CHAPTER - IV

SOCIO-ECONOMIC ANALYSIS OF KISAN CREDIT CARD HOLDERS OF HAILAKANDI DISTRICT

- ✓ ***Introduction***
- ✓ ***General Overview of Sample KCC and Non-KCC Respondents of Hailakandi District***
- ✓ ***Reasons for not-saving***
- ✓ ***Nature of Indebtedness***
- ✓ ***Migration of Rural Workforce***
- ✓ ***Reasons for the Migration of from Rural areas to Urban Areas***

4.1 INTRODUCTION

The socio-economic conditions of an area constitute an essential element of the structural parameter of the farm sector. The study has been conducted in Hailakandi District of Assam with the prime objective to make an analysis the socio-economic condition of the Kisan Credit Card holders of the Hailakandi District. An attempt has been made to discuss the composition of rural population, structure of land holdings, cropping pattern, education and other related factors. It is primarily a tabular analysis that aims at understanding the socio-economic conditions of the Kisan Credit Card and Non-Kisan Credit Card holders of the Hailakandi District.

The following table presents the methodology of research study:

Name of the Blocks	Hailakandi Block	Algapur Block	Lala Block	Katlicherra Block	Total
No. of KCC holders	48	48	48	48	192
No. of Non-KCC holders	48	48	48	48	192

4.2 GENERAL OVERVIEW OF SAMPLE KCC AND NON-KCC RESPONDENTS OF HAILAKANDI DISTRICT

The following table reflects the socio- economic characteristics of Kisan Credit Card holders and Non-Kisan Credit Card holders households from four Developmental Blocks namely, Hailakandi Developmental Blocks, Algapur Developmental Blocks, Lala Developmental Blocks and Katlicherra Developmental Blocks of Hailakandi District.

Table No. 4.1: Socio-economic characteristics of Sample Kisan Credit Card holders and Non-Kisan Credit Card holder's households

	Hailakandi Block		Algapur Block		Lala Block		Katlicherra Block		Total	
ATTRIBUTES	KCC	Non-KCC	KCC	Non-KCC	KCC	Non-KCC	KCC	Non-KCC	KCC	Non-KCC
No. of households	48	48	48	48	48	48	48	48	192	192
Total population	267	305	232	276	284	301	308	319	1091	1201
Male (all age group)	154	159	139	162	165	146	162	177	620	644
Female (all age group)	113	146	93	114	119	155	146	142	471	557
Literates (6+) : Total	209	229	188	221	220	242	235	237	852	929
Illiterates (6+) : Total	40	32	29	32	29	29	32	53	130	146
Leased in land (taken)	11	16	18	22	13	13	7	30	38	81
Leased out (given)	5	8	13	9	5	13	13	10	33	40
Mortgage in	4	1	0	1	2	0	0	1	6	3
Mortgage out	1	4	1	1	2	1	1	1	5	7
No. of households used owned: Power tiller/ tractor	1	5	3	7	3	4	2	1	9	17
No. of households hired: Power tiller/ tractor	36	38	35	31	33	33	27	37	131	139
No. of households used owned: Pump sets for irrigation	0	3	4	2	7	2	5	0	16	7
No. of households hired: Pumpsets for irrigation	10	6	16	10	14	10	11	11	51	37
Fertiliser used	40	47	40	46	35	45	37	45	152	183
Pesticides used	31	18	25	24	27	23	24	30	107	95
No. of hhs owned cattle population: Cow	30	37	26	41	27	35	26	40	109	153
No. of hhs owned cattle population: Bull	12	16	4	12	0	6	5	14	21	48
Housing structure: Kutcha	8	12	18	16	15	11	18	21	59	60
Pucca	10	12	6	8	1	4	3	3	20	27
Semipucca	30	24	24	24	32	33	27	24	113	105
No. of hhs having sanitation structure: Kutcha	17	27	21	26	19	24	22	32	79	109
Pucca	5	7	8	8	1	3	3	2	17	20
Semi-pucca	26	14	19	14	28	21	23	14	96	63
Energy: Fuel wood	29	39	32	34	37	34	31	41	129	148
LPG	18	7	14	10	8	12	15	4	55	33
Fuel wood+ LPG used	1	2	2	4	3	2	2	3	8	11
Owned following facilities : Electricity	35	29	41	36	42	34	33	33	151	132
Scooter/ car	8	11	9	9	15	6	15	6	47	32
Bank / Post office account	48	44	46	37	48	42	47	41	189	164

Source: Compiled from Primary data.

4.2.1 RELIGION

The following table highlights the religion of Kisan Credit Card holders and Non-Kisan Credit Card holders of four Development Blocks of Hailakandi district. Among KCC farm households, 32.0 percent belongs to Hindu community and 67.0 percent belongs to Muslim community where in the case of Non-KCC farm households, 38.0 percent belongs to Hindu community and 62.0 percent belongs to Muslim community.

Table No. 4.2: Classification of KCC holders and Non-KCC holders according to Religion

Religion	Hindu		Muslim		Others		Total no. of respondents	
Name of the Blocks	KCC	Non-KCC	KCC	Non-KCC	KCC	Non-KCC	KCC	Non-KCC
Hailakandi Block	3 (6.0)	2 (4.0)	44 (92.0)	46 (96.0)	1 (2.0)	0 (0.00)	48 (100.0)	48 (100.0)
Algapur Block	21 (44.0)	16 (33.0)	27 (56.0)	32 (67.0)	0 (0.00)	0 (0.00)	48 (100.0)	48 (100.0)
Lala Block	15 (31.0)	32 (67.0)	33 (69.0)	16 (33.0)	0 (0.00)	0 (0.00)	48 (100.0)	48 (100.0)
Katlicherra Block	22 (46.0)	23 (48.0)	26 (54.0)	25 (52.0)	0 (0.00)	0 (0.00)	48 (100.0)	48 (100.0)
Total	61 (32.0)	73 (38.0)	130 (67.0)	119 (62.0)	1 (1.0)	0 (0.00)	192 (100.00)	192 (100.00)
Mean	15.25	18.25	32.5	29.75	0.25	0	48	48
Minimum	3	2	26	16	0	0	48	48
Maximum	22	32	44	46	1	0	48	48

Source: Compiled from Primary data.
The figures in the parenthesis indicate the percentage of farmers to total farmers.

4.2.2 CASTE:

The following table highlights the distribution of Kisan Credit Card holders and Non-Kisan Credit Card holders caste-wise of four Development Blocks of Hailakandi district.

Table No. 4.3: Classification of KCC holders and Non-KCC holders according to caste

Caste	General		Other Backward Class (OBC)		Schedule Caste (SC)		Schedule Tribes (ST)		Total no. of respondents	
Name of the Blocks	KCC	Non-KCC	KCC	Non-KCC	KCC	Non-KCC	KCC	Non-KCC	KCC	Non-KCC
Hailakandi Block	44 (92.0)	46 (96.0)	0 (0.0)	2 (4.0)	3 (6.0)	0 (0.0)	1 (2.0)	0 (0.00)	48 (100.0)	48 (100.0)
Algapur Block	27 (56.0)	32 (67.0)	4 (8.0)	1 (2.0)	17 (36.0)	15 (31.0)	0 (0.00)	0 (0.00)	48 (100.0)	48 (100.0)
Lala Block	33 (69.0)	16 (33.0)	7 (14.0)	30 (63.0)	8 (17.0)	2 (4.0)	0 (0.00)	0 (0.00)	48 (100.0)	48 (100.0)
Katlicherra Block	31 (65.0)	26 (54.0)	4 (8.0)	2 (4.0)	13 (27.0)	20 (42.0)	0 (0.00)	0 (0.00)	48 (100.0)	48 (100.0)
Total	135 (70.0)	120 (63.0)	15 (8.0)	35 (18.0)	41 (21.0)	37 (19.0)	1 (1.0)	0 (0.00)	192 (100.00)	192 (100.00)
Mean	33.75	30	3.75	8.75	10.25	9.25	0.25	0	48	48
Minimum	27	16	0	1	3	0	0	0	48	48
Maximum	44	46	7	30	17	20	1	0	48	48

Source: Compiled from Primary data.
The figures in the parenthesis indicate the percentage of farmers to total farmers.

General category of KCC and Non-KCC farm households predominate over other caste accounting for 70.0 percent and 63.0 percent respectively. 21.0 percent of KCC holders and 19.0 percent of Non-KCC holders belongs to 'Schedule Caste' category. They are mainly Hindu farmers. 8.0 percent of KCC holders and 18.0 percent of Non-KCC holders comes from Other Backward Class (OBC) categories.

4.2.3 EDUCATION

The literacy rate of KCC holders and Non-KCC holders are 81 per cent and 80 per cent respectively while 19.0 per cent of the KCC holders and 20.0 per cent of Non-KCC holders are illiterate. 21.0 per cent of KCC holders have only primary

level of education which is lower than Non-KCC holders (23.0%). 21.0 per cent of KCC holders have middle school level education where 25.0 per cent of Non-KCC holders had middle level of education. 24.0 per cent of KCC holders have secondary school level education which is highest than other types of schooling where 22.0 per cent of Non-KCC holders who can reached at this stage of schooling. In the case of HSLC and above 15.0% of KCC holders have higher secondary level of education and above which is higher than Non-KCC holders (10.0%).

Table No. 4.4: Literacy rate of the KCC holders and Non-KCC holders

Educational attainments	Illiterate		Primary School		Middle School		HSLC		HSSLC and Above		Total	
Name of the Blocks	KCC	Non-KCC	KCC	Non-KCC	KCC	Non-KCC	KCC	Non-KCC	KCC	Non-KCC	KCC	Non-KCC
Hailakandi Block	11 (23.0)	8 (17.0)	7 (15.0)	8 (17.0)	11 (23.0)	13 (27.0)	13 (27.0)	15 (31.0)	6 (12.0)	4 (8.0)	48 (100.0)	48 (100.0)
Algapur Block	9 (19.0)	12 (25.0)	16 (33.0)	14 (29.0)	8 (17.0)	11 (23.0)	11 (23.0)	9 (19.0)	4 (8.0)	2 (4.0)	48 (100.0)	48 (100.0)
Lala Block	7 (15.0)	5 (10.0)	9 (19.0)	13 (27.0)	12 (25.0)	14 (29.0)	12 (25.0)	7 (15.0)	8 (16.0)	9 (19.0)	48 (100.0)	48 (100.0)
Katlicherra Block	9 (19.0)	13 (27.0)	8 (16.0)	10 (21.0)	10 (21.0)	9 (19.0)	11 (23.0)	11 (23.0)	10 (21.0)	5 (10.0)	48 (100.0)	48 (100.0)
Total	36 (19.0)	38 (20.0)	40 (21.0)	45 (23.0)	41 (21.0)	47 (25.0)	47 (24.0)	42 (22.0)	28 (15.0)	20 (10.0)	192 (100.0)	192 (100.0)
Minimum	7	5	7	8	8	9	11	7	4	2	48	48
Maximum	11	13	16	14	12	14	13	15	10	9	48	48

Source: Compiled from Primary data.
The figures in the parenthesis indicate the percentage of farmers to total farmers.

OVERALL EDUCATIONAL ATTAINMENTS OF KCC AND NON-KCC HOLDERS:

The following table represents the overall educational attainments of KCC and Non-KCC holders.

Table No. 4.5: Literacy rate of the KCC holders and Non-KCC holders

Educational attainments	Illiterate		Literate		Total	
Name of the Blocks	KCC	Non-KCC	KCC	Non-KCC	KCC	Non-KCC
Hailakandi Block	11 (23.0)	8 (17.0)	37 (77.0)	40 (83.0)	48 (100.0)	48 (100.0)
Algapur Block	9 (19.0)	12 (25.0)	39 (81.0)	36 (75.0)	48 (100.0)	48 (100.0)
Lala Block	7 (15.0)	5 (10.0)	41 (85.0)	43 (90.0)	48 (100.0)	48 (100.0)
Katlicherra Block	9 (19.0)	13 (27.0)	39 (81.0)	35 (73.0)	48 (100.0)	48 (100.0)
Total	36 (19.0)	38 (20.0)	156 (81.0)	154 (80.0)	192(100.0)	192 (100.0)
Minimum	7	5	37	35	48	48
Maximum	11	13	41	43	48	48

Source: Compiled from Primary data.
The figures in the parenthesis indicate the percentage of farmers to total farmers.

In aggregate 81 per cent of KCC holders and 80 per cent of Non-KCC holders are literate. Highest percentages of literacy rate under KCC holders (85%) and Non-KCC holders (90%) both are exist in Lala Development Block. Among the four Development Blocks of Hailakandi district, illiteracy rate is high in Hailakandi development block (23.0%) under KCC holder and 27.0% in Katlicherra Development Block under Non-KCC holder.

The table no 4.6 produces the literacy rate of the KCC and Non-KCC household members of the four Development Blocks of Hailakandi district presents that the literacy rate are high among the KCC household members (88%) under Katlicherra Development Block and among the Non-KCC household members (89%) under Lala Development Block.

Table No. 4.6: Literacy rate of the KCC and Non-KCC households

(No. of family members)

Nature	Literate		Illiterate		Total	
	KCC	Non-KCC	KCC	Non-KCC	KCC	Non-KCC
Hailakandi Block	209 (84.0)	229 (88.0)	40 (16.0)	32 (12.0)	249 (100.0)	261 (100.0)
Algapur Block	188 (87.0)	221 (87.0)	29 (13.0)	32 (13.0)	217 (100.0)	253 (100.0)
Lala Block	220 (88.0)	242 (89.0)	29 (12.0)	29 (11.0)	249 (100.0)	271 (100.0)
Katlicherra Block	235 (88.0)	237 (82.0)	32 (12.0)	53 (18.0)	267 (100.0)	290 (100.0)
Total	852 (87.0)	929 (86.0)	130 (13.0)	146 (14.0)	982 (100.0)	1075 (100.0)
Mean	213	232.25	32.5	36.5	245.5	268.75
Minimum	188	221	29	29	217	253
Maximum	235	242	40	53	267	290

Source: Compiled from Primary data.

Figures in the parenthesis indicate percentage.

4.2.4 OCCUPATIONAL PATTERN

It can be observed from the contents of the following table that one-fourth of the total KCC households are marginal workers where it is only 19.0 per cent from Non-KCC households. The proportionate share of cultivator comes to 28.0 per cent from Non-KCC households where it is only 18.0 per cent from KCC households. Thus, involvement of the Non-KCC household family members in agriculture sector is more than the KCC household family members. So, there is significant difference between the proportions of agriculturist belongs to Non-KCC community than the KCC community. It is further observed that there is a no considerable uniformity in the composition of KCC and Non-KCC households across the four Development Blocks. Business form the major proportion of KCC rural population in all the four Development Blocks where Service form the major proportion of Non-KCC rural population in all the four Development Blocks. However, the proportion of agricultural households in Algapur Development Block

is 20.0 per cent of KCC population and 32.0 per cent of Non-KCC population which is higher than the other three Development Blocks.

The composition of occupational pattern of family members of Kisan Credit Card and Non-Kisan Credit Card holders is given in the following table:

Table No. 4.7: Occupational pattern of KCC and Non-KCC households

(No. of family members)

Nature of occupation	Agriculturists		Business		Service		Marginal workers		Total	
Name of the Blocks	KCC	Non-KCC	KCC	Non-KCC	KCC	Non-KCC	KCC	Non-KCC	KCC	Non-KCC
Hailakandi Block	14 (16.0)	19 (23.0)	38 (43.0)	28 (34.0)	8 (9.0)	24 (29.0)	29 (32.0)	12 (14.0)	89 (100.0)	83 (100.0)
Algapur Block	18 (20.0)	33 (32.0)	39 (42.0)	17 (17.0)	17 (18.0)	27 (26.0)	18 (20.0)	25 (25.0)	92 (100.0)	102 (100.0)
Lala Block	17 (17.0)	26 (28.0)	25 (25.0)	26 (28.0)	24 (24.0)	29 (32.0)	34 (34.0)	11 (12.0)	100 (100.0)	92 (100.0)
Katlicherra Block	15 (17.0)	30 (28.0)	34 (39.0)	21 (19.0)	22 (25.0)	31 (29.0)	16 (19.0)	26 (24.0)	87 (100.0)	108 (100.0)
Total	64 (18.0)	108 (28.0)	136 (37.0)	92 (24.0)	71 (19.0)	111 (29.0)	97 (26.0)	74 (19.0)	368 (100.0)	385 (100.0)
Mean	16	27	34	23	17.75	27.75	24.25	18.5	92	96.25
Minimum	14	19	25	17	8	24	16	11	87	83
Maximum	18	33	39	28	24	31	34	26	100	108

Source: Compiled from Primary data.

The figures in the parenthesis indicate the percentage of farmers to total farmers.

4.2.5 LIVELIHOOD

The following table reflects the primary source of livelihood of KCC holders and Non-KCC holders of four Developmental Blocks of the Hailakandi district signifies that only 22.0% of KCC holders and 37.0% of Non-KCC holders rely on agriculture sector as their main source of livelihood. Out of the four Development Blocks of Hailakandi district it shows that in Algapur Development Block 31.0% of the KCC holders and in Katlicherra Development Block 50% of the Non-KCC holders have taken agriculture sector as their primary source of income than the other Development Blocks. Both KCC holders (13.0%) and Non-KCC holders

(25%) in Hailakandi Development Block is less dependent on agriculture sector as their main source of income. In aggregate 24.0% of KCC holders and 23.0% of Non-KCC holders are the marginal workers in four Developmental Blocks of the Hailakandi district where in Lala Development Block 33.0% of KCC holders and in Algapur Development Block 27.0% of Non-KCC holders are higher than other Development Blocks. It is also shows that both KCC holders (45.0%) and Non-KCC holders (26.0%) of four Developmental Blocks of the Hailakandi district are dependent on business as their main source of livelihood. Out of the total number of respondents of 86 number KCC holders have taken business and 71 number of Non-KCC holders have taken farming as their main source of income higher than any other nature of occupation of four Development Blocks of the Hailakandi district. In aggregate 9.0% of KCC holders and 14.0% of Non-KCC holders are engaged in the service sector in four Developmental Blocks of the Hailakandi district.

Table No. 4.8: Primary source of livelihood of the KCC holders and Non-KCC holders

Nature of occupation	Agriculture		Business		Service		Others		Total no. of respondents	
Name of the Blocks	KCC	Non-KCC	KCC	Non-KCC	KCC	Non-KCC	KCC	Non-KCC	KCC	Non-KCC
Hailakandi Block	6 (13.0)	12 (25.0)	27 (56.0)	18 (37.0)	2 (4.0)	9 (19.0)	13 (27.0)	9 (19.0)	48 (100.0)	48 (100.0)
Algapur Block	15 (31.0)	16 (33.0)	22 (46.0)	12 (25.0)	4 (8.0)	7 (15.0)	7 (15.0)	13 (27.0)	48 (100.0)	48 (100.0)
Lala Block	10 (21.0)	19 (39.0)	15 (31.0)	9 (19.0)	7 (15.0)	9 (19.0)	16 (33.0)	11 (23.0)	48 (100.0)	48 (100.0)
Katlicherra Block	11 (23.0)	24 (50.0)	22 (46.0)	11 (23.0)	5 (10.0)	2 (4.0)	10 (21.0)	11 (23.0)	48 (100.0)	48 (100.0)
Total	42 (22.0)	71 (37.0)	86 (45.0)	50 (26.0)	18 (9.0)	27 (14.0)	46 (24.0)	44 (23.0)	192 (100.0)	192 (100.0)
Mean	10.5	17.75	21.5	12.5	4.5	6.75	11.5	11	48	48
Minimum	6	12	15	9	2	2	7	9	48	48
Maximum	15	24	27	18	7	9	16	13	48	48

Source: Compiled from Primary data.
The figures in the parenthesis indicate the percentage of farmers to total sample farmers.

Mean value of KCC holders in the agriculture sector is 10.5, of which a minimum of 6 in Hailakandi Development Block and a maximum of 15 in Algapur Development Block. Mean value of Non-KCC holders in the agriculture sector is 17.75, of which a minimum of 12 in Hailakandi Development Block and a maximum of 24 Katlicherra Development Block. Mean value of KCC holders in the other sector is 11.5, of which a minimum of 7 and a maximum of 16. Mean value of Non-KCC holders in the other sector is 11, of which a minimum of 9 and a maximum of 13. Mean value of KCC holders in the business sector is 21.5, of which a minimum of 15 and a maximum of 27. Mean value of Non-KCC holders in the business sector is 12.5, of which a minimum of 9 and a maximum of 18. In the service sector, mean value of KCC holders is 4.5, of which a minimum of 2 and a maximum of 7 where mean value of Non-KCC holders in this particular sector is 6.75, of which a minimum of 2 and a maximum of 9.

The following table depicts the secondary source of income of the KCC Holders and Non-KCC holders of four Development Blocks of Hailakandi district. Given table indicates that rural people are now adopting agriculture sector as their secondary source of income because of food security, where as in aggregate 60.0% of KCC holders and Non-KCC holders respectively are dependent on this particular sector. It reveals that rural people are now diverting from farming activity to other activities for improving their standard of living. Both KCC holders (67.0%) and Non-KCC holders (75.0%) in Hailakandi Development Block are adopting farming activity as their secondary source of income more positively than the other three Development Blocks.

Table No. 4.9: Secondary source of income of the KCC holders and Non-KCC holders

Nature of occupation	Agriculture		Business		Service		Others		No source		Total no. of respondents	
Name of the Blocks	KCC	Non-KCC	KCC	Non-KCC	KCC	Non-KCC	KCC	Non-KCC	KCC	Non-KCC	KCC	Non-KCC
Hailakandi Block	32 (67.0)	36 (75.00)	2 (4.0)	7 (15.0)	1 (2.0)	0 (0.0)	3 (6.0)	2 (4.0)	10 (21.0)	3 (6.0)	48 (100.0)	48 (100.0)
Algapur Block	28 (58.0)	32 (67.0)	4 (8.0)	2 (4.0)	1 (2.0)	1 (2.0)	5 (11.0)	5 (10.0)	10 (21.0)	8 (17.0)	48 (100.0)	48 (100.0)
Lala Block	29 (61.0)	25 (52.0)	3 (6.0)	6 (13.0)	2 (4.0)	2 (4.0)	4 (8.0)	5 (10.0)	10 (21.0)	10 (21.0)	48 (100.0)	48 (100.0)
Katlicherra Block	26 (54.0)	23 (48.0)	1 (2.0)	4 (8.0)	0 (0.0)	0 (0.0)	6 (13.0)	13 (27.0)	15 (31.0)	8 (17.0)	48 (100.0)	48 (100.0)
Total	115 (60.0)	116 (60.0)	10 (5.0)	19 (10.0)	4 (2.0)	3 (2.0)	18 (9.0)	25 (13.0)	45 (24.0)	29 (15.0)	192 (100.0)	192 (100.0)
Mean	28.75	29	2.5	4.75	1	0.75	4.5	6.25	11.25	7.25	48	48
Minimum	26	23	1	2	0	0	3	2	10	3	48	48
Maximum	32	36	4	7	2	2	6	13	15	10	48	48

Source: Compiled from Primary data.

The figures in the parenthesis indicate the percentage of farmers to total sample farmers.

4.2.6 STRUCTURE OF TOTAL LAND HOLDING:-

The following table indicates the possession of total land by the KCC Holders and Non-KCC Holders of four Development Blocks of Hailakandi district.

Table No. 4.10: Structure of total land holding of the KCC holders and Non-KCC holders

Types of farmers	Landless		Marginal		Small		Large		Total no. of respondents	
Name of the Blocks	KCC	Non-KCC	KCC	Non-KCC	KCC	Non-KCC	KCC	Non-KCC	KCC	Non-KCC
Hailakandi Block	18 (38.0)	9 (19.0)	14 (29.0)	21 (44.0)	12 (25.0)	10 (21.0)	4 (8.0)	8 (16.0)	48 (100.0)	48 (100.0)
Algapur Block	15 (31.0)	17 (35.0)	21 (44.0)	20 (42.0)	9 (19.0)	5 (10.0)	3 (6.0)	6 (13.0)	48 (100.0)	48 (100.0)
Lala Block	18 (38.0)	15 (31.0)	13 (27.0)	16 (34.0)	12 (25.0)	13 (27.0)	5 (10.0)	4 (8.0)	48 (100.0)	48 (100.0)
Katlicherra Block	12 (25.0)	14 (29.0)	18 (38.0)	22 (46.0)	13 (27.0)	9 (19.0)	5 (10.0)	3 (6.0)	48 (100.0)	48 (100.0)
Total	63 (33.0)	55 (29.0)	66 (34.0)	79 (41.0)	46 (24.0)	37 (19.0)	17 (9.0)	21 (11.0)	192 (100.0)	192 (100.0)
Mean	31.5	13.75	16.5	19.75	11.5	9.25	4.25	5.25	48	48
Minimum	12	9	13	16	9	5	3	3	48	48
Maximum	18	17	21	22	13	13	5	8	48	48

Source: Compiled from Primary data.
The figures in the parenthesis indicate the percentage of farmers to total sample farmers.

The above table reveals that 33.0% KCC holders are landless farmer where as 29.0% Non-KCC holder farmer are landless. The table also reveals that 34.0% KCC holders and 41.0% Non-KCC holders are marginal land holders. 24.0 % KCC holders and 19.0% Non-KCC holders have small farming land. 9.0% KCC holders and 11.0% Non-KCC holders have large farming land. Among the four Developmental Blocks of Hailakandi district, highest number of KCC landless farmers exists in both Hailakandi Development Block and Lala Development Block whereas highest number of Non-KCC landless farmers are found in Algapur Development Block. Among the four types of land holding pattern like landless,

marginal, small and large, highest proportion of both KCC holders (34.0%) and Non-KCC holders (41.0%) are belongs to marginal type of land holding than other types. Further, maximum numbers of KCC holders and Non-KCC holders are in the group of marginal type of land holding in Algapur Development Block (44.0%) and in Katlicherra Development Block (46.0%) respectively.

4.2.7 STRUCTURE OF TOTAL CROPPED LAND HOLDING:

The economy of the Hailakandi district is primarily agrarian. Above than 90% land holdings are occupied by landless, small and marginal farmers in the case of both KCC and Non-KCC households who practise homestead farming wherein along with crop cultivation, dairy, backyard poultry etc. are also carried out.

The following table shows structure of total cropped land holding between the KCC holders and Non-KCC holders among the four Development Blocks of Hailakandi district.

Table No. 4.11: Structure of total cropped land holding between the KCC holders and Non-KCC holders

Nature of cropped land size	Landless 0 to <3 Bigha (or 0 to <0.5 hactre)		Marginal 3 Bigha to <7.5 Bigha (or 0.5 to < 1 hactre)		Small 7.5 Bigha to <15 Bigha (or 1 to < 2 hactre)		Large Above 15 Bigha (or >2 hactre)		Total no. of respondents	
Name of the Blocks	KCC	Non-KCC	KCC	Non-KCC	KCC	Non-KCC	KCC	Non-KCC	KCC	Non-KCC
Hailakandi Block	22 (46.0)	13 (27.0)	16 (33.0)	20 (42.0)	8 (17.0)	9 (19.0)	2 (4.0)	6 (12.0)	48 (100.0)	48 (100.0)
Algapur Block	17 (36.0)	18 (38.0)	23 (48.0)	23 (48.0)	5 (10.0)	2 (4.0)	3 (6.0)	5 (10.0)	48 (100.0)	48 (100.0)
Lala Block	21 (44.0)	18 (38.0)	16 (33.0)	16 (33.0)	8 (17.0)	11 (23.0)	3 (6.0)	3 (6.0)	48 (100.0)	48 (100.0)
Katlicherra Block	21 (44.0)	24 (50.0)	21 (44.0)	16 (33.0)	5 (10.0)	7 (15.0)	1 (2.0)	1 (2.0)	48 (100.0)	48 (100.0)
Total no. of respondents	81 (42.0)	73 (38.0)	76 (40.0)	75 (39.0)	26 (13.0)	29 (15.0)	9 (5.0)	15 (8.0)	192 (100.0)	192 (100.0)

Source: Compiled from Primary data.
The figures in the parenthesis indicate the percentage of farmers to total sample farmers.

Total 82.0% of the KCC holders are landless and marginal farmers and 13.0% of KCC holders are small farmers where 77.0% of the Non-KCC holders are landless and marginal farmers and 15.0% of Non-KCC holders are small farmers. Out of the four Development Blocks, Katlicherra Development Block occupying most of the landless and marginal farmers (88.0%) who are KCC holders followed by Algapur Development Block (84.0%). From the above table it is observed that in the Hailakandi district, the existence of landless, marginal and small farmers is higher than large farmers. The aggregate percentages of landless and marginal farmers under Non-KCC holders are less than KCC holders whereas the aggregate percentages of small and large farmers are more under Non-KCC holders than KCC holders.

Mean value of KCC holders under landless nature of cropped land size is 20.25, of which a minimum of 17 in Algapur Development Block and a maximum of 22 in Hailakandi Development Block where mean value of Non-KCC holders under landless nature of cropped land size is 18.25, of which a minimum of 13 in Hailakandi Development Block and a maximum of 24 in Katlicherra Development Block. Mean value of KCC holders under marginal nature of cropped land size is 19, of which a minimum of 16 and a maximum of 23 where mean value of Non-KCC holders under marginal nature of cropped land size is 18.75, of which a minimum of 16 and a maximum of 23. Mean value of KCC holders and Non-KCC holders under small land size are 6.5 and 7.25.

Table No. 4.12: Structure of total cropped land holding of the KCC holders and Non-KCC holders

Nature of cropped land size	Mean		Minimum		Maximum	
	KCC	Non-KCC	KCC	Non-KCC	KCC	Non-KCC
Landless 0 to <3 Bigha (or 0 to <0.5 hactre)	20.25	18.25	17	13	22	24
Marginal 3 Bigha to <7.5 Bigha (or 0.5 to < 1 hactre)	19	18.75	16	16	23	23
Small 7.5 Bigha to <15 Bigha (or 1 to < 2 hactre)	6.5	7.25	5	2	8	11
Large Above 15 Bigha (or >2 hactre)	2.25	3.75	1	1	3	6
Total	48	48	48	48	48	48

Source: Compiled from Primary data.

4.2.8 HOUSE STRUCTURE

The following table represents the house structure of the KCC holders and Non-KCC holders between the four Development Blocks of Hailakandi district. It reflects that 59.0% of the KCC holders and 55.0% of the Non-KCC holders possesses the semi-pucca houses followed by KCC holders (31.0%) and Non-KCC holders (31.0%) are living in kutcha houses. 14.0% of Non-KCC holders are living in pucca houses which are more than the KCC holders (10.0%) signifies that standard of living of Non-KCC holders are better than the KCC holders. Mean value of KCC holders have semi-pucca house structure is 28.25, of which a minimum of 24 in Algapur Development Block and a maximum of 32 in Lala Development Block where mean value of Non-KCC holders have semi-pucca house structure is 26.25, of which a minimum of 24 in Hailakandi Development Block, Algapur Development Block and Katlicherra Development Block and a maximum of 33 in Lala Development Block. Mean value of KCC holders have kutcha house structure is 14.75, of which a minimum of 8 in Hailakandi Development Block and a maximum of 18 in Algapur Development Block and Katlicherra Development Block where mean value of Non-KCC holders have kutcha house structure is 15.0, of which a minimum of 11 in Lala Development Block and a maximum of 21 in Katlicherra Development Block. Most of the pucca house possesses by both the KCC holders and Non-KCC holders in Hailakandi Development Block.

Table No. 4.13: House structure of the KCC holders and Non-KCC holders

Nature of house structure	Pucca		Semi-pucca		Kutcha		Total no. of respondents	
Name of the Blocks	KCC	Non-KCC	KCC	Non-KCC	KCC	Non-KCC	KCC	Non-KCC
Hailakandi Block	10 (21.0)	12 (25.0)	30 (62.0)	24 (50.0)	8 (17.0)	12 (25.0)	48 (100.0)	48 (100.0)
Algapur Block	6 (12.0)	8 (17.0)	24 (50.0)	24 (50.0)	18 (38.0)	16 (33.0)	48 (100.0)	48 (100.0)
Lala Block	1 (2.0)	4 (8.0)	32 (67.0)	33 (69.0)	15 (31.0)	11 (23.0)	48 (100.0)	48 (100.0)
Katlicherra Block	3 (6.0)	3 (6.0)	27 (56.0)	24 (50.0)	18 (38.0)	21 (44.0)	48 (100.0)	48 (100.0)
Total	20 (10.0)	27 (14.0)	113 (59.0)	105 (55.0)	59 (31.0)	60 (31.0)	192 (100.0)	192 (100.0)
Mean	5	6.75	28.25	26.25	14.75	15.0	48	48
Minimum	1	3	24	24	8	11	48	48
Maximum	10	12	32	33	18	21	48	48

Source: Compiled from Primary data.

The figures in the parenthesis indicate the percentage of farmers to total farmers.

KITCHEN HOUSE STRUCTURE

Table No. 4.14 represents the kitchen house structure of the KCC holders and Non-KCC holders between the four Development Blocks of Hailakandi district reflects that 50% of the KCC holder and 57.29% of the Non-KCC holder possesses the kutcha kitchen houses followed 34.90% of the KCC holder and 33.85% of the Non-KCC holder have semi-pucca kitchen houses.

Table No. 4.14: Kitchen house structure of the KCC holders and Non-KCC holders

Nature of kitchen house structure	Pucca		Semi-pucca		Kutcha		Total no. of respondents	
Name of the Blocks	KCC	Non-KCC	KCC	Non-KCC	KCC	Non-KCC	KCC	Non-KCC
Hailakandi Block	18 (37.5)	6 (12.5)	6 (12.5)	16 (33.33)	24 (50.0)	26 (54.17)	48 (100.0)	48 (100.0)
Algapur Block	6 (12.5)	7 (14.58)	16 (33.33)	14 (29.17)	26 (54.17)	27 (56.25)	48 (100.0)	48 (100.0)
Lala Block	2 (4.17)	2 (4.17)	22 (45.83)	21 (43.75)	24 (50.0)	25 (52.08)	48 (100.0)	48 (100.0)
Katlicherra Block	3 (6.25)	2 (4.17)	23 (47.92)	14 (29.17)	22 (45.83)	32 (66.66)	48 (100.0)	48 (100.0)
Total	29 (15.10)	17 (8.86)	67 (34.90)	65 (33.85)	96 (50.0)	110 (57.29)	192 (100.0)	192 (100.0)
Mean	7.25	4.25	16.75	16.25	24	27.5	48	48
Minimum	2	2	6	14	22	25	48	48
Maximum	18	7	23	21	26	32	48	48

Source: Compiled from Primary data.
The figures in the parenthesis indicate the percentage of farmers to total farmers.

CATTLE SHED HOUSE STRUCTURE

The following table represents the cattle shed house structure of the KCC holders and Non-KCC holders between the four Development Blocks of Hailakandi district reflects that 50% of the KCC holder and 57.29% of the Non-KCC holder possesses the kutcha kitchen houses followed 34.90% of the KCC holder and 33.85% of the Non-KCC holder have semi-pucca kitchen houses.

Table No. 4.15: Cattle shed house structure of the KCC holders and Non-KCC holders

Nature of cattle shed house structure	No cattle shed		Pucca		Semi-pucca		Kutcha		Total no. of respondents	
Name of the Blocks	KCC	Non-KCC	KCC	Non-KCC	KCC	Non-KCC	KCC	Non-KCC	KCC	Non-KCC
Hailakandi Block	9 (19.0)	0 (0.0)	0 (0.00)	1 (2.0)	1 (2.0)	5 (10.0)	38 (79.0)	42 (88.0)	48 (100.0)	48 (100.0)
Algapur Block	18 (38.0)	1 (2.0)	0 (0.00)	0 (0.0)	2 (4.0)	6 (13.0)	28 (58.0)	41 (85.0)	48 (100.0)	48 (100.0)
Lala Block	12 (25.0)	9 (19.0)	0 (0.00)	0 (0.0)	3 (6.0)	4 (8.0)	33 (69.0)	35 (73.0)	48 (100.0)	48 (100.0)
Katlicherra Block	16 (33.0)	2 (4.0)	0 (0.00)	0 (0.0)	0 (0.0)	2 (4.0)	32 (67.0)	44 (92.0)	48 (100.0)	48 (100.0)
Total	55 (29.0)	12 (6.0)	0 (0.00)	1 (1.0)	6 (3.0)	17 (9.0)	131 (68.0)	162 (84.0)	192 (100.0)	192 (100.0)
Mean	13.75	3	0	0.25	1.5	4.25	32.75	40.5	48	48
Minimum	9	1	0	0	1	2	28	35	48	48
Maximum	18	9	0	1	3	6	38	44	48	48

Source: Compiled from Primary data.
The figures in the parenthesis indicate the percentage of farmers to total sample farmers.

4.2.9 SANITATION CONDITION

The following table shows that hygienic sanitation condition of the KCC holders and Non-KCC holders of four Development Blocks of the Hailakandi district. From the following table it is found that 41.0% of the KCC households and 57.0% of the Non-KCC households are using kutcha sanitation where semi-pucca sanitation possesses by only 50% of the KCC households and 33.0% of the Non-KCC households.

Table No. 4.16: Hygienic sanitation condition of the KCC holders and Non-KCC holders

Nature of house structure	Pucca		Semi-pucca		Kutcha		Total no. of respondents	
Name of the Blocks	KCC	Non-KCC	KCC	Non-KCC	KCC	Non-KCC	KCC	Non-KCC
Hailakandi Block	5 (11.0)	7 (15.0)	26 (54.0)	14 (29.0)	17 (35.0)	27 (56.0)	48 (100.0)	48 (100.0)
Algapur Block	8 (17.0)	8 (17.0)	19 (39.0)	14 (29.0)	21 (44.0)	26 (54.0)	48 (100.0)	48 (100.0)
Lala Block	1 (2.0)	3 (6.0)	28 (58.0)	21 (44.0)	19 (40.0)	24 (50.0)	48 (100.0)	48 (100.0)
Katlicherra Block	3 (6.0)	2 (4.0)	23 (48.0)	14 (29.0)	22 (46.0)	32 (67.0)	48 (100.0)	48 (100.0)
Total	17 (9.0)	20 (10.0)	96 (50.0)	63 (33.0)	79 (41.0)	109 (57.0)	192 (100.0)	192 (100.00)
Mean	4.25	5	24	15.75	19.75	27.25	48	48
Minimum	1	2	19	14	17	24	48	48
Maximum	8	8	28	21	22	32	48	48

Source: Compiled from Primary data.
The figures in the parenthesis indicate the percentage of farmers to total sample farmers.

4.2.10 AVAILABILITY OF ELECTRICITY

The following table shows the availability of electricity between the KCC and Non-KCC households of the four Development Blocks of the Hailakandi district. Mean value of availability of electricity among the KCC households is 37.75, of which a minimum of 33 in Katlicherra Development Block and a maximum of 42 in Lala Development Block where mean value of availability of electricity among the Non-KCC households is 33.0, of which a minimum of 29 in Hailakandi Development Block and a maximum of 36 in Algapur Development Block reflects that use of electricity by KCC households is higher than Non-KCC households.

Table No. 4.17: Availability of electricity between the KCC and Non-KCC households

Nature	YES		NO		Total no. of respondents	
Name of the Blocks	KCC	Non-KCC	KCC	Non-KCC	KCC	Non-KCC
Hailakandi Block	35 (73.0)	29 (60.0)	13 (27.0)	19 (40.0)	48 (100.0)	48 (100.0)
Algapur Block	41 (85.0)	36 (75.0)	7 (15.0)	12 (25.0)	48 (100.0)	48 (100.0)
Lala Block	42 (88.0)	34 (71.0)	6 (12.0)	14 (29.0)	48 (100.0)	48 (100.0)
Katlicherra Block	33 (69.0)	33 (69.0)	15 (31.0)	15 (31.0)	48 (100.0)	48 (100.0)
Total	151 (79.0)	132 (69.0)	41 (21.0)	60 (31.0)	192 (100.0)	192 (100.0)
Mean	37.75	33.0	10.25	15.0	48	48
Minimum	33	29	6	12	48	48
Maximum	42	36	15	19	48	48

Source: Compiled from Primary data.

The figures in the parenthesis indicate the percentage of farmers to total sample farmers.

4.2.11 ENERGY SOURCES

The following table shows sources of energy used by the KCC and Non-KCC households in of the four Development Blocks of the Hailakandi district reflects that both the KCC households (67.0%) and Non-KCC households (77.0%) use fuel wood as their most favourable energy source.

Table No. 4.18: Use of energy sources by the KCC and Non-KCC households

Nature	FUELWOOD		LPG		BOTH USED		Total no. of respondents	
Name of the Blocks	KCC	Non-KCC	KCC	Non-KCC	KCC	Non-KCC	KCC	Non-KCC
Hailakandi Block	29 (60.0)	39 (81.0)	18 (38.0)	7 (15.0)	1 (2.0)	2 (4.0)	48 (100.0)	48 (100.0)
Algapur Block	32 (67.0)	34 (71.0)	14 (29.0)	10 (21.0)	2 (4.0)	4 (8.0)	48 (100.0)	48 (100.0)
Lala Block	37 (77.0)	34 (71.0)	8 (17.0)	12 (25.0)	3 (6.0)	2 (4.0)	48 (100.0)	48 (100.0)
Katlicherra Block	31 (65.0)	41 (86.0)	15 (31.0)	4 (8.0)	2 (4.0)	3 (6.0)	48 (100.0)	48 (100.0)
Total	129 (67.0)	148 (77.0)	55 (29.0)	33 (17.0)	8 (4.0)	11 (6.0)	192 (100.0)	192 (100.0)
Mean	32.25	37	8.25	8.25	2	2.75	48	48
Minimum	29	34	8	4	1	2	48	48
Maximum	37	41	18	12	3	4	48	48

Source: Compiled from Primary data.

The figures in the parenthesis indicate the percentage of farmers to total sample farmers.

Liquid Petroleum Gas (LPG) which is the second energy source after fuel wood use by 29.0% of KCC households and 17.0% of Non-KCC households in four Development Blocks of Hailakandi district.

4.2.12 FOOD SECURITY

Food security have been categorised into four to understand the condition of food security among the sample size of KCC holders and Non-KCC holders of four Development Blocks of Hailakandi district. These four types are (a) Less than one square meal per day for major part of the year; (b) Normally one square meal per day but less than one square meal occasionally; (c) Two square meal per day with occasional shortage; and (d) Enough food throughout the year. Availability of enough food throughout the year is a good sign mark for food security and in this aspect the condition of KCC holders (90.0%) is more secure than Non-KCC holders (77.0%).

Table No. 4.19: Food security between the KCC holders and Non-KCC holders

Nature	Less than one square meal per day		Normally one square meal per day		Two square meal per day		Enough food throughout the year		Total no. of respondents	
Name of the Blocks	KCC	Non-KCC	KCC	Non-KCC	KCC	Non-KCC	KCC	Non-KCC	KCC	Non-KCC
Hailakandi Block	NIL	NIL	NIL	NIL	5 (10.0)	14 (29.0)	43 (90.0)	34 (71.0)	48 (100.0)	48 (100.0)
Algapur Block	NIL	NIL	NIL	NIL	4 (8.0)	8 (17.0)	44 (92.0)	40 (83.0)	48 (100.0)	48 (100.0)
Lala Block	NIL	NIL	NIL	NIL	2 (4.0)	9 (19.0)	46 (96.0)	39 (81.0)	48 (100.0)	48 (100.0)
Katlicherra Block	NIL	NIL	NIL	NIL	9 (19.0)	13 (27.0)	39 (81.0)	35 (73.0)	48 (100.0)	48 (100.0)
Total	NIL	NIL	NIL	NIL	20 (10.0)	44 (23.0)	172 (90.0)	148 (77.0)	192 (100.0)	192 (100.0)
Mean	NIL	NIL	NIL	NIL	5	11	43	37	48	48
Minimum	NIL	NIL	NIL	NIL	2	8	39	34	48	48
Maximum	NIL	NIL	NIL	NIL	9	14	46	40	48	48

Source: Compiled from Primary data.

The figures in the parenthesis indicate the percentage of farmers to total sample farmers.

4.2.13 NATURE OF ENGAGEMENT IN THE AGRICULTURE SECTOR

The following table shows the nature of engagement by the KCC holders and Non-KCC holders over the year in agriculture sector of the four Development Blocks of the Hailakandi district. There is one striking point is that total 8.0% of the KCC holders are not directly or indirectly involved in the agriculture sector in Hailakandi district. It gives a clear picture that comparatively Non-KCC holders plays a vital role in the agriculture sector through full time involvement (32.0%) where KCC holders shares only (21.0%). Part time involvement in the agriculture sector by the KCC holders (53.0%) higher than Non-KCC holders shares only (47.0%).

Table No. 4.20: Nature of engagement of the KCC holders and Non-KCC holders over the year in agriculture sector

Nature of engage-ment	Full time		Part time		Fully by labour without involvement		Not involved in the agriculture sector directly or indirectly		Total no. of respondents	
Name of the Blocks	KCC	Non-KCC	KCC	Non-KCC	KCC	Non-KCC	KCC	Non-KCC	KCC	Non-KCC
Hailakandi Block	4 (8.0)	13 (27.0)	30 (63.0)	23 (48.0)	11 (23.0)	12 (25.0)	3 (6.0)	0 (0.00)	48 (100.0)	48 (100.0)
Algapur Block	16 (33.0)	18 (38.0)	21 (44.0)	24 (50.0)	9 (19.0)	6 (12.0)	2 (4.0)	0 (0.00)	48 (100.0)	48 (100.0)
Lala Block	9 (19.0)	9 (19.0)	33 (69.0)	26 (54.0)	2 (4.0)	13 (27.0)	4 (8.0)	0 (0.00)	48 (100.0)	48 (100.0)
Katlicherra Block	12 (25.0)	21 (44.0)	18 (38.0)	17 (35.0)	11 (23.0)	10 (21.0)	7 (14.0)	0 (0.00)	48 (100.0)	48 (100.0)
Total	41 (22.0)	61 (32.0)	102 (53.0)	90 (47.0)	33 (17.0)	41 (21.0)	16 (8.0)	0 (0.00)	192 (100.0)	192 (100.0)
Mean	10.25	15.25	25.5	22.5	8.25	10.25	4	0	48	48
Minimum	4	9	18	17	2	6	2	0	48	48
Maximum	16	21	33	26	11	13	7	0	48	48

Source: Compiled from Primary data.

The figures in the parenthesis indicate the percentage of farmers to total sample farmers.

Mean value of KCC holders working full time in agriculture sector is 10.25, of which a minimum of 4 in Hailakandi Development Block and a maximum of 16 in Algapur Development Block where mean value of Non-KCC holders working full

time in agriculture sector is 15.25, of which a minimum of 9 in Lala Development Block and a maximum of 21 in Katlicherra Development Block. Mean value of KCC holders working part time in agriculture sector is 25.5, of which a minimum of 18 in Katlicherra Development Block and a maximum of 33 in Lala Development Block where mean value of Non-KCC holders working part time in agriculture sector is 22.5, of which a minimum of 17 in Katlicherra Development Block and a maximum of 26 in Lala Development Block. Out of the four categories of engagement in the agriculture sector over the year, it is clear from the table that part time engagement in the agriculture sector over the year preferred by both the KCC holders (53.13%) higher than the Non-KCC holders (46.88%) in Hailakandi district.

4.2.14 USE OF TECHNOLOGY FOR CULTIVATION

Agricultural credit is of prime importance to offer confidence to adopt new technologies. A large majority of the cultivators cultivate their field by using primitive method of cultivation which has hindered to attain the desired level of growth in agricultural production.

In aggregate of the four Development Blocks both the KCC holders (38.0%) and Non-KCC holders (24.0%) are now gradually adopted physical technology instrument in the cultivation process where KCC holders (44.0%) and Non-KCC holders (56.0%) are used both primitive and technology types of methods in the farming sector.

The following table shows the use of technology for cultivation by the KCC holders and Non-KCC holders in the agriculture sector of the four Development Blocks of the Hailakandi district.

Table No. 4.21: Use of technology for cultivation by the KCC holders and Non-KCC holders in the agriculture sector

Nature of Tech-nology	No involvement with the agriculture sector		Primitive		Technological		Both techniques used		Total no. of respondents	
Name of the Blocks	KCC	Non-KCC	KCC	Non-KCC	KCC	Non-KCC	KCC	Non-KCC	KCC	Non-KCC
Hailakandi Block	3 (6.0)	0 (0.0)	5 (11.0)	5 (11.0)	15 (31.0)	14 (29.0)	25 (52.0)	29 (60.0)	48 (100.0)	48 (100.0)
Algapur Block	2 (4.0)	0 (0.00)	4 (8.0)	12 (25.0)	28 (59.0)	10 (21.0)	14 (29.0)	26 (54.0)	48 (100.0)	48 (100.0)
Lala Block	4 (8.0)	0 (0.00)	1 (2.0)	11 (23.0)	16 (34.0)	19 (40.0)	27 (56.0)	18 (37.0)	48 (100.0)	48 (100.0)
Katlicherra Block	7 (14.0)	0 (0.00)	8 (17.0)	10 (21.0)	14 (29.0)	4 (8.0)	19 (40.0)	34 (71.0)	48 (100.0)	48 (100.0)
Total no. of resp-ondents	16 (8.0)	0 (0.00)	18 (10.0)	38 (20.0)	73 (38.0)	47 (24.0)	85 (44.0)	107 (56.0)	192 (100.0)	192 (100.0)
Mean	4	0	4.5	9.5	18.25	11.75	21.25	26.75	48	48
Minimum	2	0	1	5	14	4	14	18	48	48
Maximum	7	0	8	12	28	19	27	34	48	48

Source: Compiled from Primary data.
The figures in the parenthesis indicate the percentage of farmers to total sample farmers.

4.2.15 POSSESSION OF BANK ACCOUNT/ POST OFFICE ACCOUNT

The following table shows the possession of bank account by the KCC holders and Non-KCC holders of the four Development Blocks of the Hailakandi district in the shade of banking facilities. From this table it is clear that 2.0% of the KCC holders and 15.0% of the Non-KCC holders do not possess bank account or post office account. Out of the 192 KCC respondents, bank account opened by 189 KCC holders (98.0%) and out of 192 Non-KCC respondents, bank account opened by 164 Non-KCC holders (85.0%).

Table No. 4.22: Possession of bank account/ post office account by the KCC holders and Non-KCC holders

Nature	Yes		No		Total no. of respondents	
Name of the Blocks	KCC	Non-KCC	KCC	Non-KCC	KCC	Non-KCC
Hailakandi Block	48 (100.0)	44 (92.0)	0 (0.00)	4 (8.0)	48 (100.0)	48 (100.0)
Algapur Block	46 (96.0)	37 (77.0)	2 (4.0)	11 (23.0)	48 (100.0)	48 (100.0)
Lala Block	48 (100.0)	42 (88.0)	0 (0.00)	6 (12.0)	48 (100.0)	48 (100.0)
Katlicherra Block	47 (98.0)	41 (85.0)	1 (2.0)	7 (15.0)	48 (100.0)	48 (100.0)
Total	189 (98.0)	164 (85.0)	3 (2.0)	28 (15.0)	192 (100.0)	192 (100.0)
Mean	47.25	41	0.75	7	48	48
Minimum	46	37	0	4	48	48
Maximum	48	44	2	11	48	48

Source: Compiled from Primary data.
The figures in the parenthesis indicate the percentage of farmers to total sample farmers.

Mean value of KCC holders have bank account is 47.25, of which a minimum of 46 in Algapur Development Block and a maximum of 48 in Hailakandi and Lala Development Block where mean value of Non-KCC holders have bank account is 41, of which a minimum of 37 in Algapur Development Block and a maximum of 44 in Hailakandi Development Block.

4.2.16 HABIT OF SAVING IN THE BANK

The following table highlights the habit of saving in the bank branches among the KCC holders and Non-KCC holders of the four Development Blocks of the Hailakandi district shown that 40.0% of the KCC holders and 53.0% of the Non-KCC holders have habit of saving in the banks.

Table No. 4.23: Habit of saving in the bank branches among the KCC holders and Non-KCC holders

Nature	Yes		No		Total no. of respondents	
Name of the Blocks	KCC	Non-KCC	KCC	Non-KCC	KCC	Non-KCC
Hailakandi Block	14 (29.0)	20 (42.0)	34 (71.0)	28 (58.0)	48 (100.0)	48 (100.0)
Algapur Block	15 (31.0)	27 (56.0)	33 (69.0)	21 (44.0)	48 (100.0)	48 (100.0)
Lala Block	26 (54.0)	31 (65.0)	22 (46.0)	17 (35.0)	48 (100.0)	48 (100.0)
Katlicherra Block	22 (46.0)	24 (50.00)	26 (54.0)	24 (50.00)	48 (100.0)	48 (100.0)
Total	77 (40.0)	102 (53.0)	115 (60.0)	90 (47.0)	192 (100.0)	192 (100.0)
Mean	19.25	25.5	28.75	22.5	48	48
Minimum	14	20	22	17	48	48
Maximum	26	31	34	28	48	48

Source: Compiled from Primary data.
The figures in the parenthesis indicate the percentage of farmers to total sample farmers.

4.3 REASONS FOR NOT-SAVING

The following table highlights the reasons for not saving in the bank branches among the KCC holders and Non-KCC holders of the four Development Blocks of the Hailakandi district shown that 64.0% of the KCC holders and 72.0% of the Non-KCC holders have identified that limited or no saving capabilities is the main reason for not saving in the bank branches followed by second reason that is rate of interest provided by banks supported by 21.0% of KCC holders whereas 23.0% of Non-KCC holders. Limited or no saving capabilities as a main reason for not saving accepted by the KCC holders of Lala Development Block (36.0%) w hereas Non-KCC holders of Hailakandi Development Block (32.0%).

Table No. 4.24: Reasons for not-saving among the KCC and Non-KCC holders

Reasons	No safety in rural branches		Complex process in deposit and withdrawal of amount		Rate of interest is low		Limited or no saving capabilities		Total	
Name of the Blocks	KCC	Non-KCC	KCC	Non-KCC	KCC	Non-KCC	KCC	Non-KCC	KCC	Non-KCC
Hailakandi Block	0 (0.0)	0 (0.0)	1 (7.0)	3 (11.0)	1 (7.0)	4 (14.0)	12 (86.0)	21 (75.0)	14 (100.0)	28 (100.0)
Algapur Block	0 (0.0)	0 (0.0)	1 (9.0)	1 (4.0)	0 (0.0)	6 (29.0)	10 (91.0)	14 (67.0)	11 (100.0)	21 (100.0)
Lala Block	0 (0.0)	0 (0.0)	5 (19.0)	0 (0.0)	4 (15.0)	5 (29.0)	17 (66.0)	12 (71.0)	26 (100.0)	17 (100.0)
Katlicherra Block	0 (0.0)	0 (0.0)	4 (18.0)	0 (0.0)	10 (46.0)	6 (25.0)	8 (36.0)	18 (75.0)	22 (100.0)	24 (100.0)
Total	0 (0.0)	0 (0.0)	11 (15.0)	4 (5.0)	15 (21.0)	21 (23.0)	47 (64.0)	65 (72.0)	73 (100.0)	90 (100.0)
Mean	0	0	2.75	1	3.75	5.25	11.75	16.25	18.25	22.5
Minimum	0	0	1	0	0	4	8	12	11	17
Maximum	0	0	5	3	10	6	17	21	26	28

Source: Compiled from Primary data.
The figures in the parenthesis indicate the percentage of farmers to total sample farmers.

4.4 NATURE OF INDEBTEDNESS

Nature of indebtedness has been categorised into five types to understand the magnitude of the indebtedness of the KCC and Non-KCC households. These are: A) For daily consumption purposes from informal sources; B) For production purposes from informal sources; C) For other purposes from informal sources; D) Borrowing only from institutional agencies and E) No indebtedness and possess assets. The table highlights the nature of indebtedness of the KCC and Non-KCC households in Hailakandi district.

Table No. 4.25: Nature of indebtedness among the KCC and Non-KCC households

Types of indebtedness	% OF AGGREGATE RESPONSES	
KCC=192 NON-KCC=192	KCC	NON-KCC
A) For daily consumption purposes from informal sources	7.0	21.0
B) For production purposes from informal sources	18.0	38.0
C) For other purposes from informal sources	23.0	16.0
D) Borrowing only from institutional agencies	61.0	4.0
E) No indebtedness and possess assets	0.00	45.0

Source: Compiled from Primary data.
Note: Both KCC and Non-KCC respondents responded more than one option.

It is found that a large proportion of KCC holders (61.0%) borrowed only from institutional agencies followed by for other purposes from informal sources (23.0%). One important fact is that, availing credit facility through KCC scheme, still 18.0% of KCC holders taking informal loan for production purposes. 21.0% of Non-KCC households taking informal loan for daily consumption purposes where 16.0% are taking informal loan for other purposes. 45.0% of Non-KCC households having no indebtedness and possess assets.

4.5 MIGRATION OF RURAL WORKFORCE

The traditional involvement in the agricultural sector has been declining day by day among the present generation of the youths of the State which implies attribution of shift of employment to the other sectors (Economic Survey of Assam, 2011-12, Pp.18)[1].

The following table highlights the migration of rural workforce among the KCC holders and Non-KCC holders of the four Development Blocks of the Hailakandi district. A sizable section of rural youths not wanted farming as an occupation and migrated to other cities due to inadequate land holding, absence of subsidiary industry during off season, lack of interest in farming and raising of low income from agriculture sector for alternative avenues of employment and livelihood.

46.0% of the Non-KCC household members migrated to other cities which is higher than KCC household members 32.0%.

Table No. 4.26: Migration of rural workforce under KCC households and Non-KCC households

Nature	Yes		No		Total no. of respondents	
Name of the Blocks	KCC	Non-KCC	KCC	Non-KCC	KCC	Non-KCC
Hailakandi Block	12 (25.0)	15 (31.0)	36 (75.0)	33 (69.0)	48 (100.0)	48 (100.0)
Algapur Block	18 (37.0)	25 (52.0)	30 (63.0)	23 (48.0)	48 (100.0)	48 (100.0)
Lala Block	16 (33.0)	22 (46.0)	32 (67.0)	26 (54.0)	48 (100.0)	48 (100.0)
Katlicherra Block	16 (33.0)	26 (54.0)	32 (67.0)	22 (46.0)	48 (100.0)	48 (100.0)
Total	62 (32.0)	88 (46.0)	130 (68.0)	104 (54.0)	192 (100.0)	192 (100.0)
Mean	15.5	22	32.5	26	48	48
Minimum	12	15	30	22	48	48
Maximum	18	26	36	33	48	48

Source: Compiled from Primary data.
The figures in the parenthesis indicate the percentage of farmers to total sample farmers.

4.6 REASONS FOR THE MIGRATION OF FROM RURAL AREAS TO URBAN AREAS

The size and scale of operation influences both the production and incomes at the micro level. They also become critical at the macro level, the contribution of small farmers from a different perspective. Small and marginal farmers account for an estimated two-thirds of national vegetables and milk production and more than half of cereals and fruits produced. But, with very little marketable surplus, their farming is hardly commercial. Small and marginal farmers may be *'efficient'*, but their viability is a big concern. Smaller farms, smaller volumes of produce, higher transport cost, reduced ability to negotiate for better prices are the other consequences leading to lower prices and lower incomes for farmers. Declining incomes just due to reducing farm sizes are a serious disincentive for farmers to continue farming. The NSSO 2003 data indicate that 40 per cent of farmers do not

wish to continue cultivation. (This perception could have been further aggravated by now) (Annual Report of NABARD, 2012-13, Pp. 4-5)[2].

The rapid increase in urban population is the outcomes of both pull and push factors. Better employment opportunities and higher wages in urban labour market, slow growth in rural non-farm sector and continuously declining land holding size are causing rural to urban migration (Rao and Joshi, 2009, Pp. 401-408)[3].

Table No. 4.27: The statements regarded to identify the KCC holders and Non-KCC holders' overall attitude towards reasons of migration of people from rural areas to urban areas

Reasons for the migration of from Rural areas to Urban areas
1. Inadequate land holding
2. Absence of subsidiary industry during off season
3. Job getting in outside
4. Lack of interest in farming activities
5. Lack of knowledge about farming
6. Due to Heavy hardworking
7. Educated rural youth search job rather than farming
8. Due to High income than farming activities

The respondents were asked to respond to each of these statements in five degree of agreement and disagreement viz., (I) Strongly Agree, (II) Agree, (III) Neutral, (IV) Disagree and (V) Strongly Disagree. Each of these degrees carries a score. Responses indicating the least favourable attitude towards reasons for migration of family members from rural areas to urban areas are given the least score (i.e., 1) and the most favourable attitude towards reasons for migration of family members from rural areas to urban areas are given the highest score (i.e., 5). The responses on each of the above mentioned statements that were considered in order to assess the overall attitude of the KCC and Non-KCC Respondents towards reasons for migration of family members have been highlighted in the following section with their respective frequencies and percentages.

Table No. 4.27.1: The responses of KCC and Non-KCC holders on the statement "inadequate land holding" as a reason for the migration of rural work force to other cities

	Frequency		Percent	
	KCC	Non-KCC	KCC	Non-KCC
Strongly Agree (5)	15	25	24.19	28.41
Agree (4)	33	49	53.23	55.68
Neutral (3)	4	9	6.45	10.23
Disagree (2)	7	4	11.29	4.54
Strongly Disagree (1)	3	1	4.84	1.14
Total	62	88	100.0	100.0

Source: Compiled from Primary data.

Table No. 4.27.2: The responses of KCC and Non-KCC holders on the statement "absence of subsidiary industry during off season" as a reason for the migration of rural work force to other cities

	Frequency		Percent	
	KCC	Non-KCC	KCC	Non-KCC
Strongly Agree	22	32	35.49	36.36
Agree	25	36	40.32	40.91
Neutral	5	8	8.06	9.09
Disagree	1	5	1.61	5.68
Strongly Disagree	9	7	14.52	7.96
Total	62	88	100.0	100.0

Source: Compiled from Primary data.

Table No. 4.27.3: The responses of KCC and Non-KCC holders on the statement "job getting in outside" as a reason for the migration of rural work force to other cities

	Frequency		Percent	
	KCC	Non-KCC	KCC	Non-KCC
Strongly Agree	8	14	12.90	15.91
Agree	1	4	1.61	4.54
Neutral	1	1	1.61	1.14
Disagree	0	0	0	0
Strongly Disagree	52	69	83.88	78.41
Total	62	88	100.0	100.0

Source: Compiled from Primary data.

Table No. 4.27.4: The responses of KCC and Non-KCC holders on the statement "lack of interest in farming activities" as a reason for the migration of rural work force to other cities

	Frequency		Percent	
	KCC	Non-KCC	KCC	Non-KCC
Strongly Agree	13	22	20.97	25.0
Agree	9	11	14.52	12.5
Neutral	11	7	17.74	7.96
Disagree	9	5	14.52	5.68
Strongly Disagree	20	43	32.25	48.86
Total	62	88	100.0	100.0

Source: Compiled from Primary data.

Table No. 4.27.5: The responses of KCC and Non-KCC holders on the statement "lack of knowledge about farming" as a reason for the migration of rural work force to other cities

	Frequency		Percent	
	KCC	Non-KCC	KCC	Non-KCC
Strongly Agree	4	7	6.45	7.96
Agree	5	10	8.07	11.36
Neutral	8	5	12.90	5.68
Disagree	10	8	16.13	9.09
Strongly Disagree	35	58	56.45	65.91
Total	62	88	100.0	100.0

Source: Compiled from Primary data.

Table No. 4.27.6: The responses of KCC and Non-KCC holders on the statement "due to heavy hardworking" as a reason for the migration of rural work force to other cities

	Frequency		Percent	
	KCC	Non-KCC	KCC	Non-KCC
Strongly Agree	1	1	1.61	1.14
Agree	2	5	3.23	5.68
Neutral	5	11	8.06	12.5
Disagree	3	11	4.84	12.5
Strongly Disagree	51	60	82.26	68.18
Total	62	88	100.0	100.0

Source: Compiled from Primary data.

Table No. 4.27.7: The responses of KCC and Non-KCC holders on the statement "educated rural youth search job rather than farming" as a reason for the migration of rural work force to other cities

	Frequency		Percent	
	KCC	Non-KCC	KCC	Non-KCC
Strongly Agree	4	13	6.45	14.77
Agree	5	10	8.06	11.36
Neutral	11	20	17.75	22.73
Disagree	5	5	8.06	5.68
Strongly Disagree	37	40	59.68	45.46
Total	62	88	100.0	100.0

Source: Compiled from Primary data.

Table No. 4.27.8: The responses of KCC and Non-KCC holders on the statement "due to High income than farming activities" as a reason for the migration of rural work force to other cities

	Frequency		Percent	
	KCC	Non-KCC	KCC	Non-KCC
Strongly Agree	33	20	53.22	22.73
Agree	10	36	16.13	40.91
Neutral	7	16	11.29	18.18
Disagree	9	8	14.52	9.09
Strongly Disagree	3	8	4.84	9.09
Total	62	88	100.0	100.0

Source: Compiled from Primary data.

Table No. 4.28: The responses of KCC and Non-KCC holders on the statement of "Reasons for the migration of rural work force to urban areas"

Reasons for the migration of rural people to urban areas	Strongly Agree (5)		Agree (4)		Neutral (3)		Disagree (2)		Strongly Disagree (1)		Total score		Mean Score		Std. Deviation		Covariance %	
KCC=62 Non-KCC=88	KCC	Non-KCC	KCC	Non-KCC	KCC	Non-KCC	KCC	Non-KCC	KCC	Non-KCC	KCC	Non-KCC	KCC	Non-KCC	KCC	Non-KCC	KCC	Non-KCC
Inadequate land holding	15	25	33	49	4	9	7	4	3	1	236	357	3.81	4.6	12.44	19.85	326.51	431.52
Absence of subsidiary industry during off season	22	32	25	36	5	8	1	5	9	7	236	345	3.81	3.92	21.15	15.08	555.12	384.69
Job getting in outside	8	14	1	4	1	1	0	0	52	69	99	158	1.60	1.80	22.37	29.27	1398.13	1626.11
Lack of interest in farming activities	13	22	9	11	11	7	9	5	20	43	172	228	2.77	2.59	4.56	15.65	164.62	604.25
Lack of knowledge about farming	4	7	5	10	8	5	10	8	35	58	119	164	1.92	1.86	12.86	22.66	669.79	1218.28
Due to Heavy hardworking	1	1	2	5	5	11	3	11	51	60	85	140	1.37	1.59	21.63	24.08	1578.83	1514.47
Educated rural youth search job rather than farming	4	13	5	10	11	20	5	5	37	40	120	215	1.94	2.44	14.03	13.65	723.20	559.43
Due to High income than farming activities	33	20	10	36	7	16	9	8	3	8	247	316	3.98	3.59	11.82	11.52	296.98	320.89

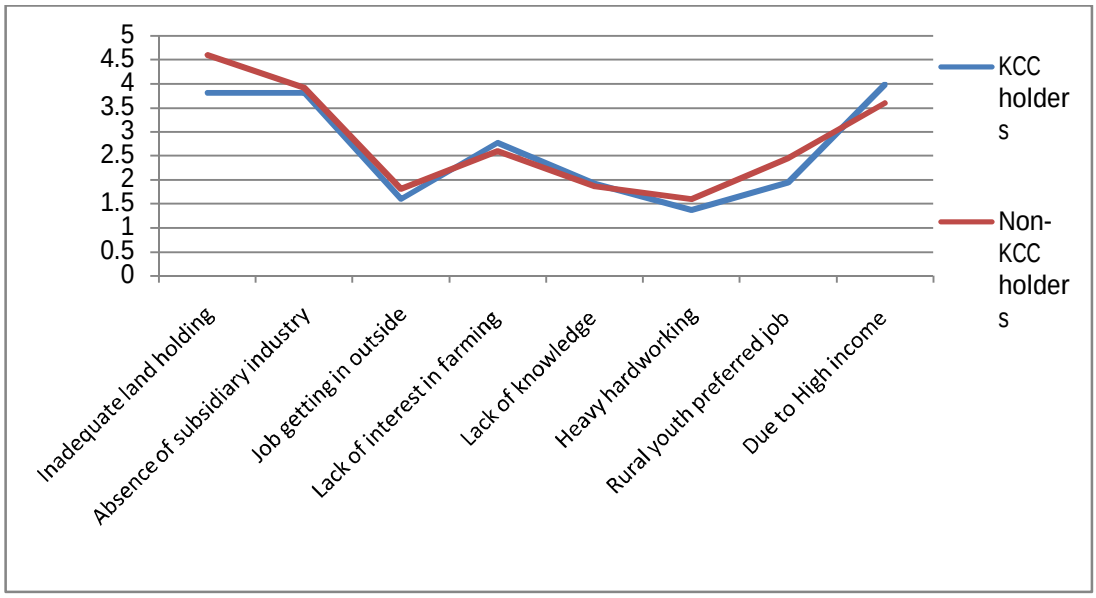
Source: Compiled from Primary data.

The following table displaying the rank of responses of KCC and Non-KCC holders on the statement of "Reasons for the migration of rural work force to urban areas" on the basis of mean score. It is indicates that provision of high income in other activities than farming activities, inadequate land holding and absence of subsidiary industry during off season are some most influencing factor among the KCC households of four Development Blocks of Hailakandi district which migrated rural people to urban areas for seeking livelihood source. Inadequate land holding, absence of subsidiary industry during off season and getting high income from other sector except agriculture sector are some most influencing factor among the Non-KCC households of four Development Blocks of Hailakandi district which forced rural work force to migrated at urban areas.

Table No. 4.29: The rank of responses of KCC and Non-KCC holders on the statement of "Reasons for the migration of rural work force to urban areas"

Reasons for the migration of rural people to urban areas	KCC holders		Non-KCC holders	
KCC=62 Non-KCC=88	Mean Score	RANK	Mean Score	RANK
Inadequate land holding	3.81	2nd	4.6	1st
Absence of subsidiary industry during off season	3.81	2nd	3.92	2nd
Job getting in outside	1.60	6th	1.80	7th
Lack of interest in farming activities	2.77	3rd	2.59	4th
Lack of knowledge about farming	1.92	5th	1.86	6th
Due to Heavy hardworking	1.37	7th	1.59	8th
Educated rural youth search job rather than farming	1.94	4th	2.44	5th
Due to High income than farming activities	3.98	1st	3.59	3rd

Chart 4.1: The mean score of different reasons of KCC and Non-KC households where their family members have migrated to urban areas



Source: Compiled from Primary data.

TESTING OF HYPOTHESIS NUMBER 1:

- H_0 =There is no significant difference in the socio-economic condition between the KCC holders and Non-KCC holders.

In order to develop the hypothesis, the researcher has taken the KCC holders as experimental groups and Non-KCC holders as control groups.

In order to test the above hypothesis, some socio-economic parameters have been taken namely livelihood source, possession of total land, cropped land holding, house structure, hygienic sanitation, literacy, availability of electricity, energy sources, food security, technology used for cultivation, possession of bank account, habit of saving in the bank and migration of rural work force.

On the basis of these socio-economic parameters, above hypothesis has been divided into different sub-hypothesis to draw a conclusion about the socio-economic characteristics of the Kisan Credit Card holders and Non-Kisan Credit Card holders, both types of agriculturists of Hailakandi District of Assam.

Sub-Hypotheses

1. There is no significant difference in the literacy rate between the KCC holders and Non-KCC holders.
2. There is no significant difference in regard of source of livelihood between the KCC holders and Non-KCC holders.
3. There is no significant difference in the possession of total land between the KCC holders and Non-KCC holders.
4. There is no significant difference in the cropped land holding between the KCC holders and Non-KCC holders.
5. There is no significant difference in the house structure between the KCC holders and Non-KCC holders.
6. There is no significant difference in the hygienic sanitation between the KCC holders and Non-KCC holders.
7. There is no significant difference in the availability of electricity between the KCC holders and Non-KCC holders.
8. There is no significant difference in the energy sources between the KCC holders and Non-KCC holders.
9. There is no significant difference in the regard of food security between the KCC holders and Non-KCC holders.
10. There is no significant difference in the technology used for cultivation between the KCC holders and Non-KCC holders.
11. There is no significant difference in the possession of bank account between the KCC holders and Non-KCC holders.
12. There is no significant difference in the habit of saving in the bank between the KCC holders and Non-KCC holders.
13. There is no significant difference in the migration of rural workforce between the KCC holders and Non-KCC holders.

RESULT AND DISCUSSION

Sub-Hypotheses Number 1

$H_{O1=}$ There is no significant difference in the literacy rate between the KCC holders and Non-KCC holders.

	Literate	Illiterate	TOTAL
KCC	156	36	192
NON-KCC	154	38	192
TOTAL	310	74	384

Source: Compiled from primary data records.

On the basis of this hypothesis, the expected frequency corresponding to the number of KCC holders and number of literate would be

Expectation of (AB) = $(A)X(B)/N$ =192x310/384 =155

Now using the expectation of (AB), the table of expected values as follows:

	Literate: B	Illiterate:b	TOTAL
KCC:A	AB= 155	Ab= 37	192
NON-KCC:a	aB=155	ab= 37	192
TOTAL	310	74	384

Calculation of Chi-Square

Groups	Observed frequency	Expected frequency	$(o_{ij}-E_{ij})$	$(o_{ij}-E_{ij})^2$	$(o_{ij}-E_{ij})^2/E_{ij}$
AB	156	155	1	1	0.006
Ab	36	37	-1	1	0.027
aB	154	155	-1	1	0.006
ab	38	37	1	1	0.027

$\chi^2 = \sum(o_{ij}-E_{ij})^2/E_{ij} = 0.066$

Therefore, Degrees of freedom in this case= (r-1)x(c-1) = (2-1)x(2-1) =1.

The table value of χ^2 for 1 degree of freedom at 5 percent level of significance is 3.841. The calculated value 0.066 is much lower than table value and hence the result of the experiment supports the hypothesis. It is insignificant. This means that

there is no significant difference in the literacy rate between KCC holders and Non-KCC holders.

Sub-Hypotheses Number 2

$H_{O2=}$ There is no significant difference in regard of source of livelihood between the KCC holders and Non-KCC holders.

	Agriculture	Business	Service	Others	TOTAL
KCC	42	86	18	46	192
NON-KCC	71	50	27	44	192
TOTAL	113	136	45	90	384

Source: Compiled from primary data records.

On the basis of this hypothesis, the expected frequency corresponding to the number of KCC holders and number of agriculturist would be

Expectation of agriculturist =192x113/384 =56.5

Now using the expectation of agriculturist, the table of expected values as follows:

	Agriculture	Business	Service	Others	TOTAL
KCC	56.5	68	22.5	45	192
NON-KCC	56.5	68	22.5	45	192
TOTAL	113	136	45	90	384

Calculation of Chi-Square

Groups	Observed frequency	Expected frequency	$(o_{ij}-E_{ij})$	$(o_{ij}-E_{ij})^2$	$(o_{ij}-E_{ij})^2/E_{ij}$
KCC					
Agriculture	42	56.5	-14.5	210.25	3.721
Business	86	68	18	324	4.765
Service	18	22.5	-4.5	20.25	0.9
Others	46	45	1	1	0.022
NON-KCC					
Agriculture	71	56.5	14.5	210.25	3.721
Business	50	68	-18	324	4.765
Service	27	22.5	4.5	20.25	0.9
Others	44	45	-1	1	0.022

$\chi^2 = \sum(o_{ij}-E_{ij})^2/E_{ij} = 18.816$

Therefore, Degrees of freedom in this case= (r-1)x(c-1) = (2-1)x(4-1) =3.

The table value of χ^2 for 3 degrees of freedom at 5 percent level of significance is 7.815. The calculated value 18.816 is much higher than table value which means that the hypothesis does not hold good. It is significant. This means that there is no significant difference in regard of source of livelihood between KCC holders and Non-KCC holders is rejected.

Sub-Hypotheses Number 3

$H_{O3=}$ There is no significant difference in the possession of total land between the KCC holders and Non-KCC holders.

	Landless	Marginal	Small	Large	TOTAL
KCC	63	66	46	17	192
NON-KCC	55	79	37	21	192
TOTAL	118	145	83	38	384

Source: Compiled from primary data records.

On the basis of this hypothesis, the expected frequency corresponding to the number of KCC holders and number of landless farmers would be

Expectation of landless farmers =192x118/384 =59

Now using the expectation of landless farmers, the table of expected values as follows:

	Landless	Marginal	Small	Large	TOTAL
KCC	59	72.5	41.5	19	192
NON-KCC	59	72.5	41.5	19	192
TOTAL	118	145	83	38	384

Calculation of Chi-Square

Groups	Observed frequency	Expected frequency	$(o_{ij}-E_{ij})$	$(o_{ij}-E_{ij})^2$	$(o_{ij}-E_{ij})^2/E_{ij}$
KCC					
Landless	63	59	4	16	0.271
Marginal	66	72.5	-6.5	42.25	0.583
Small	46	41.5	4.5	20.25	0.488
Large	17	19	-2	4	0.211
NON-KCC					
Landless	55	59	-4	16	0.271
Marginal	79	72.5	6.5	42.25	0.583
Small	37	41.5	-4.5	20.25	0.488
Large	21	19	2	4	0.211

$\chi^2 = \sum(o_{ij}-E_{ij})^2/E_{ij} = 3.106$

Therefore, Degrees of freedom in this case= (r-1)x(c-1) = (2-1)x(4-1) =3.

The table value of χ^2 for 3 degrees of freedom at 5 percent level of significance is 7.815. The calculated value 3.106 is much lower than table value and hence the result of the experiment supports the hypothesis. It is insignificant. This means that there is no significant difference in the possession of total land between the KCC holders and Non-KCC holders.

Sub-Hypotheses Number 4

$H_{O4=}$ There is no significant difference in the cropped land holding between the KCC holders and Non-KCC holders.

	Landless	Marginal	Small	Large	TOTAL
KCC	81	76	26	9	192
NON-KCC	73	75	29	15	192
TOTAL	154	151	55	24	384

Source: Compiled from primary data records.

On the basis of this hypothesis, the expected frequency corresponding to the number of KCC holders and number of landless farmers would be

Expectation of landless farmers =192x154/384 =77

Now using the expectation of landless farmers, the table of expected values as follows:

	Landless	Marginal	Small	Large	TOTAL
KCC	77	75.5	27.5	12	192
NON-KCC	77	75.5	27.5	12	192
TOTAL	154	151	55	24	384

Calculation of Chi-Square

Groups	Observed frequency	Expected frequency	$(o_{ij}-E_{ij})$	$(o_{ij}-E_{ij})^2$	$(o_{ij}-E_{ij})^2/E_{ij}$
KCC					
Landless	81	77	4	16	0.208
Marginal	76	75.5	0.5	0.25	0.003
Small	26	27.5	-1.5	2.25	0.082
Large	9	12	-3	9	0.75
NON-KCC					
Landless	73	77	-4	16	0.208
Marginal	75	75.5	-0.5	0.25	0.003
Small	29	27.5	1.5	2.25	0.082
Large	15	12	3	9	0.75

$\chi^2 = \sum(o_{ij}-E_{ij})^2/E_{ij} = 2.086$

Therefore, Degrees of freedom in this case= (r-1)x(c-1) = (2-1)x(4-1) =3.

The table value of χ^2 for 3 degrees of freedom at 5 percent level of significance is 7.815. The calculated value 2.086 is much lower than table value and hence the result of the experiment supports the hypothesis. It is insignificant. This means that there is no significant difference in the cropped land holding between the KCC holders and Non-KCC holders.

Sub-Hypotheses Number 5

$H_{O5=}$ There is no significant difference in the house structure between the KCC holders and Non-KCC holders.

	Pucca	Semi pucca	Kutcha	TOTAL
KCC	20	113	59	192
NON-KCC	27	105	60	192
TOTAL	47	218	119	384

Source: Compiled from primary data records.

On the basis of this hypothesis, the expected frequency corresponding to the number of KCC holders and number of pucca house holders would be

Expectation of pucca house holders =192x147/384 =23.5

Now using the expectation of pucca house holders, the table of expected values as follows:

	Pucca	Semi pucca	Kutcha	TOTAL
KCC	23.5	109	59.5	192
NON-KCC	23.5	109	59.5	192
TOTAL	47	218	119	384

Calculation of Chi-Square

Groups	Observed frequency	Expected frequency	$(o_{ij}-E_{ij})$	$(o_{ij}-E_{ij})^2$	$(o_{ij}-E_{ij})^2/E_{ij}$
KCC					
Pucca	20	23.5	-3.5	12.25	0.521
Semi pucca	113	109	4	16	0.147
Kutcha	59	59.5	-0.5	0.25	0.004
NON-KCC					
Pucca	27	23.5	3.5	12.25	0.521
Semi pucca	105	109	-4	16	0.147
Kutcha	60	59.5	0.5	0.25	0.004

$\chi^2 = \sum(o_{ij}-E_{ij})^2/E_{ij} = 1.344$

Therefore, Degrees of freedom in this case= (r-1)x(c-1) = (2-1)x(3-1) =2.

The table value of χ^2 for 2 degrees of freedom at 5 percent level of significance is 5.991. The calculated value 1.344 is much lower than table value and hence the result of the experiment supports the hypothesis. It is insignificant. This means that there is no significant difference in the house structure between the KCC holders and Non-KCC holders.

Sub-Hypotheses Number 6

$H_{O6=}$ There is no significant difference in the hygienic sanitation between the KCC holders and Non-KCC holders.

	Pucca	Semi pucca	Kutcha	TOTAL
KCC	17	96	79	192
NON-KCC	20	63	109	192
TOTAL	37	159	188	384

Source: Compiled from primary data records.

On the basis of this hypothesis, the expected frequency corresponding to the number of KCC holders and number of pucca house holders would be

Expectation of pucca house holders =192x37/384 =18.5

Now using the expectation of pucca house holders, the table of expected values as follows:

	Pucca	Semi pucca	Kutcha	TOTAL
KCC	18.5	79.5	94	192
NON-KCC	18.5	79.5	94	192
TOTAL	37	159	188	384

Calculation of Chi-Square

Groups	Observed frequency	Expected frequency	$(o_{ij}-E_{ij})$	$(o_{ij}-E_{ij})^2$	$(o_{ij}-E_{ij})^2/E_{ij}$
KCC					
Pucca	17	18.5	-1.5	2.25	0.122
Semi pucca	96	79.5	16.5	272.25	3.425
Kutcha	79	94	-15	225	2.394
NON-KCC					
Pucca	20	18.5	1.5	2.25	0.122
Semi pucca	63	79.5	-16.5	272.25	3.425
Kutcha	109	94	15	225	2.394

$\chi^2 = \sum(o_{ij}-E_{ij})^2/E_{ij} = 11.882$

Therefore, Degrees of freedom in this case= (r-1)x(c-1) = (2-1)x(3-1) =2.

The table value of χ^2 for 2 degrees of freedom at 5 percent level of significance is 5.991. The calculated value 11.882 is much higher than table value which means that the hypothesis does not hold good. It is significant. This means that there is no significant difference in the hygienic sanitation between the KCC holders and Non-KCC holders is rejected.

Sub-Hypotheses Number 7

$H_{O7=}$ There is no significant difference in the availability of electricity between the KCC holders and Non-KCC holders.

	Yes	No	TOTAL
KCC	151	41	192
NON-KCC	132	60	192
TOTAL	283	101	384

Source: Compiled from primary data records.

On the basis of this hypothesis, the expected frequency corresponding to the number of KCC holders and number of having electricity holders would be

Expectation of (AB) = $(A)X(B)/N$ =192x283/384 =141.5

Now using the expectation of (AB), the table of expected values as follows:

	Yes : B	No :b	TOTAL
KCC:A	AB= 141.5	Ab= 50.5	192
NON-KCC:a	aB=141.5	ab= 50.5	192
TOTAL	283	101	384

Calculation of Chi-Square

Groups	Observed frequency	Expected frequency	$(o_{ij}-E_{ij})$	$(o_{ij}-E_{ij})^2$	$(o_{ij}-E_{ij})^2/E_{ij}$
AB	151	141.5	9.5	90.25	0.638
Ab	41	50.5	-9.5	90.25	1.787
aB	132	141.5	-9.5	90.25	0.638
ab	60	50.5	9.5	90.25	1.787

$\chi^2 = \sum(o_{ij}-E_{ij})^2/E_{ij} = 4.85$

Therefore, Degrees of freedom in this case= (r-1)x(c-1) = (2-1)x(2-1) =1.

The table value of χ^2 for 1 degree of freedom at 5 percent level of significance is 3.841. The calculated value 4.85 is much higher than table value which means that the hypothesis does not hold good. It is significant. This means that there is no significant difference in the availability of electricity between KCC holders and Non-KCC holders is rejected.

Sub-Hypotheses Number 8

$H_{O8=}$ There is no significant difference in the energy sources between the KCC holders and Non-KCC holders.

	Fuel wood	LPG	Both fuel wood and LPG used	TOTAL
KCC	129	55	8	192
NON-KCC	148	33	11	192
TOTAL	277	88	19	384

Source: Compiled from primary data records.

On the basis of this hypothesis, the expected frequency corresponding to the number of KCC holders and number of fuel wood users would be

Expectation of fuel wood users =192x277/384 =138.5

Now using the expectation of fuel wood users, the table of expected values as follows:

	Fuel wood	LPG	Both fuel wood and LPG used	TOTAL
KCC	138.5	44	9.5	192
NON-KCC	138.5	44	9.5	192
TOTAL	277	88	19	384

Calculation of Chi-Square

Groups	Observed frequency	Expected frequency	$(o_{ij}-E_{ij})$	$(o_{ij}-E_{ij})^2$	$(o_{ij}-E_{ij})^2/E_{ij}$
KCC					
Fuel wood	129	138.5	-9.5	90.25	0.652
LPG	55	44	11	121	2.75
Both fuel wood and LPG users	8	9.5	-1.5	2.25	0.237
NON-KCC					
Fuel wood	148	138.5	9.5	90.25	0.652
LPG	33	44	-11	121	2.75
Both fuel wood and LPG users	11	9.5	1.5	2.25	0.237

$\chi^2 = \sum(o_{ij}-E_{ij})^2/E_{ij} = 7.278$

Therefore, Degrees of freedom in this case= (r-1)x(c-1) = (2-1)x(3-1) =2.

The table value of χ^2 for 2 degrees of freedom at 5 percent level of significance is 5.991. The calculated value 7.278 is much higher than table value which means that the hypothesis does not hold good. It is significant. This means that there is no significant difference in the energy sources between the KCC holders and Non-KCC holders is rejected.

Sub-Hypotheses Number 9:

$H_{O9=}$ There is no significant difference in the regard of food security between the KCC holders and Non-KCC holders.

	Two square meal per day	Enough food throughout the year	TOTAL
KCC	20	172	192
NON-KCC	44	148	192
TOTAL	64	320	384

Source: Compiled from primary data records.

On the basis of this hypothesis, the expected frequency corresponding to the number of KCC holders and number of two square meal taken per day holders would be

Expectation of (AB) = $(A)X(B)/N$ =192x64/384 =32

Now using the expectation of (AB), the table of expected values as follows:

	Yes : B	No :b	TOTAL
KCC:A	AB= 32	Ab= 160	192
NON-KCC:a	aB=32	ab= 160	192
TOTAL	64	320	384

Calculation of Chi-Square

Groups	Observed frequency	Expected frequency	$(o_{ij}-E_{ij})$	$(o_{ij}-E_{ij})^2$	$(o_{ij}-E_{ij})^2/E_{ij}$
AB	20	32	-12	144	4.5
Ab	172	160	12	144	0.9
aB	44	32	12	144	4.5
ab	148	160	-12	144	0.9

$\chi^2 = \sum(o_{ij}-E_{ij})^2/E_{ij}$ = 10.8

Therefore, Degrees of freedom in this case= (r-1)x(c-1) = (2-1)x(2-1) =1.

The table value of χ^2 for 1 degree of freedom at 5 percent level of significance is 3.841. The calculated value 10.8 is much higher than table value which means that the hypothesis does not hold good. It is significant. This means that there is no significant difference in the regard of food security between KCC holders and Non-KCC holders is rejected.

Sub-Hypotheses Number 10:

$H_{O10=}$ There is no significant difference in the technology used for cultivation between the KCC holders and Non-KCC holders.

	Primitive	Technological	Both techniques used	TOTAL
KCC	18	73	85	176
NON-KCC	38	47	107	192
TOTAL	56	120	192	368

Source: Compiled from primary data records.

On the basis of this hypothesis, the expected frequency corresponding to the number of KCC holders and number of primitive method users would be

Expectation of primitive method users =176x56/368 =26.78

Now using the expectation of primitive method users, the table of expected values as follows:

	Primitive	Technological	Both techniques used	TOTAL
KCC	26.78	57.39	91.83	176
NON-KCC	29.22	62.61	100.17	192
TOTAL	56	120	192	368

Calculation of Chi-Square

Groups	Observed frequency	Expected frequency	$(o_{ij}-E_{ij})$	$(o_{ij}-E_{ij})^2$	$(o_{ij}-E_{ij})^2/E_{ij}$
KCC					
Primitive	18	26.78	-8.78	77.09	2.879
Technological	73	57.39	15.61	243.67	4.25
Both techniques used	85	91.83	-6.83	46.65	0.51
NON-KCC					
Primitive	38	29.22	8.78	77.09	2.879
Technological	47	62.61	-15.61	243.67	4.25
Both techniques used	107	100.17	6.83	46.65	0.51

$\chi^2 = \sum(o_{ij}-E_{ij})^2/E_{ij} = 15.278$

Therefore, Degrees of freedom in this case= (r-1)x(c-1) = (2-1)x(3-1) =2.

The table value of χ^2 for 2 degrees of freedom at 5 percent level of significance is 5.991. The calculated value 15.278 is much higher than table value which means that the hypothesis does not hold good. It is significant. This means that there is no significant difference in the technology used for cultivation between the KCC holders and Non-KCC holders is rejected.

Sub-Hypotheses Number 11:

$H_{O11=}$ There is no significant difference in the possession of bank account between the KCC holders and Non-KCC holders.

	Yes	No	TOTAL
KCC	189	3	192
NON-KCC	164	28	192
TOTAL	353	31	384

Source: Compiled from primary data records.

On the basis of this hypothesis, the expected frequency corresponding to the number of KCC holders and number of bank account holders would be

Expectation of (AB) = $(A)X(B)/N$ =192x353/384 =176.5

Now using the expectation of (AB), the table of expected values as follows:

	Yes : B	No :b	TOTAL
KCC:A	AB= 176.5	Ab= 15.5	192
NON-KCC:a	aB=176.5	ab= 15.5	192
TOTAL	353	31	384

Calculation of Chi-Square

Groups	Observed frequency	Expected frequency	$(o_{ij}-E_{ij})$	$(o_{ij}-E_{ij})^2$	$(o_{ij}-E_{ij})^2/E_{ij}$
AB	189	176.5	12.5	156.25	0.885
Ab	3	15.5	-12.5	156.25	10.081
aB	164	176.5	-12.5	156.25	0.885
ab	28	15.5	12.5	156.25	10.081

$\chi^2 = \sum(o_{ij}-E_{ij})^2/E_{ij}$ = 21.932

Therefore, Degrees of freedom in this case= (r-1)x(c-1) = (2-1)x(2-1) =1.

The table value of χ^2 for 1 degree of freedom at 5 percent level of significance is 3.841. The calculated value 21.932 is much higher than table value which means that the hypothesis does not hold good. It is significant. This means that there is no

significant difference in the possession of bank account between KCC holders and Non-KCC holders is rejected.

Sub-Hypotheses Number 12

$H_{O12=}$ There is no significant difference in the habit of saving between the KCC holders and Non-KCC holders.

	Yes	No	TOTAL
KCC	77	115	192
NON-KCC	102	90	192
TOTAL	179	205	384

Source: Compiled from primary data records.

On the basis of this hypothesis, the expected frequency corresponding to the number of KCC holders and number of having habit of saving holders would be

Expectation of (AB) = $(A)X(B)/N$ =192x179/384 =89.5

Now using the expectation of (AB), the table of expected values as follows:

	Yes : B	No :b	TOTAL
KCC:A	AB= 89.5	Ab= 102.5	192
NON-KCC:a	aB=89.5	ab= 102.5	192
TOTAL	179	205	384

Calculation of Chi-Square

Groups	Observed frequency	Expected frequency	$(o_{ij}-E_{ij})$	$(o_{ij}-E_{ij})^2$	$(o_{ij}-E_{ij})^2/E_{ij}$
AB	77	89.5	-12.5	156.25	1.746
Ab	115	102.5	12.5	156.25	1.524
aB	102	89.5	12.5	156.25	1.746
ab	90	102.5	-12.5	156.25	1.524

$\chi^2 = \sum(o_{ij}-E_{ij})^2/E_{ij} = 6.54$

Therefore, Degrees of freedom in this case= (r-1)x(c-1) = (2-1)x(2-1) =1.

The table value of χ^2 for 1 degree of freedom at 5 percent level of significance is 3.841. The calculated value 6.54 is much higher than table value which means that the hypothesis does not hold good. It is significant. This means that there is no significant difference in the habit of saving between KCC holders and Non-KCC holders is rejected.

Sub-Hypotheses Number 13:

$H_{O13=}$ There is no significant difference in the migration of rural workforce between the KCC holders and Non-KCC holders.

	Yes	No	TOTAL
KCC	62	130	192
NON-KCC	88	104	192
TOTAL	150	234	384

Source: Compiled from primary data records.

On the basis of this hypothesis, the expected frequency corresponding to the number of KCC holders and number of migrated holders would be

Expectation of (AB) = $(A)X(B)/N$ =192x150/384 =75

Now using the expectation of (AB), the table of expected values as follows:

	Yes : B	No :b	TOTAL
KCC:A	AB= 75	Ab= 117	192
NON-KCC:a	aB=75	ab= 117	192
TOTAL	150	234	384

Calculation of Chi-Square

Groups	Observed frequency	Expected frequency	$(o_{ij}-E_{ij})$	$(o_{ij}-E_{ij})^2$	$(o_{ij}-E_{ij})^2/E_{ij}$
AB	62	75	-13	169	2.25
Ab	130	117	13	169	1.44
aB	88	75	13	169	2.25
ab	104	117	-13	169	1.44

$\chi^2 = \sum(o_{ij}-E_{ij})^2/E_{ij}$ = 7.38

Therefore, Degrees of freedom in this case= (r-1)x(c-1) = (2-1)x(2-1) =1.

The table value of χ^2 for 1 degree of freedom at 5 percent level of significance is 3.841. The calculated value 7.38 is much higher than table value which means that the hypothesis does not hold good. It is significant. This means that there is no significant difference in the migration of rural workforce between KCC holders and Non-KCC holders is rejected.

Table No. 4.30: The summary of result of hypothesis number 1

Sl. No.	PARAMETERS	Level of significance	Degrees of freedom	Table value of χ2	Calculated value of χ2	Significant/ Insignificant	Accept/ Reject the hypotheses
1	Literate	5%	1	3.841	0.066	Insignificant	Accepted
2	Livelihood source	5%	3	7.815	18.816	Significant	Rejected
3	Total land holding	5%	3	7.815	3.106	Insignificant	Accepted
4	Total cropped land holding	5%	3	7.815	2.086	Insignificant	Accepted
5	House structure	5%	2	5.991	1.344	Insignificant	Accepted
6	Hygienic sanitation	5%	2	5.991	11.88	Significant	Rejected
7	Availability of electricity	5%	1	3.841	4.85	Significant	Rejected
8	Energy sources	5%	2	5.991	7.278	Significant	Rejected
9	Food Security	5%	1	3.841	10.8	Significant	Rejected
10	Method of cultivation	5%	2	5.991	15.278	Significant	Rejected
11	Possession of Bank or Post Office Account	5%	1	3.841	21.932	Significant	Rejected
12	Habit of saving in account	5%	1	3.841	6.54	Significant	Rejected
13	Migration of family members to urban areas	5%	1	3.841	7.38	Significant	Rejected

Out of 13 sub-hypotheses, in 9 sub-hypotheses the calculated value is much higher than the table value and hence the result of the experiment does not support the hypotheses. Therefore, in the respect of different parameters namely livelihood source, hygienic sanitation, availability of electricity, energy sources, food security, method of cultivation, possession of bank account, habit of saving in account and migration of rural work force, there is significant difference between the KCC holders and Non-KCC holders. Remaining 4 sub-hypotheses in the regard of following parameters namely literacy, possession of total land, cropped land holding and house structure, there is no significant difference between the KCC holders and Non-KCC holders. Most of the sub-hypotheses on the ground of socio-economic parameters are significant, so we can conclude that the main hypothesis "there is no significant difference in the socio-economic condition between the KCC holders and Non-KCC holders" is rejected.