IMPACT OF AGRICULTURE CREDIT IN TAMIL NADU – FROM FARMERS PERSPECTIVE

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Keeping farmers in the farmland and ensuring them a life with basic needs met has become a challenge with the rapid urbanization, low income from agriculture, abject poverty, shifting of government's focus from agriculture, growth of other employment opportunities and the burden of doing agriculture. The government has declared agriculture lending under priority sector lending to ensure money is not the factor that keeps the farmer away from doing agriculture. Assuming that after crossing all the impediments agriculture credit has finally reached the hands of farmers the study aims to find whether the credit made the desired impact. The data collected were quantitatively analyzed by using different SPSS tools. The study classified the impact under three categories where in the first category the credit has a direct and a minimal impact on the basic needs of farmer. In the second category Agriculture Credit impacts the number of working days and food security of the farmers and also helps in facing the basic needs like education, health. However the second category and the first category of impact suggest that agriculture credit is yet to play a significant role in agriculture infrastructure development and improving the overall stature of an agriculturist. The third category recognizes that agriculture credit has an overall and well distributed contribution to farmers, but only to a minimum number of populations. The overall finding suggests that institutionalized agriculture credit still gives a great thrust for farmers to continue farming. The results shows that majority of the farmers are in the business of doing agriculture only due to government intervention and support. However, such support is not making them self reliant. The Agriculture credit plays a minimal role and covers less than one third of farmer helping them build proper agriculture infrastructure and make investments in machineries.

***Key words**: Agriculture credit, Impact of Credit*

INTRODUCTION

The need for agriculture credit was seen even during the British era where selective areas stricken by droughts were brought under institutional credit arrangements. The cooperative societies act passed in 1904 made cooperatives a premier organization for agriculture credit. When RBI act was passed in 1935, special provisions were made under section 54 of the act to start agriculture credit. Since then agriculture credit has become an integral part of Indian agriculture and the society bounded by it. Every year the agriculture credit target set by the government was met and in some states the credits disbursed crossed the set targets. Even then the farmers committing suicide is on rise. Percent of people depending on agriculture and its allied activities has come down to 56.7 percent (as per 1999-2000 census). The World Bank estimates that India is one of the highest ranking countries in the world for the number of children suffering from malnutrition, and the major contributors being rural India. Agriculture contribution to rural GDP has shrink by one-fourth.

"Rural India, in our view, is no longer an agrarian economy exposed to the vicissitudes of an erratic monsoon. All agriculture is rural by definition, but the converse is no longer true," And "In rural India, jobs are switching away from agriculture. In 1978, around 81 per cent of rural males considered agriculture as their primary job. This ratio fell to 67 per cent in FY05 and 55 per cent in FY10. The trend is similar for female rural employment as well", said Neelkanth Mishra and Ravi Shankar, (2012). Noting that increase in productivity and realization of reasonable price of agri-production is essential for the welfare of rural people, the Finance minister of India, Arun Jaitley, opined "We should commit to increase irrigation area, improve efficiency of distinct irrigation scheme, promoting agro-based industries, value addition, increasing farm income and reasonable prices for farmers produce.", in his first budget speech, thus emphasizing more on agriculture infrastructure development. However the desired impact from agriculture was never realized. Capacity building and basic infrastructure is the key to a sustained agriculture but the needs seem to be less met by the agriculture credit. Even the finance minister in his yearly budget opined the same. Agriculture credit, a succor given to farmers during drought time as become an essential commodity, but the impact stays rudimentary, touching only the bottom. Statistical data reveals various levels of impact; the study helps us learn from the perspective of farmers and people involved in agriculture activities on whether the credit has done a justifiable impact on agriculture and the community depending on it.

LITERATURE REVIEW

Ramesh Golait, (2007) says that the demand for agricultural credit arises due to i) lack of simultaneity between the realization of income and act of expenditure; ii) lumpiness of investment in fixed capital formation; and iii) stochastic surges in capital needs and saving that accompany technological innovations. The first and the foremost point emphasized by Ramesh Goliat is the realization of income which leads to meeting needs. Without the needs met there is no actual purpose for anyone to continue the business. And once the basic income needs are met, people move to the next level. Ramesh Golait, (2007) opined that One of the major impediments constraining the adoption of new technological practices, land improvements and building up of irrigation and marketing infrastructure has been the inadequacy of farm investment capital. Farmers seem to borrow more short-term credit in order to meet input needs to maintain continuity in agricultural operations without much worrying about long-term capital formation. It might be the case from supply side that short-term credit bears low credit risk, lower supervision and monitoring costs, and a better asset liability management. Rakesh Mohan, (2004) said that heavy dependence on borrowed funds by major agricultural credit purveyors. These have major implications for agricultural development as also the well being of the farming community. Mr. Ramesh Goliat and Mr. Rakesh Mohan have seen the missing impact on agriculture credit in agriculture infrastructure development and growing dependence of farmers on agriculture credit. Ramesh Goliat has also pointed out that the credits are availed mainly for input needs rather than capacity building needs. Richard L Meyer, (1990) said that "Production loans from financial institutions may not contribute much additionality to farm input use and output if, due to fungibility, they simply substitute for own savings or other sources of loans." And "Low interest led to excess demand for loans and the nonprice rationing that occurred often resulted in large loans to farmers with greater factor endowments, access to better inputs and technical information, and better management. This gives larger, more powerful farmers a reason to use their influence to get a larger share of the pie." The author has thrown a different perspective believing that loans are availed because it is cheap meaning the loans are not availed looking at the purpose it require one to serve. Loans are yet another option for rotating money in the business. Since the cheap loans are available it is invested in agriculture. Things may not be the same in case the credits are not available. So, agriculture is kept as an option by few farmers based on the availability of credit. Access to loans and loan size are usually correlated with land

ownership, particularly in underdeveloped formal financial systems. Therefore, inequalities in land are often at once the cause and the effect of credit market inequalities, as implied by Carter and Wiebe. The statement shows that the reach of the credit is biased to certain section of the society and it can considerably skew the nature of impact. Infrastructure development may be a high end objective of agriculture credit. The basic need is to increase the income and productivity. Sreeram (2007) concluded that increased supply and administered pricing of credit help in the increase in agricultural productivity and the well being of agriculturists as credit is a sub-component of the total investments made in agriculture. As per the Data of NABARD, The increased credit flow to agriculture has not resulted in the commensurate increase in production. The average rate of growth of food grains production decelerated to 1.2 per cent during 1990-2007, lower than annual rate of growth of population, averaging 1.9 per cent. Mir Kalan Shah, Humayun Khan, Jehanzeb And Zalakat Khan, (2008) found that if the credit were utilized properly it has substantial impact on the productivity and income.

RESEARCH OBJECTIVE

The primary objective of the study is to find out the impact of agriculture credit on the livelihood of farmers in Tamil Nadu

RESEARCH METHODOLOGY

Random sampling technique was used to collect primary data, through carefully structured questionnaire prepared after an extensive literature review, from farmers in three districts (Kanyakumari, Thirunelveli and Madurai) of Tamil Nadu. Farmers were sampled based on their land holding pattern with 82 percent of the farmers belonging to Marginal (53.3 percent) and Small (28.7 percent) land holding group. 18 percent of the farmers were from Semi-Medium (9.3 percent), Medium (Four percent) and Large (Four percent) land holdings groups. Type of crops cultivated was also considered to increase the scope of study and farmers spread across eight different type of crops were brought in. Annual expenditure on agriculture, annual gain on agriculture, type of loans availed, institutions approached, number of times credit facility is availed is also considered along with other demographic details such as gender, education and family type. Exploratory factor analysis is use to group variables into homogenous factors. Cluster analysis is carried out on the homogenous factors to arrive at heterogeneous clusters with varying level of contribution from the factors.

ANALYSIS AND INTERPRETATION

RELIABILITY TEST

According to Thordike, Cunningham, Thorndike & Hagen, (1991), reliability is an important tool to identify the errors of data and make a data to be fit for future research works. Cronbach's alpha is a measure of internal consistency and how close related a set of items are as a group.

Table 1: Reliability test

Cronbach's Alpha	N of Items
.840	10

The alpha coefficient of the ten variables under study is .840, suggesting that the items have high internal consistency.

DETERMINATION OF FACTORS

Factor analysis is used as a data reduction tool to find out the structure of relations between the variables. The number of factors to be extracted is determined using principal component method. The factors with Eigen value greater than one are extracted. The component matrix is further rotated by using Varimax rotation algorithm. The variance accounted for by the successive factors are shown in table 2

Table 2: Variance explained by factors

S. No	Factors	Total	% of Variance	Cumulative %
1	Component 1	4.158	41.584	41.584
2	Component 2	1.401	14.008	55.592
3	Component 3	1.079	10.793	66.385

The total variance explained by the three components with Eigen value greater than 1 is 66 percent; remaining 34 percent variance are explained by other variables. The factors are selected by taking higher factor loadings are specified below

ROTATED COMPONENT MATRIX

Table 3: Rotated component matrix

	Component		
	1	2	3
Agri. credit improves your social status and overall livelihood	.745		
Agri. credit makes you sufficient enough	.827		
Agri. credit helps to cope with and recover from Stress and Shock	.705		
Agri. credit helps to adapt modern technology	.589		
Agri. credit increases the number of working days			.861
Agri. credit increases food security			.833
Agri. credit improved access to modern health facilities		.555	
Agri. credit improved access to education		.720	
Agri. credit increased net income		.792	
Agri. credit increases production		.818	

Factors contained in component one was named Tertiary Need, component two was named Secondary Need and component three was named Primary Need.

FREQUENCY ANALYSIS OF IMPACT VARIABLES

For convenience and for better interpretation the five point scale of impacts are classified into three groups. Number of factors falling under each category and its mean frequencies are shown in the table 4

Table 4: Frequency analysis of impact variables

Factors and its variables	1 - 2.5 (No impact)		2.5 - 3.5 (Undecided)		3.5 - 5.0 (Positive impact)	
	Frequency	Percentage	Frequency	Percentage	Frequency	Percentage
Primary Need	192	32	46	8	362	60
Impact on Number of working days	102	34	27	9	171	57
Impact on Food security	90	30	19	6	191	64
Secondary Need	398	33	126	11	676	56
Impact on access to modern health facilities	113	38	32	10	155	52
Impact on improving access to education	95	32	37	12	168	56

Impact on net income	98	33	30	10	172	57
Impact on production	92	31	27	9	181	60
Teritiary Impact	719	60	93	8	388	32
Impact on adapting modern technology	178	59	20	7	102	34
Impact on coping up with shock and stress	167	56	23	8	110	36
Impact on helping farmers to stop borrowing further	194	65	25	8	81	27
Impact on overall status and livelihood	180	60	25	8	95	32

IDENTIFICATION OF FACTORS

PRIMARY NEED

The first factor is labeled as Primary Need. It contains two factors working days and food security. The variables in Primary Need factor explain the basic requirement that agriculture credit has to satisfy. It checks whether the agriculture credit keeps the farmer in the farmland, by measuring the impact on the increase in the number of working days and second it helps to identify whether the food security, the basic need for a farmer and for any human being is being satisfied choosing agriculture has an occupation.

Table 5: Primary Need

Si. No	Factors	Description of the factor statement	Factor Loadings
1	Number of Working days	Agriculture credit increases your number of working days	0.861
2	Food security	Agriculture credit increases your food security	0.833

The factor loadings of each variable are presented in the table 5. The frequency table 4 shows that 57 percent of the farmers accept that agriculture credit has increased the number of working days and 64 percent of farmers accept that agriculture credit has increased their food security. Overall agriculture credit plays its role in encouraging farmers to continue with agriculture.

SECONDARY NEED

The agriculture credit a farmer avails should have an impact on the production and net income. Though there are many other factors that can influence production such as monsoon, seed variety, disease control, proper maintenances of the field, timely harvest and other variables, sufficient agriculture credit at the right time will help farmers avail the factors of production like labour, seeds, fertilizers, pesticides, electricity and other supporting factors that will impact the production. Though increase in net income is another variable that can be affected by multiple sources a cheap and a hassle free agriculture credit will stop the entry of non institutional credit agencies that sucks a huge margin of farmers income has interest for the loans it provided. Also, Agriculture credit can stop intermediaries/middleman's who drain a huge amount of profit from farmers by purchasing the output at low cost intimidating them on the loans and the interest the farmers needs to pay. Access to education and modern health facilities are outcome of a financially strong family. Once they are financially strong their accessibility to modern health facilities becomes easier than before.

Table 6: Secondary Need

S. No	Factors	Description of the factor statement	Factor Loadings
1	Production	Agriculture credit increases production	0.818
2	Net Income	Agriculture credit increases your net income	0.792
4	Education	Agriculture credit has improved your access to education	0.72
3	Modern health facilities	Agriculture credit has improved your access to modern health facilities	0.555

Frequency analysis table 4 shows that 60 percent of the farmers accept that agriculture credit has a positive impact on the rise in production. 57 percent of the farmers accept the positive impact that agriculture credits have on increase in net income. 56 and 52 percent of farmers opined that agriculture credit has positive impact on access to education and in improving production respectively. Agriculture credit overall has a positive impact on all the variables in the factor "Secondary Need"

TERTIARY NEED

Overall improvement in livelihood, Impact of self sustainability, Impact on ability to meet shock and stress and impact on adapting modern technology are the factors under Tertiary Need. Once the primary and secondary needs of a farmer are met and once they settle down on agriculture as their main livelihood the need to build proper infrastructure and capacity building arise. Only for whom the fundamentals are strong can go on to build such infrastructure. When there is a positive Tertiary Need due to agriculture credit it means a farmer has become self reliable, he/she can faces all the stress and shocks in agriculture and his overall livelihood has improved. The farmer's ability to meet shock and stress comes with financial stability. Crop insurance, Crop failure relief fund and credit written off can play a role, but it all comes after the damage is done. The variable aims to study whether an unprecedented event can be faced by a farmer only with the help of the credit he/she has already availed.

The most important feature of any credit should be to make a person succeed and make him stop relying on credit every time he/she starts up. In simple words it should help the borrower self sufficient, self reliable and self sustainable over a period of time. A farmer should not be looking for subsidized credit all the time for the overall benefit of the economy, as the subsidized credit imposes a great burden in the fiscal. After five decades of receiving credit a farmer still looks for credit. The situation changes when there is an overall impact.

Table 7: Tertiary Need

S. No	Factors	Description of the factor statement	Factor Loadings
1	Stops availing it again	Once availing agriculture credit makes you sufficient enough to stop you avail agriculture credit again and again	0.827
2	Social status and livelihood	Your overall status and livelihood improved with the utilization of agriculture credit	0.745
3	To cope with stress and shock	Agriculture credit helps you to cope up with and recover from stress and shocks	0.705
4	Adapt modern technology	You can adapt modern technology with the help of agriculture credit	0.589

The frequency table 4 shows that 65 percent of the farmers are in need of subsidized agriculture credit continuously and their need for the loan has not diminished. 59 percent of farmers said that they were not able to adopt modern technology in farming with the help of agriculture credit. 56

percent of farmers believe that agriculture credit is not helping them to cope up with the shock and stress resulting from crop failure or bad harvest. A question whether the social status and livelihood improved got 60 percent negative response where the farmers perceive that their livelihood has not changes even after the credit requirements for agriculture was met by institutional credit.

SEGMENTATION OF THE DEGREE OF IMPACT

The degree of impact, agriculture credit has on farmers, are segmented by using K-means cluster algorithm. The procedure attempts to analyze the homogenous group of needs in to three different categories as shown in table 8. The mean value of each cluster which explains the characteristics of each cluster

Table 8: Final cluster centers and ANOVA table

Factors	Cluster				
	1	2	3	F	Sig
Primary Need	2.08 (III)	4.0 (I)	3.97 (I)	417.326	0.000
Secondary Need	2.62 (II)	3.31 (II)	3.95 (I)	91.599	0.000
Tertiary Need	2.06 (III)	2.24 (III)	3.74 (I)	238.743	0.000
Mean	2.25	3.18	3.89		
No. of cases in each cluster	99.00	108.00	93.00		
Total Percentage	33	36	31		

The ANOVA table indicates that Mean values of three clusters are significantly different. Here Primary Need is the factor with higher F value. This shows that this factor contributes more on discriminating the three degree of impact. The significant value of all the three factors is 0.000 which indicates that these three factors are contributing more on dividing the level of impact based on their variables the agriculture credit impacts in a farmer's life. 36 percent of the farmers are in cluster 2 where the impact on Primary Need is more and the Secondary Need is moderate with no impact of agriculture credit on the tertiary part. 33 percent of the farmers are in cluster 2 where the impact on Secondary Need is moderate and impact on primary and Tertiary Need by agriculture credit is less significant. 31 percent of farmers are in cluster three where all the three levels of impact are high.

CLUSTER CLASSIFICATION ON THE DEGREE OF IMPACT

SUBTLE IMPACT

The first category impact or the Subtle Impact suggests that even if agriculture credit doesn't increases the living standards of the farmers overnight it provides the basic sustenance to maintain status quo. Though the outcomes may not be encouraging the impact of agriculture credit in this scenario would not be overly discouraging. The farmers who may be in the verge of moving out from regular agriculture, but not sure what to be done and if they couldn't identify an alternative job or source of income the credit extended by institutions will keep them doing agriculture. Here the agriculture is done because the credit has been extended. The role of agriculture credit in this scenario is to keep farmers in their business. Farmers see a moderate impact of the credit in production and net income which keeps them afloat. Also, the major impetus is the help done in supporting children's education and improving access to health facilities. Tertiary Need being impacted less in this case is acceptable as it is considered more as a highest level of impact, but the less influence on primary need might raise eyebrows asking us what keeps farmers afloat when their food security itself is not met. In that case let us not overlook the fact that 58 percent of the farmers engage in activities other than agriculture. 72 percent of farmers have annual other income of Rs 50, 000/ to Rs. 1.00 Lakh. In 70.7 percent of the households at least one family member is engaged in economic activities other than agriculture. MNREGAs and Public distribution scheme also ensure minimum sustenance and food security.

It shows that agriculture credit availability alone has become a sole reason for farmers to do agriculture. In the absence of institutionalized credit and governments support 33 percent of the farmers who sees a Subtle 'Status Quo' impact would have already left agriculture.

BASIC IMPACT

The "Basic Impact" has an attribute of a strong influence of agriculture credit on Primary Need, a moderate influence on Secondary Need and weak influence on Tertiary Need. 36 percent of the respondents belong to this group where they see a great impact of agriculture credit on the primary requirements like ensuring food security and increasing number of working days. From the day banks were directed by the government to take care of the primary needs of farmers the

credit infused inside the system has played a significant role in increasing the net income and production by sidelining middlemen's, usurers and other non institutional lenders. But, only to those who had the patience to avail the credit from government institutions after crossing all the impediments and without falling prey to the non institutional lenders. The impact on Education and health facility has other contributing factors where government is taking steps to take education to everyone. Agriculture credit alone cannot be taken as a single common denominator in making education and medical facilities reach the public and the farmers, however it has a role to play and the farmers firmly believe that it has done its role. Influence on Tertiary Need is less in the cluster. Thus the cluster believes that agriculture credit can play a pivot in ensuring farmers achieve their basic needs but capacity building and making farmers self reliable still stays as a distant dream.

CORE IMPACT

When the agriculture credit does it job in all directions not leaving any part untouched it is understood that the credit has done justification. Giving room for development, Agriculture credit has touched all levels of farmers, from marginal to large land holders. 31 percent farmers believe that Agriculture Credit has played its role in each and every variable that contributes to all the three factors (primary, secondary and Tertiary Need). They feel that agriculture credit is focused on the right direction. A high impact of agriculture credit on primary, secondary and Tertiary Need means that farmers are making use of the government schemes properly. When core impact is done then it becomes essentially the real focus group of agriculture credit. Further research should focus on extracting the demography and characters of this group and identify how agriculture credit was utilized by them. This will help in credit optimization which in turn will lead India into the second phase of 'Farming with Agriculture credit'.

RELIABILITY OF CLUSTER CLASSIFICATIONS

Discriminant analysis is a statistical tool to test reliability of classification of cluster. It is also used to determine the most prudent way to distinguish between groups. For that purpose the three factors (Primary, Secondary and Tertiary Need) are taken as predictors and the three categories of degree of impact are taken as grouping variables

Table 9: Eigen Values

Function	Eigen value	% of Variance	Cumulative %	Canonical Correlation
1	3.659[a]	78.8	78.8	.886
2	.985[a]	21.2	100.0	.704

Table 9 contains the Eigen values of the two discriminant factors and also its canonical correlation. Function 1 has larger Eigen value. It accounts for more amount of variance distributed the linear combination of variables. Function one has Eigen value greater than unity. This means that function one contributes good variability between two functions. The co-efficient of canonical correlation is also high for function one. This signifies that there exists a strong relation between two functions and three factors.

Table 10: Structure Matrix

	Function	
	1	2
Primary Need	.834*	-.518
Secondary Need	.401*	.173
Tertiary Need	.517	.800*

The structure matrix table 10 shows within group correlations of each independent variable with the canonical function. The strongest correlation of the Primary Need with function one is 0.834 and for Secondary Need is .401. The strongest correlation for Teritary impact with Function two is .800.

Z1= .834* Primary Need, Z2 = .401*Secondary Need and Z3 = .800* Tertiary Need

These two functions are significant discriminant functions which will explain the characteristics of investors.

Figure 1: Cluster classification of Impact variables

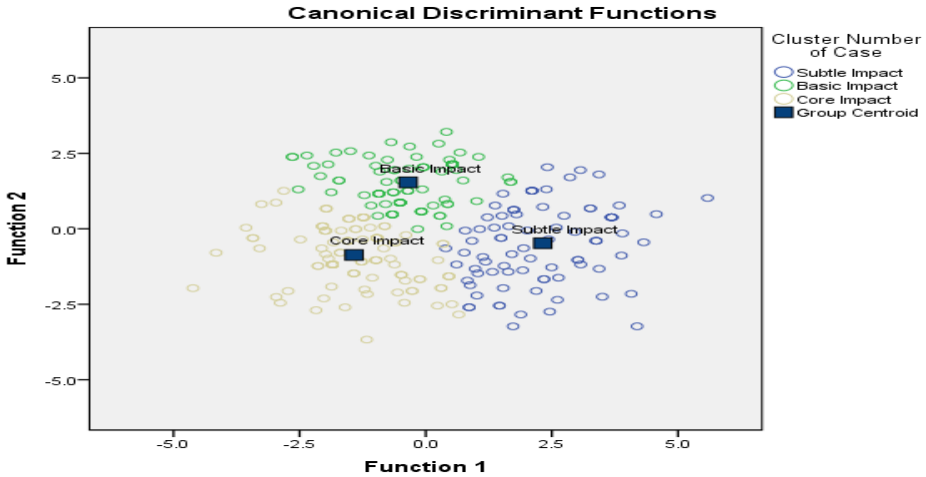


Figure 1 explains how well the clusters are distinctive with one another. The centroids of all the three clusters are distinctive and have different mean values. Further the clusters are aligned separately from other groups.

ASSOCIATION BETWEEN DEMOGRAPHIC VARIABLES AND DEGREE OF IMPACT

Pearson Chi Square test is used to find the relationship between demographic variables, agriculture profile of the farmers and the Degree of Impact.

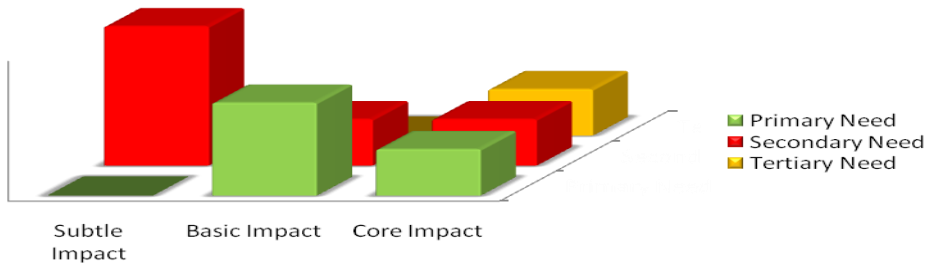
Table 11: Pearson Chi Square test

Si.No	Degree of Impact Vs Demographic Variables (Mentioned below)	Pearson Chi - Square		
		Value	df	Asymp. Sig. (2 - Sided)
1	Family Type	9.765	2	0.008
2	Prominent cultivated crops	33.928	14	0.002
3	Time of selling the output	18.726	8	0.016
4	Source of hand loans	13.154	6	0.041
5	Securities preferred by banks	12.812	6	0.046
6	Source of hand loans	14.128	6	0.028
7	Distance b/w house and credit institution	13.192	6	0.040
8	Percent utilization of agriculture credit for other activities	18.752	6	0.005

The above table shows a significant level of correlation between the demographic variables and degree of impact.

Chart 1 represents the three clusters where the level of impacts was categorized into three groups. The Subtle Impact group suggests that there is no impact of agriculture credit on the primary and tertiary needs of the farmer. In the group only the secondary need was subtly affected by the presence of agriculture credit. Since there is no impact on the primary and tertiary need and only a minimal impact on the tertiary needs it is ascertained that agriculture credit has no impact on the overall livelihood of farmers under this group. This suggests that agriculture credit is just used as a fillip and once the credit is removed there will be a reversal in status quo leaving a huge vacuum on the livelihood of farmers. Also, such credit is of no use as it plays role no significant role in capacity building and making farmers self reliant. 33 percent of the farmers see only the subtle impact of agriculture credit.

Chart 1: Degree of need in various impacts

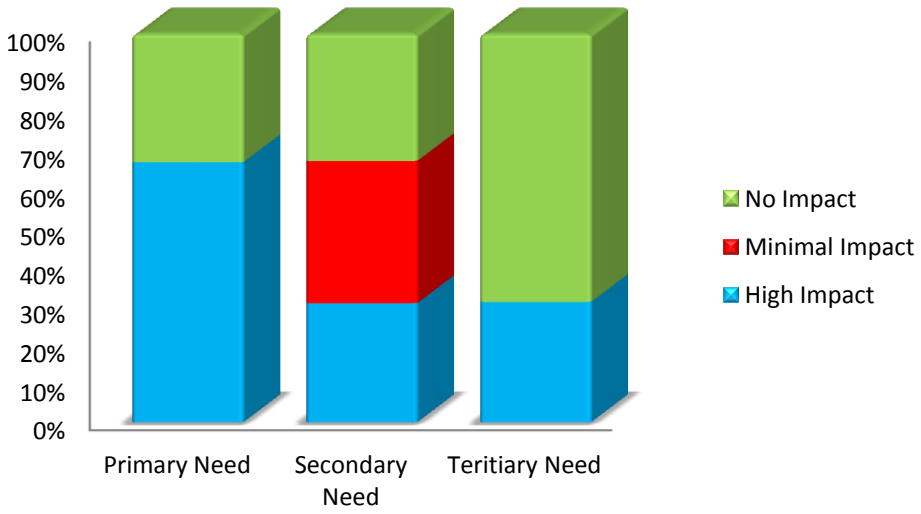


Basic impact suggests only the primary and secondary needs are satisfied by agriculture credit for the farmers in this group. 36 percent or the majority of the farmers are in this group. The secondary needs have only a minimal impact and there is no impact on Tertiary Need. Again, such impact gives reasons for them to stay in agriculture industry. Unlike the group under Subtle Impact this group doesn't do agriculture only because they get credit facility, but for the reason that they get a moderate living out of agriculture. However they are once again not a self reliant group or the group that feels that agriculture credit can improve their standards of living. They also lack capacity building and any stress and shock or a crop or monsoon failure can push them into Subtle impact group. The farmers under both this group i.e 69 percent of the farmers were

completely depended on agriculture not because they have well established themselves in this field or because they believe they can make a good livelihood of agriculture. The two groups do agriculture for the following reasons i. The personal sentiment attached to agriculture; ii. Agriculture is their only source of income; iii. They couldn't find an alternate job or source of income iv. Agriculture is not their major source of earning; v. They have other alternate source of earning; vi. Agriculture credit makes the job viable and helps them keep going vii. Waiting for the right time to leave agriculture; viii. Government policies keep encouraging them to do agriculture or; ix. Common belief that the situation might change in their favor; Apart from these reasons other food security schemes, health schemes and job guarantee scheme impact their livelihood so that the harsh realities faced through agriculture is subsidized though not nullified.

The third group is the Core Impact group where all their needs were satisfied by agriculture credit. They are the positive and successful face of Basic impact group, like Subtle Impact group being the negative side of Basic impact group. Proper, complete and right usage of credit, saving habit and prudent investment are the reasons for the existence of the group. Political, social and financial clout enjoyed by this group, mainly the medium and large land holding farmers, cannot be overlooked. Impact of agriculture credit on the tertiary need is felt only in this group. 31 percent of the farmers belong in this group. The Core Impact group sees maximum impact of agriculture credit on all the three needs.

Chart 2: Level of impact on various needs



It is evident from Chart 2 that agriculture credit has a very high impact on meeting the primary needs of the farmer i.e ensuring food security and increasing the number of working days. Majority of the agriculture credit has no impact on the tertiary needs of the farmers i.e making them self reliant, helping them adapt modern technology, protecting them from stress and shock and improve their overall livelihood. Only a moderate impact is seen on the secondary needs such as increasing net income, productivity and access to education and medical facilities. The study implies that 69 percent of the credit is not making impact on the livelihood of farmers and on agriculture industry. A lot has to be done on capacity building and agriculture infrastructure development. Long term credit facilities are availed by 3.7 percent of the farmers in the entire group and only 29.3 percent are availing medium term loans. 67 percent of the farmers are still reliant on short term loans use to purchase basic agriculture inputs.

From a socialistic perspective we could suggest the continuous availability of agriculture credit to farmers is essential to help them meet their basic needs in life or we can encourage farmer's cooperative with profit sharing motive to focus more on medium and long term loans to develop the infrastructure and move to the next level.

From a capitalistic perspective the loans given to 69 percent of the farmers are not making huge differences even after centuries. Thus agriculture credit should be gradually weaned out of the system for better utilization of capital resources and to meet the labour shortage in other industries. Only small, medium and large scale holding are to be focused more and they should be encouraged to avail more medium and long term loans at low interest rate. Subsistence agriculture cannot be useful for India in the days to come and the focus should be more on extensive agriculture with emphasis on basic agriculture infrastructure development, adaptation of modern machinery, human resource development and capacity building.

REFERENCES

1. Sunny Ibe Obilor, (2013) The Impact of Commercial Banks' Credit to Agriculture on Agricultural Development in Nigeria: An Econometric Analysis, International Journal of Business, Humanities and Technology Vol. 3 No. 1; January 2013

2. Anjani Kumar, K.M. Singh and Shradhajali Sinha, (2010), Instituitional Credit to Agriculture Sector in India: Status, Performance and Determinants, Agricultural Economics Research Review, Vol. 23, July – Decemnber 2010 pp 253 – 254.

3. Seemi Waheed, (2009), Does rural micro credit improve well-being of borrowers in The Punjab (Pakistan), Pakistan Economic and Social Review, Volume 47, No.1 (Summer 2009), pp. 31 – 47.

4. Mir Kalan Shah, Humayun Khan, Jehanzeb And Zalakat Khan, (2008), Impact Of Agricultural Credit On Farm Productivity And Income Of Farmers In Mountainous Agriculture In Northern Pakistan: A Case Study Of Selected Villages In District Chitral, Sarhad J. Agric. Vol.24, No.4, 2008

5. Abhiman Das, Manjusha Senapati and Joice John, (2007), Impact of Agricultural Credit on Agriculture Production: An Empirical Analysis in India, Reserve Bank of India Occasional Papers, Vol. 30, No. 2, Monsoon 2009.

6. Ramesh Golait, (2007), Current Issues in Agriculture Credit in India: An Assessment,

7. Reserve Bank of India Occasional Papers, Vol. 28, No. 1, Summer 2007.

8. Sriram M. S. (2007): 'Productivity of Rural Credit: A Review of Issues and Some Recent Literature', Indian Institute of Management Ahmedabad, Working Paper No.2007-06-01.

9. Robin Burgess and Rohini Pande, (2005), Do Rural Banks Matter? Evidence from the Indian Social Banking Experiment, The American Economic Review, Vol. 95, No. 3 (Jun., 2005), pp. 780-795

10. Rakesh Mohan, (2004), Agricultural Credit in India: Status, Issues and Future Agenda, Reserve Bank of India Bulleting, Nov. 2004.

11. Anil, B. and A. Bhulmall. 2000. A cooperative credit society's impact on credit demand in agricultural production. Econ. Affairs. Calcutta. 45(2): 86-91.

12. Richard L Meyer, (1990), Analyzing The Farm Level Impact Of Agricultural Credit: Discussion, Economics and Socilology, Occasional paper no. 1740.

13. Government of India, 'Economic Survey', various issues.