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STATUS OF FARM BUSINESS ANALYSIS OF KISAN CREDIT CARD IN DIMAPUR DISTRICT OF NAGALAND, INDIA

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Abstract

A research investigation was carried out during the year 2017-2018 for the present study in the first stage of sampling two (2) block viz; Medziphema and Chumukdima were selected, total 85 respondents were interviewed, out of that 80 respondents were selected on both category viz; 40 KCC beneficiaries, 40 Non-beneficiaries and 5 numbers of banking personals for their opinions and problem faced in providing the KCC loan. The result showed that the majority of the KCC beneficiaries' were younger as compared to Non-beneficiaries of KCC, it was observed that 82.50 percent of KCC beneficiaries' respondents were literate, while 75.00 per cent on Non-beneficiaries. The Annual income of beneficiaries was found more ascompared to Non-beneficiaries. The average cost of cultivation of paddy was Rs. 23,686.83 / ha and Rs. 16,072.66 / ha with an average yield of 5,138.89 kg / ha and 3,000 kg / ha on KCC beneficiaries and Non-beneficiaries, repetitively. Theaverage cost of pineapple cultivation was Rs. 34,607.00 / ha and Rs. 24,853.71 / ha and average yield was 18,104 pineapple piece / ha and 11,501 pineapple piece / ha on beneficiaries and non-beneficiaries farm, respectively. The cost of cultivation of paddy and pineapple was found to be higher for KCC holders than non-KCC holders, which is due to the investment of high inputs, so it has resulted both yield and net returns highestfor KCC holders as compared to non-KCC holders, due to proper utilization of resources.

Keywords: KCC, beneficiaries, non-beneficiaries, net-return, constraints.

Introduction

Agriculture is the backbone of the Indian economy. It ensures huge capital returns and provides employment to the ever growing population of the country. In India, agriculture is practiced in every part of the country. Being one of the leading countries in agriculture, Indian farmers' faces competition with regard to quality production which requires large amount of capital investment. KCC Scheme has been implemented to facilitate the access of short term credit for the farmers from the financial institutions to meet their crop requirements. KCC has been proved to be much beneficial than any other tool of financial inclusion for small farmers (Kamble, 2009). Under this scheme a credit card and a pass book or a card-cum-passbook is issued to the beneficiaries. This card has name, address, other particulars as operational land holding, limitations of borrowing amount, validity period of the credit etc.

In Nagaland 11,000 (up to end of March, 2012) KCC was issued and all efforts were made by the commercial banks (NABARD, 2012). Except the commercial banks, no other banks could able to make a single issue, which means there is a gap between the beneficiary and the banks (Sharma and Tungoe, 2011). Among the 11 districts of Nagaland, Dimapur district is one of the majoragriculture belts and majority of the farmers were poverty stricken (Tangjang and Sharma, 2018).

Dimapur is the 8th district of Nagaland established on December 1997 and lies between 25º 48´ and 26º00´ North latitude and 93º 30´ and 93º 54´ East longitude, the district is bounded by Assam on its north and west, Kohima on the east and Peren district in the south (Leah and Sharma, 2018). The total geographical area of Dimapur district is 927 square kilometer. Dimapur district fall under humid Sub-tropical agro climate zone (ACZ) in summer, it is hot and humid and cold 18° C in winter. The maximum temperature is 26 °C and minimum temperature is 21° C.

So there is a need of credit support from various agencies. Therefore a study has been planned to undertake the present study with the following objectives:

1. To study the socio-economic, socio-personal profile of beneficiary and non-beneficiary of selected respondent.
2. To study the impact of KCC in providing credit to the farmers.

Materials and Methods

The research study was undertaken during the year 2017-2018 in Dimapur district of Nagaland due to varied climate condition and different crop growing farmers are available as well as having good process in KCC scheme. Two blocks i.e. Medziphema block and Chumukdima block were purposively selected for the study, four village viz; Medziphema, Molvom, Seithekema and Tenyiphe-1 were selected randomly from each block based on concentration of maximum number of KCC holder, comprising of 10 beneficiaries and 10 non-beneficiaries respondent from each village both primary and secondary data were used for the study. Primary data should be collected through structured schedule during 2017-2018 from all the sample respondent. The data collected were processed and analyzed using appropriate mathematical and statistical tools in order to get valid conclusion. Tabular analysis, cost concepts, functional analysis significance test, Garret's ranking test were used to get some specific conclusion in some part of the study.

Results and Discussion

Table 1 reveals the socio-economic and socio-personal profile of beneficiary and non-beneficiary of selected respondent, out of 40 KCC beneficiaries, majority of the farmers (45.00 per cent) was 40 to 50 years age group, in case of Non-KCC farmers, majority of the farmer (40.00 per

cent) were 50 years and above aged group, respectively; this shows that KCC farmers are comparatively younger than Non-KCC farmers, respectively. Similar studies were carried out by Vengoto and Sharma (2018); Yadav and Sharma (2019).

Table 2 reveals that the distribution of the farmer according to their family size, the average size of the family was 7 people per family with highest of 15 persons and lowest of 3 persons per family, while the majority of the KCC holders (75.00 per cent) and Non-KCC holders (85.00 per cent) were found to fall under medium farms category group, respectively. Similar studies were carried out by Sharma (2014); Choudhary *et al.* (2017).

It can be observed from table 3 that 82.50 per cent of KCC farmers were literate and remaining 17.50 per cent were illiterate. Among the KCC farmer 35.00 per cent had education up to middle (6 to 8th standard) school level. 10.00 per cent had education up to secondary (up to 10th) school level, 5.00 per cent had education up to higher secondary (12th) school level. While in case of Non-KCC farmers 75.00 per cent were literate and remaining 25.00 per cent were illiterate, but none of the farmer was observed to have education up to higher secondary and graduated level of education in Non-KCC farmers. Thus, overall proportion of literacy level was more in case of KCC farmer as compared to Non-KCC farmer, respectively. Similar studies were carried out by Sharma (2013); Sakhrie and Sharma (2014).

Table 4 reveals that the majority of the KCC beneficiary farmer was (62.50 per cent) small farm, whereas majority of Non-KCC farmer was (60.00 per cent) small farm, but in case of medium land holding KCC farmers was (20.00 per cent), followed by (2.50 per cent) on large size groups, respectively. Whereas Non-KCC farmers was (5.00 per cent) medium farm followed by (0.00 per cent) large farm, which shows that the KCC farmer have more land compared to Non- KCC farmers, respectively. Similar studies were carried out by Jamir and Sharma (2014); Sharma *et al.*, (2018).

Table 5 depicted that the main occupation of majority of KCC holders was farming (37.50 per cent) and in case of Non-KCC farmer major occupation was farmer + service (42.50 per cent), which shows that the main occupations of KCC holders are farming as compared to Non-KCC holders, further the table shows that majority of the beneficiary farmer were earning around more than 1.50 lakhs annually (52.50 per cent) and Non-KCC majority farmer were earning 1.00 lakhs to 1.50 lakhs (42.50 per cent), which clearly indicate that KCC farmers were earning more as compared to Non-KCC farmers, respectively. Similar studies were carried out by Sharma and Singh (2001); Sharma *et al.*, (2016).

Table 6 reveals that the distribution of respondent according to their annual income was recorded maximum on 1,50,001 and above for the KCC holders with 52.50 per cent, whereas for the non-KCC holders it was found to be maximum on 1,00,001 to 1,50,000 with 42.50 per cent, respectively. Similar studies were carried out by Sharma and Singh (2001); Sharma (2006).

Table 1 : Distribution of respondents according to their age

S. N.	Category	KCC Beneficiaries		Non-KCC farmer	
		Number of respondent	Percentage of total	Number of respondent	Percentage of total
1.	20 to 30 years	3	7.50	3	7.50
2.	30 to 40 years	6	15.00	7	17.50
3.	40 to 50 years	18	45.00	14	35.00
4.	50 years and above	13	32.00	16	40.00
Total		40	100.00	40	100.00

Table 2 : Distribution of respondent according to their family size

S. N.	Category	KCC Beneficiaries		Non-KCC farmer	
		Number of respondent	Percentage of total	Number of respondent	Percentage of total
1.	Small family (up to 4)	1	2.50	2	5.00
2.	Medium family (5 to 8)	30	75.00	34	85.00
3.	Large family (above 8)	9	22.50	4	10.00
Total		40	100.00	40	100.00

Table 3 : Distribution of respondents according to their Education level

S. N.	Category	KCC Beneficiaries		Non-KCC farmer	
		Number of respondent	Percentage of total	Number of respondent	Percentage of total
1.	Illiterate	7	17.50	10	25.00
2.	Primary	10	25.00	17	42.50
3.	Middle	14	35.00	6	15.00
4.	Secondary	4	10.00	7	17.50
5.	Higher Secondary	2	5.00	0	0.00
6.	Graduate & above	3	7.50	0	0.00
Total		40	100.00	40	100.00

Table 4 : Distribution of respondent according to their operational land

S. N.	Category	KCC Beneficiaries		Non-KCC farmer	
		Number of respondent	Percentage of total	Number of respondent	Percentage of total
1.	Marginal (less than 1.00 ha)	6	15.00	14	35.00
2.	Small (1.01 to 2.00 ha)	25	62.50	24	60.00
3.	Medium (2.01 to 4.00 ha)	8	20.00	2	5.00
4.	Large (4.01 ha & above)	1	2.50	0	0.00
Total		40	100.00	40	100.00

Table 5 : Distribution of respondent according to their occupation

S. N.	Category	KCC Beneficiaries		Non-KCC farmer	
		Number of respondent	Percentage of total	Number of respondent	Percentage of total
1.	Farming	15	37.50	9	22.50
2.	Farming + Business	9	22.50	17	42.50
3.	Farming + Service	12	30.00	6	15.00
4.	Farming + Business + Service	4	10.00	8	20.00
Total		40	100.00	40	100.00

Table 6 : Distribution of respondent according to their annual income

S. N.	Category	KCC Beneficiaries		Non-KCC farmer	
		Number of respondent	Percentage of total	Number of respondent	Percentage of total
1.	Up to Rs. 50,000	1	2.50	0	0.00
2.	Rs. 50,001 to Rs. 1,00,000	5	12.50	11	27.50
3.	Rs. 1,00,001 to Rs. 1,50,000	13	32.50	17	42.50
4.	Rs.1,50,001 to above	21	52.50	12	30.00
Total		40	100.00	40	100.00

Table 7 reveals that the utilization pattern of KCC holders for the overall maximum borrower (47.50 per cent) partially utilized the amount of loan for the activity it was taken. Whereas, 32.50 per cent of the borrower fully utilized the loan for the purpose it was sanctioned, only 20.00 per cent of the borrower had least utilized the loan. Similar studies were carried out by Sharma (2002); Sharma *et al.*, (2016).

Table 8 reveals that the various income measures of farm business analysis were calculated for crop paddy and pineapple in study area, as farm business income, owned farm business income, family labour income, net income, farm investment income, benefit cost ratio was high for KCC farmer than non-KCC farmers. Similar studies were carried out by Sharma (2002); Sharma *et al.*, (2016); Sharma *et al.*, (2018).

Table 7 : Distribution of borrower according to loan utilization pattern

S. N.	Loan utilization	Numbers of respondent	Percentage of total
1.	Least utilized	8	20.00
2.	Partially utilized	9	47.50
3.	Fully utilized	13	32.50
Total		40	100.00

Table 8 : Farm business analysis of major crop cultivated in the study area

S. N.	Particulars	Paddy		Pineapple	
		KCC Holders	Non-KCC Holders	KCC Holders	Non-KCC Holders
1.	Farm Business Income	1,38,885.87	80,167.33	1,55,875.9	98,215.29
2.	Owned Farm Business Income	1,38,885.87	80,167.33	1,55,875.9	98,215.29
3.	Family Labour Income	1,37,455.87	78,877.33	1,54,260.9	96,783.29
4.	Net Income	1,28,111.19	72,320.06	1,43,973.2	87,672.91
5.	Farm Investment Income	1,31,909.87	75,217.33	1,48,048.9	91,590.29
6.	Benefit cost ratio	5.41: 1	4.49: 1	4.13: 1	3.60: 1

Conclusion

The majority of the KCC farmers were under 40 to 50 age group; whereas non-KCC farmers was above 50 aged group. So the KCC farmers were relatively younger than the non-KCC farmers. In operational land holding majority KCC farmers belonged to marginal category (50.00 per cent) followed by small category (35.00 per cent) land holding

and majority of non-KCC farmers belonged to small category (42.50 per cent) followed by medium category. KCC beneficiaries were found to earn more compared than non-KCC holder. In the present study it seen that the majority of the beneficiary farmer were earning around more than Rs. 1.50 lakhs annually (52.50 per cent) and Non-KCC majority farmer were earning Rs. 1.00 lakhs to Rs. 1.50 lakhs (42.50 per cent). So it shows that KCC farmers were earning more as compare to non-KCC farmers.The cost of cultivation of paddy was worked out to be Rs. 23,686.83 / ha in case of KCC beneficiaries; while Rs. 16,072.66 / ha in case of Non-beneficiaries and net return was Rs. 1,28,111.19 / ha and Rs. 72,320.00 / ha for KCC and Non- KCC respectively. In case of pineapple cultivation total cost was Rs. 34,607.00 / ha for KCC beneficiaries where net return was Rs. 3,24,014.10 / ha and in case of Non- beneficiaries total cost was Rs. 24,853.71 / ha and net return was Rs. 2,02684.91 / ha. It can be concluded that the net return for the KCC beneficiaries were more in comparison with the Non-KCC holders, respectively.

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Annexure - I:

Cost and return from paddy cultivation (Rs./ha)

S. N.	Particulars	KCC Beneficiaries	Percentage of cost	Non-KCC farmer	Percentage of cost
A.	Variable cost:				
1.	Hired labour	6500.00	27.44	4066.67	25.30
2.	Family labour	6976.00	29.45	4950.00	30.80
3.	Seed value	3590.83	15.16	2191.67	13.64
4.	FYM cost	3727.78	15.74	2633.33	16.38
5.	Interest on working capital	832.22	3.531	621.00	38.98
Total variable cost (TVC)		21626.83	91.30	14462.66	89.98
B.	Fixed cost				
6.	Imputed rental value of land	1000.00	4.22	1000.00	6.22
7.	Rent paid for leased in land	0.00	0.00	0.00	0.00
8.	Depreciation	630.00	2.66	320.00	1.99
9.	Land revenue	0.00	0.00	0.00	0.00
10.	Interest on fixed capital	430.00	8.69	290.00	1.80
Total fixed cost (TFC)		2060.00	100.00	1610.00	100.00
Total cost (TVC + TFC)		23686.83		16072.66	

11.	Cost A_1	15280.83	9832.67
12.	CostA_2	15280.83	9832.67
13.	Cost B_1	15710.83	10122.67
14.	Cost B_2	16710.83	11122.67
15.	Cost C_1	22686.83	15072.67
16.	Cost C_2	23686.83	16072.67
17.	Cost C_3	26055.51	17679.94
18.	Average yield (kg / ha)	*5138.89*	3000.00
19.	Average price (Rs./ kg)	30.00	30.00
20.	Gross income (Rs./ ha)	154166.70	90000.00
21.	Net income (Rs./ha)	128111.19	72320.06
22.	Benefit-cost Ratio (BCR)	5.41: 1	4.49: 1

ANNEXURE - II:

Cost and return from pineapple cultivation (Rs./ha)

S. N.	Particulars	KCC Beneficiaries	Percentage of cost	Non-KCC farmer	Percentage of cost
A.	Variable cost:				
1.	Hired labour	6386.00	18.45	5203.571	20.93
2.	Family labour	7827.00	22.61	6625.00	26.65
3.	Seed value	12705.00	36.71	7910.714	31.83
4.	FYM cost	4555.00	13.16	2821.429	11.35
5.	Interest on working capital	789.00	2.27	456.00	1.83
	Total cost (TVC)	**32262**	**93.22**	**23016.714**	**92.60**
B.	Fixed cost				
6.	Imputed rental value of land	1000.00	2.88	1000.00	4.02
7.	Rent paid for leased in land	0.00	0.00	0.00	0.00
8.	Depreciation	730.00	2.10	405.00	1.62
9.	Land revenue	0.00	0.00	0.00	0.00
10.	Interest on fixed capital	615.00	0.18	432.00	1.73
Total fixed cost (TFC)		2345.00	6.77	1837.00	7.40
	Total cost (TVC +TFC)	34607.00	100.00	24853.71	100.00
Cost concept					
11.	Cost A_1	25165		16796.71	
12.	CostA_2	25165		16796.71	
13.	CostB_1	25780		17228.71	
14.	CostB_2	26780		18228.71	
15.	CostC_1	33607		23853.71	
16.	CostC_2	34607		24853.71	
17.	CostC_3	38067.7		27339.09	
18.	Average yield (kg / ha)	18104.09		11501.2	
19.	Average price (Rs./ kg)	10.00		10.00	
20.	Gross income (Rs./ ha)	181040.9		115012.0	
21.	Net income (Rs./ ha)	142973.2		87672.91	
22.	BCR	4.31: 1		3.60: 1	