



# A Study on Awareness and Farmers Satisfaction of Agricultural Credit Schemes of Syndicate Bank in Pollachi Taluk of Tamil Nadu

D. Ann Pauline<sup>1</sup>, Dr.S.D. Sivakumar<sup>2</sup> and Raj Shravanthi Andukuri<sup>3</sup>

<sup>1</sup>Research Scholar, <sup>2</sup>Professor and Head, <sup>3</sup>Research Scholar  
Department of Agricultural and Rural Management,  
Tamil Nadu Agricultural University, Coimbatore, India.

## ABSTRACT

*The specific objectives of the study are to analyze the awareness and utilization of various agricultural credit schemes offered by Syndicate bank, to evaluate the awareness of electronic banking technology among farmers, to analyse the farmers satisfaction towards banking services of Syndicate Bank; and to examine the problems faced by farmers in availing credit. The villages were listed in alphabetical order; accordingly, six villages were selected by simple random sampling method. From each village twenty farmers, totally one hundred and twenty farmers were selected from the study area. Primary data was collected from sample farmers by personal interview with the aid of a pretested interview schedule. The data collected from the farmers included general particulars, social participation, farming experience, cropping details, source of irrigation, awareness about different agricultural credit schemes, source of credit information, credit availed, credit use pattern, repayment, awareness of electronic banking technology, farmer's satisfaction about banking services and problems faced.*

**Keywords:** Agriculture credit, Agricultural financing, Agriculture credit awareness, Microfinance.

## I. INTRODUCTION

Indian agriculture continues to play a vital role in the economy through its direct and indirect linkages with other sectors. The age old problem of rural credit has been the excessive reliance of farmers on money lenders and other informal sources that have entailed usurious interest rates and exploitation. The overall control of rural credit for the development of agriculture and rural sector was vested with the National Bank for Agriculture and Rural Development (NABARD) set up in 1982. It has been the apex bank for financing and promoting development of agriculture, small scale industries, cottage and allied activities in rural areas.

India has one of the most pervasive financial institutional networks in the world including over 32,000 rural branches of commercial banks and RRBs, 14,000 cooperative bank branches, 112,609 Primary Agricultural Credit Banks (PACB), approximately 1,000 microfinance institutions (MFIs), a large post office network with 154,000 only focused on deposit mobilization and 2.9 million Self-Help Groups (SHGs) (Rewa, 2008). Credit is a catalytic agent to lubricate the process of agricultural and rural development. Agricultural credit is a major component of rural credit, accounting for about 85 per cent of total rural credit. Within the banking system, Commercial banks continued dominate the total credit flow while Co-operative banks and RRBs lagged behind due to their relatively slower pace of adoption and/or implementation of reforms that are under way in the rest of the banking system. As

against the stipulated target of Rs 3,25,000 crore of credit flow to agriculture for 2009 – 10, the banking system disbursed Rs. 3, 66,919 crore (provisional) surpassing the target by 12.9 per cent.

The owners of small or marginal farms, who are non-viable or viable at the margin, and self-employed in the informal sector, cannot afford interest rates charged by informal sources (Khan *et al.*, 2011). The flow of investment credit to agriculture is constrained by a host of factors such as high transaction costs, structural deficiencies in the rural credit delivery system, issues relating to credit worthiness, lack of collaterals in view of low asset base of farmers, low volume of loans with associated high risks, high man power requirements (Ramesh, 2007). The commercial banks have now turned shy and felt that rural financing is costly and cumbersome (Gulati and Bathla, 2002).

Regional Rural Banks (RRBs) enjoyed a comparative advantage as a low cost banker in comparison to the commercial banks. However the RRBs suffer lack of operational freedom as they are tied to sponsor banks. As regard to the Co-operatives, their overall financial position is precarious, a three – tier hierarchy and absence of delivering comes in the way of rural lending and excessive bureaucratic control and politicization has compromised their democratic character and efficient functioning (Acharya, 2004). Indian rural credit market is confronted with a paradox of informal sources charging more than 20 per cent interest, keeping land or other assets as collateral securities and yet performing with high recoveries, whereas Rural Financial Institutions are charging half the interest without much of collateral security but facing huge payment defaults.

### **1.1 Problem Focus**

Currently, most banks operating in rural areas do not seem to be tailored to meet the needs of the rural poor in an efficient and effective manner. It is essential to increase awareness about the improvements in technology like e-banking. Agency banking, in the form of business facilitators and business correspondents, are the new forms which would facilitate better farmer-bank linkages. On a whole, it could be concluded that, the new lending schemes, developments in electronic banking to improve access to farmers and improved managerial practices has been introduced to mitigate the traditional constraints that deter financial institutions in providing one stop shop services to farmers. In the light of the developments, it is imperative to analyse the awareness and use of electronic banking by farmers, so as to understand the effectiveness of the change introduced. Hence, a study addressing all the above aspects was undertaken at Pollachi in Coimbatore District, which is basically an agricultural belt with progressive and innovative farmers.

### **1.2 Objectives of the study**

The main objective of the study is to analyse the farmers awareness and satisfaction of agricultural credit schemes of Syndicate Bank, Pollachi Taluk. The specific objectives of the study are

- i. To analyze the awareness and utilization of various agricultural credit schemes offered by Syndicate bank,
- ii. To evaluate the awareness of banking technology to the farmers,
- iii. To analyse the farmers satisfaction towards banking services of Syndicate Bank and
- iv. To examine the problems faced by farmers in availing credit.

## 1.2 Scope of the Study

The present study would help to get an overview about the awareness level among the farmers about the various loans offered for agriculture and problems faced by the farmers in availing credit. The study would throw a light on the use awareness of electronic banking and to analyse farmers satisfaction regarding the banking services offered by the Syndicate bank. This study would help both the farmers and the bank concerned to understand the issues relating to agricultural credit.

## 1.3 Review of Literature

**Ibrahim *et al.*, (2007)** reported that in Ethiopia, informal sector was the main source of credit in rural and urban areas. The study concluded that by reducing bureaucracy, transportation cost and other barriers in the way of credit disbursement will enhance the agricultural output.

**Kumar *et al.*, (2010)** studied implications of the economic crisis on Indian agriculture, the policy response and the future challenges to contain the negative impact of global economic crisis on Indian agriculture, and found that agricultural exports, the easiest indicator to measure the impact of any slowdown, was affected adversely. Recent estimates and projections for AgGDP for the ongoing fiscal and the next fiscal year are non-conclusive, the share of FDI in agricultural investment was negligible and the flow of institutional credit is more or less stable.

**Gulati *et al.*, (2002)** stated that the essential requirement of success in agricultural sector was that the interlocking of credit and input-output markets is in an intact manner.

**Mishra (2010)** suggested adopting several marketing strategies to retain and satisfy the customer. With the intention of increasing customer loyalty, banks must introduce innovative products and services.

**Agarwal (2009)** stated that e-banking will have two-fold effect, first, it will reach the remote consumer and second it would create the awareness among consumer about benefits of investment in different financial products. Investment in-turns would boost the financial markets and economy.

**Singh *et al.*, (2009)** reported that institutional credit has increased rapidly in recent years in Punjab, it still lacks behind the productive needs of the farmers. They reported that a farmer on an average has to incur Rs 4016 for obtaining a loan from commercial banks, which amounts to 5 per cent of the total loan obtained by him. About 59 per cent farmers reported the procedure to get loans is complicated and time-consuming.

**Sekar (2011)** reported the problems of rural credit to release the poor farmers in West Bengal from the clutches of the moneylenders. He stated that undue delay in granting credit, frequent visits by the borrowers to bank premises and credit deficiency seriously affected the borrowers

#### 1.4 Sample selection

The list of revenue villages in Pollachi south and Anaimalai blocks were collected, pooled and listed in alphabetical order. From the list, six revenue villages were selected by simple random sampling method. The list of revenue villages selected is given in Table 1.1. In each village, the lists of account holders were collected from the bank. In each village 20 farmers were selected by simple random sampling method. Thus the overall sample size worked out to 120 farmers.

#### 1.5 Data collection

Primary data were collected from the selected farmers by survey using well structured, elaborate and pre-tested interview schedule. The secondary information about the blocks were collected from the records of Assistant Director of Statistics and Joint Director of Agriculture, Pollachi South and Anaimalai blocks.

#### 1.6 Period of the study

Data were collected through field survey during the months of February and March 2011. The data collected from the farmers pertained to the year 2010 - 2011.

#### 1.7 Tools used

Keeping in view the specific objectives of the study, the data collected were subjected to following statistical analysis.

##### 1.7.1 Conventional Analysis

Simple percentages and averages were used to describe the general characteristics of the sample farmers which included age, gender, education level, occupation, farming experience, size of land holding, annual income etc.

##### 1.7.2 Garrett Ranking Technique (GRT)

GRT technique was used to rank the problems faced by the sample farmers while availing loan. The sample farmers were asked to rank each problem and these ranks were converted into percent position by using the following formula. **Per cent position =  $100 (R_{ij} - 0.05) / N_i$** . Where,  $R_{ij}$  = Rank given to  $i^{\text{th}}$  attribute by  $j^{\text{th}}$  individual and  $N_i$  = number of factors ranked by  $j^{\text{th}}$  individual.

##### 1.7.3 Tobit Regression

The Tobit model is a statistical model describing the relationship between a non-negative dependent variable  $Y_i$  and an independent variable (or vector)  $X_i$ . In order to identify the factors influencing awareness of farmers about the loans of Syndicate Bank, Tobit regression model was employed in this study.

#### **1.7.4 Data Reduction - Factor Analysis:**

To identify the underlying constructs and investigate the relationship among the variables that influence and determine the farmer's satisfaction towards the banking services, factor analysis was applied. In this study, a total of 27 statements on various aspects were selected. The farmers were asked to indicate on a 5 point scale whether they were highly satisfied, satisfied, neutral, not satisfied and highly dissatisfied. The responses of the farmers were recorded and score was given to each factor, then the scores were added to obtain the total score. To test the sampling adequacy, Kaiser-Meyer-Olkin measure of sampling adequacy was calculated. Principal component analysis was employed for extracting factors. Orthogonal varimax rotation was applied. The variables whose communalities were greater than 0.50 were retained. The factors with Eigen- values greater than 1.0 were considered and the analysis was done.

#### **1.8 Limitations of the Study**

The study has been carried out in Pollachi taluk of Coimbatore district. Hence any generalization of the results to the other parts of the state or country may be carried out with sufficient care and precaution.

## **II. ANALYSIS AND DISCUSSION**

### **2.1 General characteristics of the sample farmers**

General profile of farmers shows that major share of the sample farmers (39.17 per cent) were in the age group of 41-50 years. About 88 per cent of the farmers were literates. About 89 per cent of the sample farmers had agriculture as their sole occupation. About 54.17 per cent of farmers were living in nuclear family followed by 45.83 per cent living in joint families. About 60 per cent of farmers were members of farmers discussion group in the study area. The farmers have rich experience in farming with about 86.67 per cent of the farmers having 11 to 30 years of experience in farming. About 33.33 per cent of the sample farmers were medium farmers (2 to 5 hectares), 31.76 per cent were large farmers (>5 hectares) and 27.5 per cent were small farmers (1-2 hectares). The main source of irrigation in the study area was lift irrigation from rivers. Coconut was cultivated predominantly (76 per cent) in the study area, followed by groundnut, cholan, paddy and cereals. About 39 per cent of farmers earned Rs.3.01 – 4.00 lakhs (middle income category), followed by 27.50 per cent earning Rs.4.01 – 5.00 lakhs (high income category).

### **2.2 Awareness and utilization of different agricultural credit schemes offered by Syndicate bank.**

To evaluate awareness amongst the farming community about various schemes of agriculture offered by Syndicate bank, the data was analyzed and the results are presented in Table 2.11. It can be observed that, 99 per cent of farmers were aware of Synd Kisan Swarna (Gold loan). Secondly, farmers were aware of SKCC, which assured availability of credit that ensures reduced interest burden for the farmer. Among the schemes, awareness on credit schemes facilitating development of irrigation infrastructure like drip, sprinkler (57 per cent), farm mechanization (55 per cent) and land development schemes (47 per cent) were lower among the farmers in the study area.

### **2.3 Factors influencing the awareness of agricultural credit schemes – A Tobit function analysis**

Primary data was used to estimate the Tobit model to assess the change in one of the independent variables on the probability of awareness level of agricultural credit schemes of farmers. The factors used for the study were age, educational status, land holding pattern, farming experience, credit availed and social participation. The data were analysed and from the Table 2.12, significant factors responsible for awareness of the credit schemes by the farmers could be identified. Educational status of farmers did not have significant influence over awareness level.. An increase in size holding by one ha would result an increase in proportion of awareness by 0.26 times. Farmers with less experience were interested to know about more credit schemes. For every increase in the volume of credit, awareness level would increase by a probability of 0.08 times.

### **2.4 Relationship between land holding pattern and Awareness index**

Land holding pattern was found to have a profound effect on the awareness level of different agricultural credit schemes. So chi-square analysis was done to affirm the relationship.

Null hypothesis ( $H_0$ ): There is no association between land holding pattern and awareness index of the farmers.

Alternate hypothesis ( $H_1$ ): There is association between land holding pattern and awareness index of the farmers.

From the Table 2.13, it is observed that, the calculated chi-square value 40.643 was greater than table value 21.026, for 12 degrees of freedom at 5 per cent level significance. Hence the null hypothesis is rejected. It inferred that there was association between land holding pattern and awareness index of the farmers. Large farmers were well aware of all the five schemes, since larger land holdings demanded more credit, provided regular returns thereby prompted proper repayment, collaterals were available with documentation to facilitate utilisation of credit schemes. Small and medium farmers were mostly aware of SKS (Synd Kisan Swarna) and SKCC (Syndicate Kisan Credit Card) operating in Syndicate Bank as they required short term credit which ensured availability of credit instantly with a reduced interest burden for the farmers.

### **2.5 Sources of agricultural credit information**

The knowledge about the sources of information helps to choose the different channels to broadcast information among the farmers. The data were analyzed and the results are presented in Table 2.14. It could be inferred that besides credit institutions, it was the dealers of agricultural inputs who acted as the main source of information. It can be recommended that Syndicate Bank can arrange for contractual programs through dealers of inputs who establish a direct contact with the farmers on the credit and agricultural products.

## **2.6 Agricultural credit**

Credit should be timely and at reasonable terms to encourage the farmers to adopt sustainable agriculture (Perlas, 1993). To study the credit priorities in different portfolios of agricultural advances made by commercial banks and to give better insight into the credit details of sample farmers, the following details were analyzed.

### **2.6.1. Purpose of agricultural credit availed by the sample farmers**

Credit availed by the farmers helps to meet their diverse financial needs. It is evident from Table 2.15 that, about 58.33 per cent had availed credit for crop cultivation followed by 25.84 per cent for irrigation purposes. The maximum share of credit was distributed by Syndicate bank, with respect to crop loans followed by minor irrigation, farm mechanization, horticulture and other allied agriculture portfolios.

### **2.6.2. Sources of credit for the sample farmers**

The sources of credit indicate the different channels available for the farmers to get credit. All the sample farmers have availed loan from the case firm. Among the sample farmers 65 of them (54.17 per cent), had borrowed money from more than a single source. Table 2.16 shows that, there existed different sources for the farmers to borrow funds. PACBs were the major secondary source for availing credit followed by 10.83 per cent from money lenders. The marginal and small farmers are too poor to offer any assets as collateral, and hence are most vulnerable to harsh contracts of informal sources. This perhaps indicated the insufficiency of the loan amount sanctioned by the nationalized banks to meet their diverse needs for effective utilisation.

### **2.6.3. Average quantum of loan availed by the sample farmers**

Based on the amount of credit availed the sample farmers were categorised into four categories viz., less than Rs. 1 lakh, Rs.1 to 2 lakhs, Rs.2 to 3 lakhs and more than Rs. 3 lakhs. It is evident from the Table 2.17, Around 74 per cent of farmers availed low (Rs <1 lakh) credit amount. The Synd Kisan Swarna (SKS) facilitated small borrowing and repayment in shorter credit cycles. About 12.50 per cent availed (Rs 1 – 2 lakhs), which mainly covered investment in irrigation, farm mechanisation. About 13 per cent availed (Rs 2 – 5 lakhs) for investment and allied agricultural activities. The transaction cost of rural lending was high, mainly due to small loan sizes, high frequency of transactions, large geographical spread and heterogeneity of borrowers (Basu, 2007).

### **2.6.4. Credit utilization pattern of the sample farmers**

The results in the Table 2.18 indicated that, credit was mostly used as stated by the major share of the farmers, however, diversion (30 per cent) was reported in the case of short-term (working capital) loans for factors like consumption, education and emergency. It could be observed from the Table 2.19, About 66 per cent utilized for investment purpose. Diversion indicated 44 per cent for consumption, education, emergency and others. On comparing of the credit utilization pattern, diversion is more in investment loans than in crop loans probably due to long term repayments.

### **2.6.5. Source of funds for probable repayment**

The details on the source of funds such as farm income, redirect consumption finance, by sale of property and outside borrowings from money lenders or commission agents or from friends and relatives for repayment of the loans were analyzed and the results are presented in Table 2.20. Majority of farmers (39.17 per cent) stated that they repaid loan amount with farm income. More than 27.50 per cent of sample farmers borrowed from external sources like money lenders to repay the debt, 20 per cent would repay by redirecting consumption finance, while 13.33 per cent reported by way of sale of property. Normally, when new loans are sanctioned, the balances of the existing loans are adjusted. About 60.00 per cent of the sample farmers relied on other sources to repay, since they were not able to generate revenue from crops on time due to lack of proper marketing channels. In traditional sources, interest rates and contractual terms were harsh. All these affected the net income and repayment capacity of the farmers

### **2.6.6. Reasons for Non – repayment**

Expecting Government loan waiver schemes with an average score of 44.28 was ranked first among the sample farmers. The loan waiver has dampened the enthusiasm of banks to expand agricultural credit, since farmers were reluctant in repaying the availed loan which resulted in mounting defaults. Expectation of farm loan waiver does not discriminate between those who are wilful defaulters and those who are involuntary defaulters thereby rewarding morally hazardous behaviour. Diversion of funds ranked second to non-repayment. This trend can be avoided by timely sanction of adequate credit to the right person, supervision at regular intervals and borrowers' integrity to utilise the loan for the right purpose it was borrowed. Low productivity, natural calamities, weather risks, lack of access to technology, low availability of inputs including finance, withdrawal from agricultural activity etc. had been the common reasons for non- repayment.

## **2.7 Awareness of electronic banking technology among farmers**

With the development of secured electronic transaction technologies, banks are widely using electronic banking services. Table 2.22. indicated that, the farmers awareness were high on ATM services followed by credit and debit cards, core, online and tele banking. Currently, 72.50 per cent of farmers were aware and were using e-banking services on a consistent basis. E-banking ensured adequate management of information in a clear and comprehensible format. Bank should take strategic and proactive approach to undertake proportional advertising campaigns on information security.

## **2.8 Farmers satisfaction about banking services**

### **2.8.1 Results of factor analysis**

To identify the underlying constructs and investigate the relationship among the variables that influence and determine the farmers satisfaction, factor analysis was applied. In this study, a total of 27 variables were selected. To test the sampling adequacy, Kaiser-Meyer-Olkin measure of sampling adequacy was calculated as 0.705. It indicates that the sample was good enough for sampling. Principal component analysis was employed for extracting factors. Orthogonal varimax rotation was

applied. The variables whose communalities were greater than 0.50 were retained. The factors with eigen- values greater than 1.0 were considered. The Rotated factor matrix, eigen - values and percentage of variance along with communalities ( $h^2$ ) are presented in the Table 2.23. For the study, the eigen- values of the eight factors along with the cumulative percentage of the variance are shown in Table 2.24. The percentage of total variance as an index to determine how well the factor solution accounts was found to be 73.27 per cent.

**F1: Empathy:** Empathy is the cornerstone of genuine human relationships. This factor accounts for 25.09 per cent of the total variance. Table 2.25 gives the composition of the factor along with factor labels and loadings.

**F2: Responsiveness:** Willingness to help farmers and delivery of prompt information and services are the ingredients of responsiveness. This factor accounts for 13.57 per cent of the total variance. Table 2.26 gives the composition of the factor along with factor labels and loadings.

**F3: Service innovation:** The third factor that has emerged from analysis is the “Service innovation” and it accounts for 7.63 per cent of the total variance. Table 2.27 shows the three variables have been loaded on this factor.

In item 4, the statement, bank is giving loans to economically weaker and socially oppressed people, entrepreneurs, etc. with rigid loan conditions, security, flexible repayment facility and easy credit terms had the highest loading of (0.797), and the statement, bank is having branch locations in most of the places convenient to all the sectors of the society (e.g., villages, backward areas etc) had a loading of (0.639). In item 5, the statement, farmers feel safe and secure transacting with the bank had a highest loading of (0.795). In item 6, the statement, bank helps farmers plan their investments had a highest loading of (0.849). In item 7, the statement, farmers need not visit the bank repeatedly to get their problems solved had a loading of (0.773).

## 2.9 Problems faced by farmers in availing credit

The problems faced by the sample farmers while availing credit were analyzed using Garrett Ranking technique and the results are furnished in Table 2.29. Delay in sanctioning of loans was ranked first by the farmers, because in the existing set up, a file would take a number of days to move from one table to another for processing, since majority were crop loans, delayed disbursement had an adverse effect on farming. Secondly, cumbersome and time-consuming loan procedures and formalities like farmers must have their own accounts, reproduce the original documents and hypothecate the assets etc, constitute a major obstacle for farmers. Loans disbursed were inadequate, so some farmers experienced a high credit deficiency. Collateral, being more liquid and accessible is convenient for the bank, whereas farmers incurred expenses for documentation (property rights certificate from revenue department). Lack of transparency and high interest rate were added to the problems faced by farmers in availing credit. Results indicate that delay and cumbersome procedures can be simplified, timely response and adequate credit availability would facilitate a better and healthy interaction with the farmers.

### **III. FINDINGS AND SUGGESTIONS**

#### **3.1 Awareness of different schemes among the sample farmers**

About 99 per cent of farmers were aware of Synd Kisan Swarna (Gold loan) and 94 per cent farmers were aware of SKCC. Among the other schemes, awareness on credit schemes facilitating development of irrigation infrastructure like drip, sprinkler (57 per cent), farm mechanization (55 per cent) and land development schemes (47 per cent) were lower among the farmers in the study area. Land holding pattern and credit availed was found to significantly influence farmers' awareness on agricultural credit schemes.

Bank employees were promoting only two major schemes (SKCC and SKS). So efforts have to be taken to promote schemes relating to irrigation infrastructure, farm mechanisation and land development. The bankers have to assume the role of an extension worker in order to make farmers aware by conducting promotional and training programs in collaboration with the Department of Agriculture, KVKs etc. Bank can promote the 'Farmers Club' and use them as their extended arms. Advertisements on mass media can be exploited.

#### **3.2 Utilisation**

Diversion was high in investment loan (44 per cent of farmers) than crop loans (30 per cent of farmers). Farmers diverted loans for consumption, education and emergency. Farmers were sanctioned only one loan/period. Normally, when new loan are sanctioned, the balances of the existing loan was adjusted. Farmers expressed inadequacy of loan amount to meet requirements.

Farmers can be given more than one loan to meet requirements. Thereby the bank can become a one stop shop for the farmers. Lack of access by farmers to consumption loans from the banking system led to an increase of indebtedness especially to informal sources, Therefore different schemes can be formulated according to needs of farmers, timely sanction of the right amount of credit along with constant supervision at frequent intervals would serve the farming community better and control diversion of funds. The list of farmers repaying loan amount regularly can be monitored by a database thereby, additional loan amount can be offered based on the credit worthiness of farmers.

#### **3.3 Awareness of electronic banking technology**

Farmers awareness was high on ATM services followed by credit and debit cards, core banking and online banking.

Banks must attract rural farmers attention by creating awareness, indicate accessibility at home or at work, highlight its factors like convenience, usability and self-efficacy. Availability of sufficient support and in depth knowledge from the bank employees will significantly contribute to the adoption of electronic banking by the farmers. The young and middle aged are familiar with mobile phones and computers. This segment can be educated with electronic banking options.

### 3.4 Farmers satisfaction about banking services

Factor analysis revealed that the factors such as empathy, responsiveness, service innovation, safe and secured transaction, investment planning, complaint redressal had positively contributed towards the increase in farmers satisfaction on the banking services of Syndicate Bank. The farmers were not satisfied with tangible component like physical facilities and layout.

The tangibles component which measures factors such as appearance of a bank's physical facilities and infrastructure can be rearranged. The bank layout can be designed to give more space to customers to transact business. The signs, symbols, advertisement boards, pamphlets and other artifacts in the bank should be visually appealing and properly placed so as to guide the farmers.

### REFERENCES

- [1] Acharya, S. S., (2004), "Agricultural Marketing and Rural credit: Status, Issues and Reform Agenda", *Working paper, Technical Workshop of Policy Research Networking Project*, p.25- 27.
- [2] Agarwal R., Rastogi S., Mehrotra A., (2009), "Customers' Perspectives Regarding e-banking in an Emerging Economy", *Journal of Retailing and Consumer Services*, 16(2): 340 -351.
- [3] Bhende, M.J., (1986), "Credit Markets in Rural South India", *Economic and Political Weekly*, 21(38 and 39): 119-124.
- [4] Deb, Sharmistha and Meenakshi Rajeev., (2007), Banking on 'Baniyas' for Credit. *Economics and Political Weekly*, 42(2): 280-283.
- [5] Department of Economic Affairs., (2008), Economic Division *Monthly Economic Report*, 8(1).
- [6] Desai, V.V., (1976), "Agricultural Credit", *Eastern Economist*. 67(2): 82-92.
- Gulati, A. and Bathla, S., (2002), "Institutional Credit to Indian Agriculture", Defaults and Policy Options", Occasional Paper-23, *NABARD*.
- [7] Hoff, Karla and Joseph E.Stiglitz., (2005), "Imperfect Information and Rural Credit Markets: Puzzles and Policy Perspectives", *The Economics of Rural Organization, Theory Practice and Policy*. Edited by Karla, Hoff, Avishay Braverman and Joseph E. Stiglitz, (London: Oxford University Press,).
- [8] Ibrahim G, Kedir A and Sebastián Torres., (2007). "Household-level Credit Constraints in Urban Ethiopia": *Working Paper No.07/03* Department of Economics, School of Oriental and African Studies, University of London, Nottingham Business School, Nottingham Trent University, UK.
- [9] Khan, Rana Ejaz Ali; Hussain, Tanveer., (2011), "Demand for Formal and Informal Credit in Agriculture": A Case Study of Cotton Growers in Bahawalpur, *Interdisciplinary Journal of Contemporary Research in Business* 2(10): 308-314.
- [10] Kothari, C. R., (2004), "*Research Methodology – Methods and Techniques*", (New Delhi Age International Private Limited: New Delhi), p.184-186.
- [11] Kumar, Anjani Shinoj, P. Joshi, P. K., (2010), "Global Economic Crisis and Indian Agriculture: Impacts and Perspectives", *Indian Journal of Agricultural Economics*, Bombay, India, p.508-519.
- [12] Lal, R.C. and Lawania., (1986), "Impact of Co-operative Credit on Agricultural Production and Income", *Indian Co-operative Review*, 23 (3): 264-276.

- [13] Leeladhar, V., (2005), Deputy Governor of the Reserve Bank of India, “*Speech on Taking Banking Services to the Common Man*” – Financial Inclusion, IIBF.
- [14] Mishra Anubhav Anand., (2010), "Factors Affecting Customer Satisfaction and their Relative Importance in the Retail Banking Sector: An Empirical Study", *The IUP Journal of Management Research*, 9(3): 7.
- [15] National Bank for Agriculture and Rural Development., (NABARD) (2007), *Annual Report on Rural Credit*.
- [16] National Bank for Agriculture and Rural Development., (NABARD) (2010), *Annual Report of the Expert Committee on Rural Credit*.
- [17] Ramesh Golait., (2007), “Current Issues in Agriculture Credit in India: An Assessment”; *Reserve Bank of India, Occasional Papers*, 28(1): 15.
- [18] Rao, and C.H. Hanumantha., (1970), “Farm Size and Credit Policy”, *Economic and Political Weekly*, 5(52): 161-169.
- [19] Reserve Bank of India., (1989), Report of Agricultural Credit Review Committee, A Review of Agricultural Credit System in India, *Reserve Bank of India*, Bombay.
- [20] Sekhar Chatterjee., (2011), “Rural Banking Services: Inadequate for the Target Groups”, *Continental J. Social Sciences*, 4 (1): 24 – 32
- [21] Singh, S., Manjeet Kaur and Kingra, K. S., (2009), “Inadequacies of Institutional Agricultural Credit System in Punjab State”, *Agricultural Economics Research Review*, 22(4): 309-318.
- [22] Tobin, James., (1958), "Estimation of relationships for limited dependent variables", *Econometrica* (The Econometric Society) 26 (1): 24–36
- [23] Varshney, R. L. and Gupta, S. L., (2004), “*Marketing Management: An Indian Perspective*”, (New Delhi : Sultan Chand and Sons educational publishers), p.314.
- [24] Venugopal, M. and G. Perumal., (1991), “Farmers Knowledge on Dry land Technology and its Importance in Adoption”, *Rural Development Review*, 19(3-4): 11-14.

## FIGURES AND TABLES

**Table 1.1. List of selected villages**

S.No	Village	Total No. of farmers	No. of SB Account holders	No. of farmers selected
1	Anaimalai	473	172	20
2	Ambarampalayam	277	198	20
3	Athupollachi	212	170	20
4	Marchinaickenpalayam	1053	867	20
5	Odayankulam	636	411	20
6	Periapodu	539	356	20
	<b>Total</b>	<b>3190</b>	<b>2174</b>	<b>120</b>

**Table 2.1. Age of the sample farmers**

S. No.	Age category	Number of farmers	Percentage
1.	Below 30 years	18	15.00
2.	31 - 40 years	27	22.50
3.	41 – 50 years	47	39.17
4.	Above 50 years	28	23.33
	<b>Total</b>	<b>120</b>	<b>100.00</b>

**Table 2.2. Educational status of the sample farmers**

S.No	Educational status	Number of farmers	Percentage
1.	Illiterate	14	11.67
2.	Elementary (1-5 yrs)	44	36.67
3.	Higher Secondary (6-12 yrs)	46	38.33
4.	Graduate	10	8.33
5.	Post Graduate	6	5.00
	<b>Total</b>	<b>120</b>	<b>100.00</b>

**Table 2.3. Occupational status of the sample farmers**

S.No	Occupational status	Number of farmers	Percentage
1.	Primary	107	89.17
2.	Secondary	13	10.83
	<b>Total</b>	<b>120</b>	<b>100.00</b>

**Table 2.4. Family type of the sample farmers**

S.No	Family type	Number of farmers	Percentage
1.	Joint family	55	45.83
2.	Nuclear family	65	54.17
	<b>Total</b>	<b>120</b>	<b>100.00</b>

**Table 2.5. Social participation of the sample farmers**

S.No	Particulars	Number of farmers	Percentage
1.	Farmers club member	72	60.00
2.	Not a part of farmers Club	48	40.00
	<b>Total</b>	<b>120</b>	<b>100.00</b>

**Table 2.6. Farming experience of the sample farmers**

S.No	Farming experience (years)	Number of farmers	Percentage
1.	Less than 10	16	13.33
2.	>10 – 20	56	46.67
3.	More than 20	48	40.00
	<b>Total</b>	<b>120</b>	<b>100.00</b>

**Table 2.7. Size of land holding of the sample farmers**

S. No	Land holding category (in ha)	Number of farmers (Percentage)	Average land holding (in ha)
1.	Marginal (<1)	9 (7.50)	0.81
2.	Small (1-2)	33 (27.50)	1.67
3.	Medium (2-5)	40 (33.33)	4.42
4.	Large (>5)	38 (31.67)	7.64
	<b>Total</b>	<b>120 (100.00)</b>	

(Figures in parentheses indicate percentage to total)

**Table 2.8. Cropping pattern of the sample farmers**

S. No	Crops	Area (in ha)	Percentage
1.	Coconut	405.50	76.58
2.	Ground nut	42.83	8.09
3.	Cholam	30.60	5.78

4.	Paddy	17.84	3.37
5.	Cowpea	13.07	2.47
6.	Sugarcane	11.33	2.14
7.	Maize	8.31	1.57
	<b>Total</b>	<b>529.52</b>	<b>100.00</b>

**Table 2.9. Source of irrigation for the sample farmers**

S. No	Source of irrigation	Number of farmers	Percentage
1.	Lift irrigation	61	50.84
2.	Bore well	52	43.33
3.	Open well	7	5.83
	<b>Total</b>	<b>120</b>	<b>100.00</b>

**Table 2.10. Annual income of the sample farmers**

S. No	Annual income (Rs)	Number of farmers	Percentage
1.	Up to 2.00 lakhs	13	10.83
2.	Semi - Medium (2.01 – 3.00 lakhs)	18	15.00
3.	Medium (3.01 – 4.00 lakhs)	47	39.17
4.	High (4.01– 5.00 lakhs)	33	27.50
5.	Very High (>5.01 lakhs)	9	7.50
	<b>Total</b>	<b>120</b>	<b>100.00</b>

**Table 2.11. Awareness of agricultural credit schemes of Syndicate Bank**

S.No	Details of the schemes	Aware (Per cent)
1.	Synd Kisan Swarna (SKS)	99
2.	Syndicate Kisan Credit Card Scheme (SKCC)	94
3.	Development of irrigation infrastructure	57
4.	Farm mechanization schemes	55
5.	Land development schemes	47

**Table 2.12. Effects of independent variables on the awareness of agricultural credit schemes**

SI No.	Factors	Coefficient	Standard Error	t	P>  t
1.	Education	0.0121	0.0208	0.59	0.559
2.	Land holding pattern	0.2651	0.0375	7.07	0.000
3.	Experience	-0.0525	0.0302	-1.74	0.085
4.	Credit availed	0.0886	0.0257	3.45	0.001
5.	Social participation	-0.1082	0.0419	-2.58	0.011
6.	Constant	0.3658	0.0747	4.89	0.000
	<b>Summation</b>	<b>0.2188</b>	<b>0.0146</b>		

**Table 2.13. Relationship between land holding pattern and awareness index**

SI No.	Land holding pattern (Ha)	Awareness index					Total
		0.2	0.4	0.6	0.8	1	
1.	Marginal (<1)	3	6	0	0	0	9
2.	Small (1-2)	2	16	2	4	9	33
3.	Medium (2-5)	1	17	1	3	18	40
4.	Large (>5)	0	9	0	1	28	38
5.	<b>Total</b>	<b>6</b>	<b>48</b>	<b>3</b>	<b>8</b>	<b>55</b>	<b>120</b>
	Chi- square value 40.643	Degrees of freedom 12			Table value 21.026		

**Table 2.14. Sources of agricultural credit information**

S.No	Sources of Information	Types of farmers			Total	Per cent
		Marginal & Small	Medium	Large		
1.	Credit Institution	10	13	12	35	29.17
2.	Dealers of agricultural inputs	22	8	2	32	26.67
3.	Friends & Relatives	5	1	13	19	15.83
4.	Advertisement	4	4	5	13	10.83
5.	Others	1	14	6	21	17.50
	<b>Total</b>	<b>42</b>	<b>40</b>	<b>38</b>	<b>120</b>	<b>100.00</b>

**Table 2.15. Purpose of agricultural credit availed by the sample farmers**

S. No	Purpose of credit availed	Types of farmers			Total	Per cent
		Marginal & Small	Medium	Large		
1.	Crop cultivation	20	27	23	70	58.33
2.	Irrigation	15	9	7	31	25.84
3.	Farm mechanization	7	3	5	15	12.50
4.	Allied activities	Nil	1	3	4	3.33
	<b>Total</b>	<b>42</b>	<b>40</b>	<b>38</b>	<b>120</b>	<b>100.00</b>

**Table 2.16. Sources of credit for the sample farmers**

S. No	Sources of credit	Types of farmers			Total	Per cent to sample size (n = 120)
		Marginal & Small	Medium	Large		
1.	Commercial banks	2	1	2	5	4.17
2.	Primary Agricultural Co- operative banks	1	9	17	27	22.50
3.	Friends and Relatives	2	5	3	10	8.33
4.	Money lenders	11	2	0	13	10.83

**Table 2.18. Credit use pattern of crop loan of the sample farmers**

S.No	Credit use pattern	Types of farmers			Total	Per cent
		Marginal & Small	Medium	Large		
1.	For the same purpose – Crop loan	23	9	17	49	70.00
	<b>Diversion of funds</b>					
2.	Consumption	2	1	3	6	8.57
3.	Education	1	5	4	10	14.29
4.	Emergency	1	4	Nil	5	7.14
	<b>Total</b>	<b>27</b>	<b>19</b>	<b>24</b>	<b>70</b>	<b>100.00</b>

**Table 2.19. Credit use pattern of investment loan of the sample farmers**

Sl. No	Credit use pattern	Types of farmers			Total	Per cent
		Marginal & Small	Medium	Large		
1.	For the same purpose – Investment loan	10	12	11	33	66.00

Diversion of funds						
2.	Consumption	3	3	Nil	6	12.00
3.	Education	1	2	Nil	3	6.00
4.	Emergency	1	1	Nil	2	4.00
5.	Others	Nil	3	3	6	12.00
<b>Total</b>		<b>15</b>	<b>21</b>	<b>14</b>	<b>50</b>	<b>100.00</b>

**Table 2.20. Source of funds for probable repayment**

Sl. No	Source of funds	Number of farmers			Total	Per cent
		Marginal & Small	Medium	Large		
1.	Farm income	14	16	17	47	39.17
2.	Redirect consumption finance	10	7	7	24	20.00
3.	Sale of property	6	8	2	16	13.33
4.	Outside borrowings	12	9	12	33	27.50
<b>Total</b>		<b>42</b>	<b>40</b>	<b>38</b>	<b>120</b>	<b>100.00</b>

**Table 2.21. Reasons for Non – repayment**

(n = 65)

S.No	Reasons for Non repayment	Average Garrett Score	Rank
1.	Expecting Government loan waiver schemes	44.28	I
2.	Diversion of funds	32.14	II
3.	Willful default	23.85	III
4.	Natural calamities (drought & flood)	22.14	IV
5.	Withdrawal from activity	20.85	V

**Table 2.22. Awareness about e-banking technology among farmers**

S.No	E – Banking Services	Number of farmers	Percentage to n = 120
1.	ATM	87	72.50
2.	Credit card & Debit card	70	58.33
3.	Core banking	54	45.00
4.	Online banking	23	19.17
5.	Tele banking	12	10.00

**Table 2.23. Rotated Component Matrix**

Sl No.		Factors								Communalities ( $h^2$ )
		1	2	3	4	5	6	7	8	
1	BPES	0.271	0.395	0.483	0.250	0.023	0.047	-0.050	0.255	0.596
2	BOCRS	-0.015	0.096	<b>0.872</b>	0.025	0.201	0.153	-0.132	-0.056	<b>0.854</b>
3	BACAO	0.089	0.192	<b>0.725</b>	0.122	0.108	0.098	0.247	-0.236	0.723
4	BETSC	0.064	0.018	<b>0.832</b>	0.058	-0.255	0.076	0.213	0.087	<b>0.825</b>
5	ECFPR	0.137	<b>0.576</b>	0.303	-0.161	-0.397	0.336	-0.068	-0.130	0.759
6	EPATI	<b>0.879</b>	-0.033	0.009	0.054	-0.138	-0.197	0.077	0.113	<b>0.854</b>
7	BSRNQ	0.568	0.016	0.225	0.400	0.244	0.180	-0.129	0.271	0.715
8	BCOH	0.407	-0.054	0.113	0.153	0.271	-0.019	0.103	0.677	0.748
9	LDMCT	<b>0.668</b>	-0.078	0.312	0.282	0.361	0.006	0.075	0.253	<b>0.829</b>
10	SAPAVF	<b>0.649</b>	0.095	0.343	0.259	0.439	0.053	0.015	-0.052	<b>0.814</b>

Sl No.		Factors								Communalities ( $h^2$ )
		1	2	3	4	5	6	7	8	
11	EWDKS	0.097	<b>0.773</b>	0.281	-0.142	-0.055	0.027	-0.041	-0.029	0.712
12	ADSFA	0.283	0.444	0.353	-0.223	0.204	-0.005	0.252	0.304	0.649
13	IPBA	0.450	0.311	0.142	0.486	0.053	0.407	-0.165	0.224	<b>0.802</b>
14	BMCS	0.258	-0.034	0.100	0.639	0.007	0.346	0.034	0.107	0.618
15	BFPI	-0.052	-0.074	0.212	0.042	0.036	<b>0.849</b>	0.058	-0.066	0.785
16	FSAO	0.419	-0.072	-0.046	0.152	0.175	-0.006	0.460	-0.267	0.519
17	BEAC	-0.115	0.450	-0.081	0.244	0.159	0.476	0.284	-0.183	0.648
18	FNVBR	0.219	-0.125	0.171	-0.151	-0.032	-0.010	<b>0.773</b>	0.243	<b>0.774</b>
19	EFAF	<b>0.735</b>	0.177	0.115	-0.106	0.337	0.180	0.072	-0.105	<b>0.759</b>
20	ATBC	0.133	0.147	0.293	-0.156	0.193	0.086	0.091	-0.635	0.606
21	BPINS	-0.132	<b>0.741</b>	-0.044	0.219	0.154	0.033	0.219	-0.040	0.690
22	FEFRB	-0.105	0.374	0.125	0.159	0.050	0.200	0.667	-0.193	0.716
23	ESPPRS	0.027	<b>0.776</b>	-0.022	0.139	0.177	-0.220	-0.141	-0.164	0.749
24	FSTWB	0.166	0.260	0.022	-0.165	<b>0.795</b>	0.111	0.060	0.001	<b>0.771</b>
25	ERFRP	0.106	<b>0.569</b>	0.212	-0.150	0.273	0.423	0.072	0.295	0.748
26	BLEWC	0.083	0.061	0.060	<b>0.797</b>	-0.125	-0.130	0.047	0.049	0.687
27	CREBF	<b>0.887</b>	0.038	-0.108	0.079	-0.127	-0.025	0.097	0.008	<b>0.832</b>

Extraction Method: Principal Component Analysis (PCA)

Table 2.24. Total variance explained

Factors	Total variance explained		
	Initial eigen-values	Per cent of Variance	Cumulative Percentage
1	6.775	25.092	25.092
2	3.663	13.566	38.658
3	2.059	7.625	46.284
4	1.888	6.994	53.278
5	1.606	5.947	59.225
6	1.418	5.251	64.476
7	1.284	4.754	69.230
8	1.090	4.038	73.268

Table 2.25. Empathy

Label	Variables	Loading
CREBSF	The cordial relationship among the bank employees contributes towards providing better services to farmers.	0.887
EPATI	Employees provide adequate and timely information	0.879
EFAF	Employees of bank are friendly in attitude towards farmers	0.735

Table 2.26. Responsiveness

Label	Variables	Loading
ESPPRS	Bank employees have a sense of public responsibility, by being punctual, regular and sincere.	0.776
EWDKS	Employees are well trained and can provide detailed knowledge on schemes rendered.	0.773
BPINS	Bank provides information for all the new banking services introduced.	0.741

Label	Variables	Loading
BOCRS	Banks offer a complete range of services	0.872
BETSC	Banks enhances technological capability (e.g., computerisation, networking of operations ) to serve customers more efficiently.	0.832
BACAO	The bank's ATM network collaborates with the ATM services of other banks.	0.725

Factors	Variables	Ranking
<b>Factor 1</b>	The cordial relationship among the bank employees contributes towards providing better services to farmers	I
	Employees provide adequate and timely information	II
	Employees of bank are friendly in attitude towards farmers	III
<b>Factor 2</b>	Bank employees have a sense of public responsibility, by being punctual, regular and sincere	IV
	Employees are well trained and can provide detailed knowledge on schemes rendered	V
	Bank provides information for all the new banking services introduced	VI
<b>Factor 3</b>	Banks offer a complete range of services	VII
	Banks enhances technological capability (e.g., computerisation, networking of operations etc.) to serve customers more efficiently	VIII
	The bank's ATM network collaborates with the ATM services of other banks	IX
<b>Factor 4</b>	Bank is giving loans to economically weaker and socially oppressed people, entrepreneurs, etc. with rigid loan conditions, security, flexible repayment facility and easy credit terms	X
	Bank is having branch locations in most of the places convenient to all the sectors of the society (e.g., villages, backward areas etc)	XI
<b>Factor 5</b>	Farmers feel safe and secure transacting with the bank	XII
<b>Factor 6</b>	Bank helps farmers plan their investments	XIII
<b>Factor 7</b>	Farmers need not visit the bank repeatedly to get their problems solved	XIV
<b>Factor 8</b>	Bank has convenient operating hours	XV

S.No	Problems faced	Average score	Rank
1.	Delay in sanctioning loans	59.71	I
2.	Cumbersome procedures and formalities	57.71	II
3.	Inadequate disbursement of loan	55.32	III
4.	Collateral requirements	54.15	IV
5.	High processing fee	47.71	V
6.	Lack of transparency of bankers	46.78	VI
7.	High interest rate	41.73	VII