215.

**Table No. 4.8**  
**Cost of Electricity Charges**  
(Cost – per Hectare)

Sr. No.	Cost of Electricity Charges (In Rs.)	Before KCC Scheme		After KCC Scheme	
		No. of Respondents	Percentage	No. of Respondents	Percentage
1	0 – 1,000	4	4.0	3	3.0
2	1,000 – 5,000	21	21.0	20	20.0
3	5,000 – 10,000	73	73.0	74	74.0
4	10,000 – 15,000	1	1.0	2	2.0
5	15,000 – 20,000	0	0.0	0	0.0
6	20,000 – 25,000	1	1.0	0	0.0
7	25,000 – 30,000	0	0.0	1	1.0
	<b>Total</b>	<b>100</b>	<b>100.0</b>	<b>100</b>	<b>100.0</b>
	<b>A.M.</b>	<b>1075</b>	<b>-</b>	<b>1290</b>	<b>-</b>

Source: Field work

#### 4.5.6. Use of Water Charges:

Water is a most important single requirement for the growth of plant, animal and human life. Water resources become a prerequisite in all productive activities. The water for intensive agricultural production is necessary. It also helps in multiple cropping. Farmers were using the water from different sources like canal, wells and rivers. The water charges were charged on the basis of per hectare and per hours.

Table 4.9 shows water charges paid by the beneficiaries; 46 farmers paid the water charges in the range of Rs. 1,000 to Rs. 5,000 both before and after KCC scheme. Whereas, only 1 farmer paid the charges in the range of Rs. 20,000 to Rs. 25,000 during the same period. But the average of water charges was constant at Rs. 5780.

**Table No. 4.9**  
**Cost of Water Charges**

(Cost - per Hectare)

Sr. No.	Cost of Water Charges (In Rs.)	Before KCC Scheme		After KCC Scheme	
		No. of Respondents	Percentage	No. of Respondents	Percentage
1	0 – 1,000	14	14.0	14	14.0
2	1,000 – 5,000	46	46.0	46	46.0
3	5,000 – 10,000	19	19.0	20	20.0
4	10,000 – 15,000	16	16.0	14	14.0
5	15,000 – 20,000	4	4.0	5	5.0
6	20,000 – 25,000	1	1.0	1	1.0
	<b>Total</b>	<b>100</b>	<b>100.0</b>	<b>100</b>	<b>100.00</b>
	<b>A.M.</b>	<b>5780</b>	<b>-</b>	<b>5780</b>	<b>-</b>

Source: Field work.

#### 4.5.7 Use of Other Cultivation Inputs:

Other cost cultivation includes ploughing, harvesting and labour charges (owned and hired) etc. Application of modern technology in the farm has become costly.

Table 4.10 shows the other costs of cultivation. The overall cost of cultivation of 100 sample farmer has increased from Rs. 5179 to Rs. 6674 per hectare with marginal growth of Rs. 1495 after KCC scheme.

**Table No. 4.10**  
**Other Cost of Cultivation**

Sr. No.	Other Cost of Cultivation (In Rs.)	(Cost -per Hectare)			
		Before KCC Scheme		After KCC Scheme	
		No. of Respondents	Percentage	No. of Respondents	Percentage
1	100 – 5,000	59	59.0	49	49.0
2	5,000 – 10,000	35	35.0	28	28.0
3	10,000 – 15,000	3	3.0	17	17.0
4	15,000 – 20,000	1	1.0	4	4.0
5	20,000 – 25,000	1	1.0	1	1.0
6	25,000 – 30,000	1	1.0	1	1.0
	<b>Total</b>	<b>100</b>	<b>100.0</b>	<b>100</b>	<b>100.0</b>
	<b>A.M.</b>	<b>5179</b>	<b>-</b>	<b>6674</b>	<b>-</b>

Source: Field work.

#### **4.6 Agricultural Income:**

Farmers from sample area were taking both food crops and cash crops. Due to KCC scheme most of the farmers shifted from food crops to cash crops. As a result income of the farmers has increased.

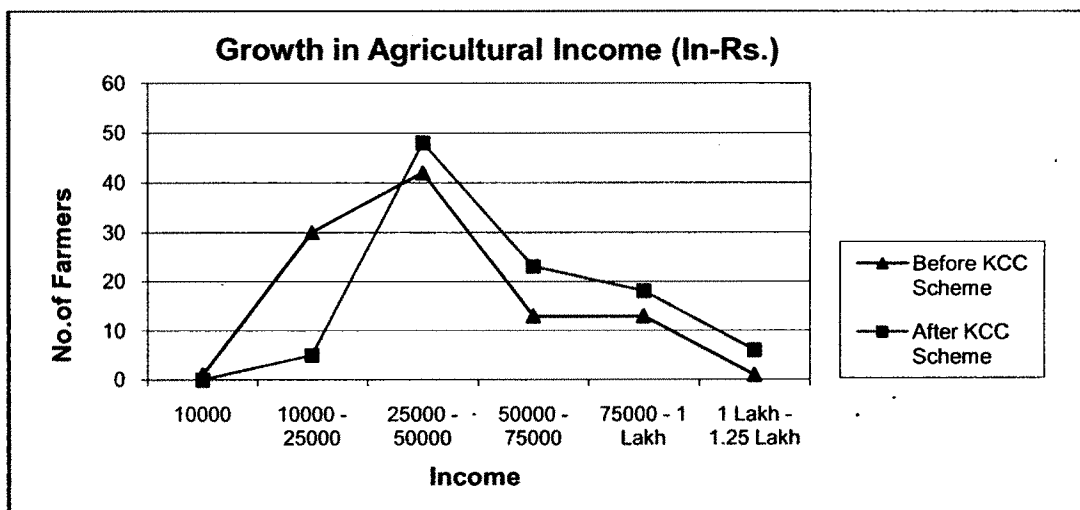
Table 4.11 indicates growth of agriculture income of the sample farmers. After KCC scheme the income of majority farmers has increased from Rs. 41725 to Rs. 55750 with absolute increase of Rs. 14025 after the KCC scheme.

**Table No. 4.11**  
**Growth in Agricultural Income**

Sr. No.	Agricultural Income (In Rs.)	Before KCC Scheme		After KCC Scheme	
		No. of Respondents	Percentage	No. of Respondents	Percentage
1	10,000	1	1.0	0	0.0
2	10,000 – 25,000	30	30.0	5	5.0
3	25,000 – 50,000	42	42.0	48	48.0
4	50,000 – 75,000	13	13.0	23	23.0
5	75,000 – 1,00000	13	13.0	18	18.0
6	1,00000 -1,25000	1	1.0	6	6.0
	<b>Total</b>	<b>100</b>	<b>100.0</b>	<b>100</b>	<b>100.0</b>
	<b>A.M.</b>	<b>41725</b>	<b>-</b>	<b>55750</b>	<b>-</b>

Source: Field work.

**Chart No.4.1**



#### **4.7 Concluding Remarks:**

The overall impact of KCC scheme is positive. Due to available inputs after the scheme the agricultural income registered a positive growth in the study area. But, it was observed that after introduction of KCC scheme overall cost of inputs has increased, but on the other hand farmers were not getting reasonable prices for their produce.