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**Department of Management, North- Eastern Hill University**
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# International Journal of Applied Management Research

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# Growth and Development of Government Bond Market in Bangladesh: Analysis of Influencing Factors

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**Abstract:**

Treasury Bond Market dominates over corporate bond market with respect to size, number of products, growth, etc. in developing country. The Treasury bond market holds the major share in the bond market of Bangladesh. The present study has been undertaken aiming at identifying the factors influencing the growth and development of Treasury Bond Market by employing sophisticated multivariate technique- Varimax Rotated Factor Analysis. The study has collected and used both primary and secondary data for analysis. It has found that the average market capital is Tk. 88826.77 million. The share of government bond to total market capital was 13.715% on an average during the study periods. The growth in share of government bond to total market capital has been increasing at the increasing rate over the study periods. The study has identified four most significant factors. They are Trade and Reporting Factor, Standardization Factor, Financial and Regulatory Environment Factor, and Tax at source Factor in order of their magnitudes. The study has finally suggested some measures such as specific bond market regulation, fiscal benefits, establishment of benchmark interest rate, etc. for the phenomenal growth and development of Treasury Bond Market in Bangladesh.

**Keywords:** ***Treasury bond, Growth, Development, Factors, and Market Capital.***

### 1.1 Background

Bond market being an integral part of debt market plays a key role in providing funds to the deficit sectors of the economy. An efficient bond Market is important for managing public debt and bank liquidity and for efficient conduct of monetary policy. The bond market links the issuers having long-term financing needs with investors willing to place funds in long-term interest bearing securities. When firms can raise funds by issuing bonds, they are less dependent on banks and less exposed to vulnerabilities of the banking system. It also makes the financial market more competitive by generating

market based interest rates that reflect the opportunity cost of funds at each maturity and reduces excess dependence on the banking system. A well functioning bond market is essential to developing the capital market which in turn contributes to promoting a sound and deep financial system. Without a well functioning bond market, the monetary transmission process of policy measures remain circumvented and the desired impact on the real economy remains incomplete leading to compromises with the effectiveness of monetary policy operations. A well developed financial system contributes to a mature bond market helps develop the derivative market thereby facilitating hedging mechanisms and enabling greater diversification of risks by participant.

In Bangladesh, an efficient bond market can play a critical role in supplementing the banking system to meet the requirements of the corporate sector for long-term capital investment and asset creation. It can provide a stable source of finance when the equity market is volatile. The bond market in Bangladesh, however, is thin and at a nascent state. While the size of tradable government bonds is small, secondary trading of government bonds is rare and there has been rarely any public issue of corporate bonds in the country's bond market. The bond market in Bangladesh is characterized by excessive reliance on bank deposits, government dominated debt instruments, non-existent corporate bond, high and risk free interest rates, absences of market based yield curve, primary auctions based activity, lack of product variation. (Akhtaruzzaman and Rahman, 2008). Efficient government bond markets improve economic performance in several ways. A key benefit is that they allow governments to raise large amounts of finance without resorting to captive market controls that distort interest rate signals. In many countries, the size of the government bond market is highly correlated with the government's fiscal position and its need to borrow; for example, Australia and Japan. In other situations, government bond markets have been created to enhance the financial system's infrastructure, rather than as a means to raise funds; for example, Singapore and Hong Kong. (David Lynch, 2005)

In Bangladesh, the corporate bond and debenture market is regulated by the SEC although the market is small. Fixed income securities first came into existence in 1987 with the floatation of debenture by two companies. As on November, 2011, only eight debentures exist in the Dhaka stock exchange. No new debenture was issued after 1999. Besides these, ten debentures already went to maturity. The corporate bond market is not mentionable feature. Only three corporate bonds are trading in the capital market. First corporate bond is floated in 2007 by the Islami bank Bangladesh limited named as IBBL Mudaraba perpetual bond. Then in 2010, ACI zero coupon bond is introduced in the market. The primary market of government securities is regulated by the ministry of finance and Bangladesh bank. The government securities are traded in two places –over the counter segment and the organized segment at the stock exchange. The CDBL (Central Depository Bangladesh Limited) provides the depository function for all securities including government securities and corporate bond and debentures. The OTC (over the counter) segment of the secondary market in the government securities is regulated by Bangladesh Bank while the stock exchange traded segment is regulated by Securities and Exchange Commission (SEC). Primary dealer of government securities are regulated by Bangladesh Bank. Trading of government treasury bonds stated in December2005 at DSE. As on November ,2011, 221 treasury bonds are traded in the market with the name of 5-years Treasury bond, 10-years Treasury bond, 15- years' treasury bonds, and 20- years' Treasury bond.(Islam and Jahan, 2012)

**1.2 Review of Literature**

Bond market in developing country like Bangladesh is developed neither literary nor operationally. A few numbers of literatures is available. So, researchers have reviewed available literature as follows:

Bond market in developing country like Bangladesh being an emerging market is facing many challenges for its development. Pakistan needs to satisfy a set of pre-requisites before some meaningful progress in domestic bond market development is made (Ahmed M. Khalid, 2007). This market in Bangladesh has been found very inefficient with respect to number of issues, volume of trade, number of participant, long-term yield curve, interest rate policy etc. The size of debt market of Bangladesh is very low as compared to other SAARC Countries; has huge growth potentiality; and identified important impediments to the growth and development of Bond Market in Bangladesh such as risk and return factor, liquidity and government policy factor, issue management factor, investment policy factor, macro-economic and regulatory factor, and market & issue related factor (Jahur and Quadir, 2010). Return on investment in Bond Market plays a vital role of its development in both national and international market. This is influenced by both country specific and global factors. It has been found that accounting for country-specific factors essentially improves the predictability of emerging bond returns, although global factors including the world bond and stock excess returns play an important role in determining the emerging market bond returns (Yin-Feng Gau & Wen-Ju Liao).

Financing capital structure and fiscal deficit through issue of bond in developed economy is common phenomenon. In developing country government recourses to the issue of treasury securities including treasury bond for financing its fiscal deficit; but corporate world is found inactive and not interested to go for financing through issue of corporate bond. The Asian financial crisis suggests many policy tasks not only to its worst hit economies but also to other developing countries. One of these tasks is the need to diversify the source of long-term industrial financing, which historically is concentrated in the form of short-term bank borrowing. This form of financing behavior historically has entailed currency mismatches, financial inflexibility and vulnerability to external shocks (Jonathan Batten and Yun-Hwan Kim, 2000). At present government is trying to harmonize bond market in order to raise fund through issue of sovereign bond. This requires different legal and administrative infrastructure. It has been found that there is only weak bond market integration in the region and very little progress has taken place since 2003 (Ip-wing Yu, Laurence Fung and Chi-sang Taml, 2007). It has been found that there is a weak correlation between inflationary history and the composition of public debt. The existing scenario is attributed to the presence of capital controls (Kristine Forslund ,Lycia Lima and Ugo Panizza, 2011).

The bond market is required to be developed in order to lessen the dependency of both government and corporate firms on the banking sector of developing economy. This calls for diversification of debt market. So, bond market should be strengthened all the ways (Michael G. Plummer and Reid W. Click, 2003). There is a great diversity in terms of the level of bond market development across East Asian countries. Initiatives to develop bond markets in East Asia should focus on: (i) sustaining a stable macroeconomic environment with low inflation and stable interest rates, (ii) developing a healthy government bond market that would serve as a benchmark for the corporate bond market, (iii) completing the post crisis agenda of banking sector restructuring, (iv) improving corporate governance, (v) strengthening the regulatory framework for bond market, (vi) rationalizing tax treatment of bonds, (vii) broadening the investor base, and

(viii) promoting the growth of regional bond market centers (Raul Fabella and Srinivasa Madhur, 2003).

**1.3 Statement of the Problem**

Development of Bond Market is pre-requisite not only for development of capital market, but also for development of economy of any country (IOSC, 2002). Without a functioning bond market, the monetary transmission processes of policy measures would be circumvented, and the desired impact on the real economy can not be fulfilled, which compromises the effectiveness of monetary policy operations ( Mu, 2007).Compared with neighboring countries such as India, Pakistan, Srilanka, Nepal etc., the Bangladesh bond market is at the nascent stage and playing a limited role in its economy (Bangladesh Bank, 2008). Like in any other country, a well-developed tradable bond market is critical to ensuring stability and efficiency of the financial market in Bangladesh.

The financial sector of Bangladesh is characterized by the dominating presence of commercial banks, accounting for 72.19% of domestic savings in the form of term deposits. Fixed income securities including non-transferable instruments constitute 27.81% of domestic debt. Corporate debentures are only less that 1% of the debt securities market. 20% of annual budget deficit are financed from internal debt. Persistent revenue shortfall is forcing the Government to borrow that resulted in increased debt-servicing liability (Yewar, 2005). The overall size of the bond market in Bangladesh, mainly consisting of public bonds and bills including NSD certificates, stood at Tk. 755.8 billion or 14% of GDP during June 2008(BIS, 2008).For developing an efficient and broad based bond market, a robust secondary market of fixed income securities is essential. Fixed income securities first came into existence in 1987 with the floatation of debenture by two companies. However, no debenture was issued after 1999. Trading of government treasury bonds started in December 2005 at the Dhaka Stock Exchange (DSE). Till the end of December 2010, eight debentures, 111 treasury bonds with different maturities, and one perpetual corporate bond (floated by IBBL in 2007) and one ACI Zero-Coupon Bond are being traded in the country's capital market. By this time, all corporate debentures floated have been matured and written off. This poor stage of bond market in Bangladesh can be attributed to some important factors such as risk & return factor, liquidity & government policy related factor, issue management factor and investment policy factor in order of magnitudes (Jahur, 2009). So, the priority of the development of Bangladesh's capital markets should be to promote the bond market development.

The bond market in Bangladesh is experiencing lopsided development. This market is dominated by treasury debt instruments accounting for a lion share of total debt capital of the debt market. Institutional investors like commercial banks, non-banking financial institutions, and specialized financial institutions are key players of Treasury Bond Market. The imbalances between different segments of capital market in Bangladesh can be removed through the development of robust domestic treasury and corporate bond markets. In view of this, the present study has been undertaken aiming at identifying the factors that influence the growth and development of Treasury Bond Market in Bangladesh.

**1.4. Objectives of the Study**

The principal objective of the study is to identify the factors that influence the growth and development of Treasury Bond Market in Bangladesh. To accomplish this principal objective, following specific objectives have been covered:

1. To examine the Treasury Bond Market performance of Bangladesh.

2. To identify the factors influencing the growth and development of Treasury bond Market in Bangladesh.
3. To suggest some important policy measures for the growth and development of Treasury Bond Market in Bangladesh

### 1.5. Hypothesis of the Study

$H_{o:}$ Following variables are hypothesized to be contributing to the growth and development of treasury bond market in Bangladesh.

| Variables | |
|---|---|
| $X_1$ | Diversification of Investors in Treasury Bond market |
| $X_2$ | Convenient maturity structure of treasury bond |
| $X_3$ | Trading Platform-OTC market |
| $X_4$ | Rating Agencies-Best Rating grade |
| $X_5$ | Clearing and Settlement System, |
| $X_6$ | Accounting and Audit standard |
| $X_7$ | Tax Treatment: Fiscal Incentive |
| $X_8$ | Facilitates Sustaining and stable macroeconomic Environment |
| $X_9$ | Legal and Regulatory framework-Favorable legal environment |
| $X_{10}$ | Transparent Government policy |
| $X_{11}$ | Awareness of Market participants and investors |
| $X_{12}$ | Adequate Supply in the secondary Market |
| $X_{13}$ | Intermediaries with expertise in Bond products |
| $X_{14}$ | Increase primary dealers of bond market- Adequate No. of deader |
| $X_{15}$ | Suitable Size of Market lot |
| $X_{16}$ | Bench Mark Interest Rate |
| $X_{17}$ | High rate of Withholding tax |
| $X_{18}$ | Special Incentives for primary dealers |
| $X_{19}$ | Issued at market interest rate |

### 1.6 Methodology of the Study

The study has been both theoretical and empirical one. Both primary and secondary data have been used.

***1.6.1 Collection of Primary Data:*** The researcher has prepared a questionnaire on the basis of survey of existing literature as well as of discussions made with some executives associated with the stock market. Researchers conducted interview of 31 respondents personally on the basis of pre-structured questionnaire. The respondents are concerned officials of listed firms, investors, academics, regulators and professionals. The opinions of 31 experts have been captured on five point-likert scales such as 5( Most significant), 4 ( Significant), 3 ( Indifferent), 2( Insignificant) and 1( Most insignificant).

***1.6.2 Collection of Secondary Data***: The secondary data has been collected from existing different sources- Annual Reports of Bangladesh Bank, Data Archive of DSE (2004-2010) World Bank Reports, published research journals, published books, websites, etc.

***1.6.3 Analysis of Data:*** The data thus collected has been tabulated first manually. Then, the data have been analyzed with the help of descriptive statistical techniques-mean, standard deviation, and coefficient of variations; relationship measures-coefficient of correlation; multivariate technique-varimax rotated factor analysis; and financial technique-ratios for analysis of data, and t test for testing the significance of coefficient of correlation between variables understudy.

*Factor Analysis*: Factor analysis is a method of reducing a large number of variables (tests, scales, items, persons and so on) to a smaller number of presumed underlying hypothetical entities called factor ( Fruchter, 1967). It tries to simplify and diverse relationship that exist among a set of observed variables by uncovering common dimensions or factors that link together the seemingly unrelated variables and consequently provides insight into the underlying structures of the data( Dillion and Goldstein, 1984). The purpose of factor analysis is mainly two folds: data reduction and substantive interpretation. In the present study, 'Principal Components Varimax Rotated Method' of factor analysis has been used in order to identify the factors influencing the development of Bond Market in Bangladesh.

Principal component factor explains more variance that the loadings obtained from any method of factoring. In order to define the group membership, an algorithm may be used to uncover a structure purely on the basis of the correlation structure of the input variables. Then the number of principal components to be retained in the study is decided on the basis of Kaiser's criterion (1958) of Eigen value **≥1.** Principal components having higher reliability coefficients are more reliable in the sense that the corresponding factors would be replicable in other similar kind of studies. Then Communality, symbolized by $h^{2}$---- are then worked out which show how much of each variable is accounted for by the underlying factors taken together. Then, factor scores are generated on the basis of weighted average of Principal Factor loadings and average of respective variables included into the concerned group. Ranking of each factor will be made on the basis of scores derived.

### 1.7 Organization of the Study

The study has been segmented into three sections. First section has covered statement of the problem, objective, hypothesis, and research methodology of the study; second section has focused on the findings and their analysis and third section has covered summary of the findings, policy implications and conclusion.

## 2. Finding and Analysis

### 2.1 Government Bond Market in Bangladesh

The primary market of government securities is regulated by the Ministry of Finance and Bangladesh Bank-the central bank of the country. The government securities are traded in two markets–money market through dealers, and the OTC segment of DSE. The CDBL provides the depository function for all securities including government securities and corporate bond and debentures. The government securities traded in money market is regulated by Bangladesh Bank; and that traded in the stock exchange is regulated by SEC. Primary dealer of government securities are regulated by Bangladesh Bank. The present study has shown the growth and development of Treasury bond with different maturities in Table-1 as follows:

**Table 1: Government Bond**

| | | | Outstanding (bl.) | | | | | | | Market capitalization(ml.) | Growth of Market capitalization (%) | Growth of Market capitalization (%) | Share of Govt. bond to total market capitalization (%) | Growth of share of Govt. bond to total market(%) | Growth of share of Govt. bond to total market(%) | Total Market capitalization(ml.) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Year | No. of T. bond | T. bond (ml) | 5-year | 10-year | 15-year | 20-year | total | Growth | Growth | | | | | | | |
| 2003 | | | 0.2 | 0.1 | | | 0.3 | Base year 3200 | Year to Yr growth | | Base year 2003 | Year to Yr growth | | Base year 2003 | year to year growth | 97586.61 |
| 2004 | | | 6.7 | 3.4 | | | 10.1 | 3266.67 | 3266.67 | | | | | | | 224922.74 |
| 2005 | 18 | 0.2 | 9.5 | 6.9 | | | 16.4 | 5366.7 | 62.38 | 11588.64 | | | 4.96 | | | 233542.94 |
| 2006 | 34 | 0.45 | 28.5 | 32.6 | | | 61.1 | 20266.67 | 272.56 | 44825.00 | 286.80 | 286.80 | 13.86 | 179.32 | 179.32 | 323368.00 |
| 2007 | 61 | 1.21 | 62.4 | 72.4 | 6 | 3 | 143.8 | 47833.33 | 135.35 | 122403.00 | 956.23 | 173.07 | 16.23 | 227.09 | 17.10 | 753955.00 |
| 2008 | 111 | 2.42 | 102.4 | 120.3 | 21 | 13.5 | 257.2 | 85633.33 | 78.86 | 243403.00 | 2000.36 | 98.85 | 22.97 | 362.92 | 41.53 | 1059530.00 |
| 2009 | 151 | 3.56 | 144.7 | 164.8 | 36.8 | 26.6 | 372.9 | 124200.00 | 44.98 | 357313.00 | 2983.30 | 46.80 | 18.93 | 281.50 | -17.59 | 1887177.00 |
| 2010 | 186 | 4.2 | | | | | | | | 422213.0 | 3543 | 18.2 | 0.12 | -97.58 | -99.37 | 3471109.00 |
| σ | | | | | | | 143.7 | | | 168290.7 | | 108 | 8.67 | | 101.77 | |
| Av. | | | | | | | 32.92 | | | 115179.5 | | 124.74 | 12.25 | | 24.20 | |
| CV | | | | | | | 436.52% | | | 146.11% | | 86.63% | 70.80% | | 420.55% | |

**Source: Dhaka Stock Exchange. www.dsebd.org/**
***Note: Data have been compiled by researchers.***

It has been found from the analysis of Table-1 that the total outstanding of Treasury bond stood Tk.372.9 billion in 2009 and the market capital stood Tk. 357313 million in 2009. The average market capital is Tk. 88826.77 million. The growth rate in market capital has been found on the declining trend. The share of government bond to total market capitalization has been found 18.93 percent in 2009 and the average share of government bond to total capital is 13.715%. The growth in share of government bond to total market capital has been increasing over the study periods with an exception in 2009. These imply that the size of Treasury bond market is reasonably large. This also indicates that the government recourses to the issue of more number of treasury bonds with different maturities for borrowings in order to finance the fiscal deficit amongst important reasons. It has also been found that institutional investors-banks and insurance companies are the dominant players in Treasury bond market. This is because, commercial banks can keep treasury bond with the Bangladesh Bank-the central bank of the country against statutory reserve requirements, and Insurance companies has to invest their a share of revenues-premiums in treasury bonds as a legal compulsion.

### 2.2 Factor Analysis and Interpretation

The analysis is subjected to correlation analysis, principal component analysis, rotated factor analysis and finally factor score for ranking the factors derived from principal component analysis.

### *2.2.1 Analysis of Correlation Matrix*

The study has estimated zero-order correlation of all 19 variables that contribute to the development of the Treasury bond market of Bangladesh. The Zero Order Correlation Matrix (Table-2) has shown that variables understudy have formed several groups on the basis of relationship underlying between variables. Variables within the group have been found to have significant relationship at different level of significance ranging from 1% to10%. It is observed that variable $X_1$ has been found significantly correlated with variable $X_2$ , $X_3$ ,$X_4$ ,$X_7$ ,$X_{12}$ at 1% level and variable $X_2$ is found correlated with $X_8$, $X_{12}$; variable $X_3$ is correlated with $X_4$, $X_7$ , variable $X_4$ is found correlated with $X_6$, $X_{10}$, $X_{11}$ $X_{12}$ ; variable $X_5$ is correlated with $X_6$, ; variable $X_6$ is correlated with $X_{14}$, $X_{10}$, $X_{11}$ ,$X_{12}$; variable $X_7$ is correlated with $X_8$, $X_9$, $X_{10}$ ,$X_{18}$; variable $X_8$ is correlated with $X_9$ $X_{10}$, ; variable $X_9$ is correlated with $X_{18}$, $X_{10}$, ,$X_{12}$; variable $X_{10}$ is correlated with $X_{18}$, $X_{11}$ ,$X_{12}$; variable $X_{11}$ is correlated with $X_{12}$; variable $X_{12}$ is correlated with $X_{15}$, $X_{18}$, ; variable $X_{14}$ is correlated with $X_{15}$,; variable $X_{15}$ is correlated with $X_{16}$, $X_{18}$, at 1% level of significance. These relationships between variables finally lead to the formation of different orthogonal factors.

### *2.2.2. Principal Component Analysis*

The correlation matrix of all 31 variables has been further subjected to principal component analysis. The Eigen values, the percentage of total variance, and rotated sum of squared loadings have been shown in Table-3. The factor matrix as obtained in the principal component analysis has also been further subjected to Varimax Rotation. An examination of Eigen values has led to the retention of six factors. These factors have accumulated for 19.223%, 13.9%, 13.88%, 11.87%, 11.12%, and 7.087% of variation. This implies that the total variance accumulated for by all six factors is 77.096% and remaining variance is explained by other factors.

The rotated factor matrix has been shown in Table-4. This shows that variables understudy have constituted six groups/factors. It can be mentioned that the variable with factor loading of o.50 and above has been considered for inclusion into the factors. These have been discussed in the following paragraphs.

***Factor-I: Financial and Regulatory environment factor:***Factor-I explains 19.223% of the total variations existing in the variable set. This includes variables- $X_7$, $X_8$, $X_9$, $X_{10}$, $X_{12}$ and $X_{18}$. This factor has significant factor loadings on these variables which have formed this major cluster. This factor belongs to Tax treatment: Fiscal incentive, Facilitates sustaining and stable macroeconomic environment, legal and regulatory frame work- favorable legal environment, transparent government policy, Special incentives for primary dealers, and adequate supply in the secondary market for development of Treasury bond market. So, this factor provides a basis for conceptualization of a dimension, which may be identified as 'Financial and Regulatory environmental factor'.

***Factor-II: Investment and liquidity factor***

Factor-II explains 13.909% of the total variations existing in the variable set. This includes variables- $X_1$, $X_3$, $X_4$, $X_{11}$. This factor has significant factor loadings on these variables which have formed second important cluster. This factor is concerned with Diversification of Investment in Treasury bond market, Trading Platform-OTC market, Rating Agencies- Best Rating grade, Awareness of market participants and investors. So, this factor provides a basis for conceptualization of a dimension, which may be identified as '*Investment and liquidity factor'*

***Factor-III: Trade and Reporting Factor***

Factor-III explains 13.88% of the total variations existing in the variable set. This includes variables- $X_5$, $X_6$ and $X_{14}$. This factor has significant factor loadings on these variables which have formed third cluster. This factor is related to Clearing and settlement System, Accounting and audit standard, the bond market- adequate number of dealers. So, this factor provides a basis for conceptualization of a dimension which may be identified as '*Trade and Reporting Factor*'.

***Factor-IV: Standardization Factor***

Factor-IV explains 11.876% of the total variations existing in the variable set. This includes variables- $X_{15}$, $X_{16}$. This factor has significant factor loadings on these variables which have formed fourth cluster. This factor is related to suitable size of market lot and bench mark interest rate. So, this factor provides a basis for conceptualization of a dimension, which may be identified as 'Standardization Factor'.

***Factor-V: Term Structure Factor***

Factor-V: explains 11.121% of the total variations existing in the variable set. This includes variables- $X_2$, $X_{13}$ and $X_{19}$. This factor has significant factor loadings on these variables which have formed fifth cluster. This factor is related to convenient maturity structure of Treasury bond, Intermediaries with expertise in bond products, and issued at market interest rate. So, this factor provides a basis for conceptualization of a dimension which may be identified as '*Term Structure Factor'.*

***Factor-VI: Tax at source Factor***

Factor-VI explains 7.087% of the total variations existing in the variable set. This includes variables -$X_{17}$. This factor has significant factor loadings on these variables which have formed sixth cluster. This factor is related to high rate of with holding tax. So, this factor provides a basis for conceptualization of a dimension which may be identified as '*Tax at source Factor'.*

Finally the rankings obtained on the basis of factor wise average scores are shown in the following table:

**Table-5: Rankings of Factors Influencing the Growth and Development of Treasury Bond Market in Bangladesh**

| | Factor | Average Score | Rank |
|---|---|---|---|
| I | Financial and Regulatory environment factor | 2.53 | 3 |
| II | Investment and liquidity factor | 2.28 | 6 |
| III | Trade and Reporting Factor | 2.72 | 1 |
| IV | Standardization Factor | 2.63 | 2 |
| V | Term Structure Factor | 2.32 | 5 |
| VI | Tax at source Factor | 2.49 | 4 |

***Note: Data have been compiled by the researchers***

The ranking show that factors III: Trade and Reporting Factor is the most important factor that leads the growth and development of Treasury bond market in Bangladesh. This factor includes variable $X_5$: Clearing and settlement system, $X_6$: Accounting and audit standard, and $X_{14}$: the bond market- adequate number of dealer. This implies that the development of Treasury bond market give emphasize on number of dealers and clearing system. So, the trade and reporting related variables are key indicators of Treasury bond market development in Bangladesh.

The second most important factor is the Standardization Factor. This factor includes variables such as suitable size of market lot and benchmark interest rate. These variables have been found working as stimulates to the development of bond market in Bangladesh. The third important factor is the Financial and Regulatory environment factor which includes Tax treatment: fiscal incentive facilitates sustaining and stable macroeconomic environment, legal and regularity framework –favorable legal environment, transparent government policy, special incentives for primary dealers, and adequate supply in the secondary market. Other important factors are tax at source factor, term structure factor, investment and liquidity factor.

**3.0 Summary of the Findings and Policy Implications**

The study has been both theoretical and empirical one. It has used direct approach to the collection of primary data and consulted available existing literature for collecting secondary data. It has used financial, statistical, and sophisticated multivariate techniques for analysis of data and testing the significance of coefficient of correlations between factor variables.

3.1 The major findings of the study have been chalked out as follows:

a) The growth of Treasury Bond Market over the study periods was found positive; but is not consistent. This is substantiated by higher standard deviation and coefficient of variation in volume and share in total market debt.

b) The relative lower growth indicates the future growth potentiality of Treasury Bond Market in Bangladesh.

c) The study has identified three factors as most important factors that influence the growth and development of Treasury Bond Market in Bangladesh. They are as follows in order of their magnitudes:

   I. Financial and Regulatory environment factor;

   II. Investment and liquidity factor; and

   III. Trade and Reporting Factor.

These findings are truly reflecting the present status and scenario of Treasury Bond Market of Bangladesh.

**3.2 Policy Implications:**

Following policies have been put forwarded for the development of Treasury bond market in Bangladesh:

a) Securities and Exchange Commission can deregulate the existing laws and promulgate new laws for creating congenial regulatory environment for the development of Treasury bond market in the country.

b) Establishment of bench mark interest rate is one step ahead for the development of Treasury Bond Market. This would facilitate an opportunity for establishment of long term yield curve which is pre-condition for that.

c) The Government has to offer a definite fiscal benefit like investment in equity market for the development of Treasury bond market in Bangladesh.

d) Government should increase the number of dealers in the market for availability of the Treasury bond.

**4. Conclusion:**

The Treasury Bond Market in Bangladesh is dominated by institutional investors (banks and insurance companies). Individual investors are not involved in investment activities in Treasury Bond Market significantly as they are involved in stock market in Bangladesh. The policy measures suggested by the present study are expected to bring about two substantial changes in the Treasury Bond Market: first, to develop congenial investment environment in the Treasury Bond Market; and second, to synchronize the imbalances between size of investment of institutional investors and that of individual investors.

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## Appendices:

**Table-2: Zero Order Correlation Matrix**

| | | X1 | X2 | X3 | X4 | X5 | X6 | X7 | X8 | X9 | X10 | X11 | X12 | X13 | X14 | X15 | X16 | X17 | X18 | X19 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Correlation | X1 | 1.000 | | | | | | | | | | | | | | | | | | |
| | X2 | ***.540*** | 1.000 | | | | | | | | | | | | | | | | | |
| | X3 | ***.604*** | .332 | 1.000 | | | | | | | | | | | | | | | | |
| | X4 | ***.621*** | .452 | ***.623*** | 1.000 | | | | | | | | | | | | | | | |
| | X5 | .393 | .394 | .069 | .456 | 1.000 | | | | | | | | | | | | | | |
| | X6 | .425 | .317 | .345 | ***.608*** | ***.678*** | 1.000 | | | | | | | | | | | | | |
| | X7 | ***.547*** | .393 | ***.540*** | .418 | .079 | .293 | 1.000 | | | | | | | | | | | | |
| | X8 | .445 | ***.518*** | .433 | .420 | .279 | .356 | ***.625*** | 1.000 | | | | | | | | | | | |
| | X9 | .291 | .265 | .325 | .280 | .237 | .388 | ***.562*** | ***.515*** | 1.000 | | | | | | | | | | |
| | X10 | .316 | .391 | .482 | ***.609*** | .193 | ***.529*** | ***.540*** | ***.605*** | ***.630*** | 1.000 | | | | | | | | | |
| | X11 | .349 | .407 | .360 | ***.550*** | .306 | ***.561*** | .165 | .099 | .291 | ***.519*** | 1.000 | | | | | | | | |
| | X12 | ***.511*** | ***.507*** | .489 | ***.572*** | .291 | ***.549*** | .413 | .463 | ***.520*** | ***.663*** | ***.506*** | 1.000 | | | | | | | |
| | X13 | .323 | .378 | .160 | .315 | .200 | .196 | .219 | .129 | .083 | .306 | .407 | .373 | 1.000 | | | | | | |
| | X14 | .092 | .029 | .267 | .496 | .418 | ***.656*** | -.074 | .096 | .087 | .277 | .463 | .430 | .340 | 1.000 | | | | | |
| | X15 | .080 | .326 | .453 | .315 | .105 | .310 | .152 | .405 | .387 | .409 | .368 | ***.528*** | .176 | ***.504*** | 1.000 | | | | |
| | X16 | .093 | .448 | .333 | .279 | .188 | .220 | .104 | .334 | .137 | .268 | .381 | .353 | .462 | .449 | ***.701*** | 1.000 | | | |
| | X17 | .146 | .069 | -.013 | .033 | .063 | -.040 | -.066 | .078 | .019 | .010 | .056 | .323 | -.031 | .139 | .106 | .147 | 1.000 | | |
| | X18 | .328 | .331 | .370 | .269 | .258 | .375 | ***.502*** | .470 | ***.578*** | ***.500*** | .261 | ***.673*** | .098 | .145 | ***.565*** | .352 | .306 | 1.000 | |
| | X19 | .089 | .242 | .097 | .417 | .276 | .228 | -.017 | .233 | .061 | .254 | .246 | .284 | .411 | .436 | .224 | .322 | -.004 | .084 | 1.000 |

***Notes: Data have been compiled by the researchers; Italic number significant at 1% level***

**Table-3: Total Variance Explained**

| | Initial Eigen Values | | | Extraction Sums of Squared Loadings | | | Rotation Sums of Squared Loadings | | |
|---|---|---|---|---|---|---|---|---|---|
| Component | Total | % of Variance | Cumulative % | Total | % of Variance | Cumulative % | Total | % of Variance | Cumulative % |
| 1 | 7.242 | 38.113 | 38.113 | 7.242 | 38.113 | 38.113 | 3.652 | 19.223 | 19.223 |
| 2 | 2.231 | 11.743 | 49.856 | 2.231 | 11.743 | 49.856 | 2.643 | 13.909 | 33.133 |
| 3 | 1.635 | 8.604 | 58.460 | 1.635 | 8.604 | 58.460 | 2.637 | 13.880 | 47.012 |
| 4 | 1.319 | 6.942 | 65.402 | 1.319 | 6.942 | 65.402 | 2.256 | 11.876 | 58.888 |
| 5 | 1.193 | 6.281 | 71.683 | 1.193 | 6.281 | 71.683 | 2.113 | 11.121 | 70.009 |
| 6 | 1.028 | 5.413 | 77.096 | 1.028 | 5.413 | 77.096 | 1.346 | 7.087 | 77.096 |
| 7 | .868 | 4.571 | 81.667 | | | | | | |
| 8 | .815 | 4.291 | 85.958 | | | | | | |
| 9 | .586 | 3.086 | 89.044 | | | | | | |
| 10 | .459 | 2.418 | 91.462 | | | | | | |
| 11 | .359 | 1.890 | 93.352 | | | | | | |
| 12 | .318 | 1.673 | 95.025 | | | | | | |
| 13 | .249 | 1.309 | 96.334 | | | | | | |
| 14 | .210 | 1.106 | 97.440 | | | | | | |
| 15 | .174 | .917 | 98.357 | | | | | | |
| 16 | .128 | .672 | 99.029 | | | | | | |
| 17 | 9.446E-02 | .497 | 99.526 | | | | | | |
| 18 | 4.690E-02 | .247 | 99.773 | | | | | | |
| 19 | 4.317E-02 | .227 | 100.000 | | | | | | |

Extraction Method: Principal Component Analysis.

*Note: Data have been compiled by the researchers*

**Table-4: Rotated Component Matrix**

| | Component/Factor | | | | | |
|---|---|---|---|---|---|---|
| Variables | **1** | **2** | **3** | **4** | **5** | **6** |
| X9 | ***.814*** | | .200 | .149 | -.104 | |
| X8 | ***.781*** | .136 | | | .303 | |
| X7 | ***.727*** | .474 | | -.144 | | |
| X18 | ***.706*** | | .120 | .309 | | .404 |
| X10 | ***.640*** | .360 | .265 | .290 | .104 | -.147 |
| X12 | .482 | .405 | .318 | .337 | .181 | .345 |
| X3 | .317 | ***.795*** | | .273 | | |
| X1 | .294 | ***.721*** | .212 | -.305 | .267 | .253 |
| X4 | .213 | ***.654*** | .489 | .122 | .261 | |
| X11 | | .488 | .434 | .368 | .203 | |
| X6 | .296 | .291 | ***.826*** | .155 | | |
| X5 | .189 | | ***.817*** | -.179 | .279 | .160 |
| X14 | -.141 | .167 | ***.655*** | .605 | .122 | |
| X15 | .376 | | | ***.803*** | .157 | .126 |
| X16 | .147 | | | ***.654*** | .567 | .159 |
| X13 | | .257 | .101 | .175 | ***.730*** | |
| X2 | .410 | .274 | | | ***.659*** | .200 |
| X19 | | | .349 | .241 | ***.607*** | -.139 |
| X17 | | | | .106 | | ***.912*** |

***Note: Data have been compiled by the researchers***

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# Agricultural Crop Insurance Scenario with Special Reference to Assam

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**Abstract:**

Crop insurance is a means of protecting the agriculturist against financial losses due to uncertainties that may arise from crop failures/losses arising from named or all unforeseen perils beyond their control. Crop insurance acts as a life saver of the farmers of the state like Assam where every year, large scale crop failure occur due to various natural calamities such as flood, drought etc. Under NAIS (National Agricultural Insurance Scheme) the performance of NE states is very poor as compared to other states of the country. Till 2011-12, 2.84 lakh no of farmers are covered out of which 44 thousand nos. of farmers are benefitted and 2.16 lakh ha areas are insured under NAIS in the state. Although the performance of NAIS in Assam both for rabi and kharif season showed highly significant Compound Growth rate for different aspects, it was observed that very less amount of crop areas and farmers are covered as compared to the crop areas and farm families affected by flood or drought. The paper also attempts to list out some problems and prospects regarding crop insurance in Assam.

**Key words**: *Crop insurance, NAIS, Assam*

## Introduction:

Crop insurance is a means of protecting the agriculturist against financial losses due to uncertainties that may arise from crop failures/losses arising from named or all unforeseen perils beyond their control. The capacity of agriculture to hedge itself from vagaries of nature is considered crucial for development and growth of the sector in particular and economy in general. Agricultural production is an outcome of biological activity which is highly sensitive to changes in weather. In India, Agriculture is an uncertain business partly due to its high dependence on the weather, leaving 120 million farmer households vulnerable to serious hardship. Therefore, Crop insurance is one alternative to manage risk in yield loss by the farmers. It is the mechanism to reduce the impact of income loss on the farmer (family and farming). It is a mean of protecting farmers against the variations in yield resulting from uncertainty of practically all natural factors beyond their control such as rainfall, flood, hails, other weather variables, pest infestation etc (Govt of India). Crop insurance is a financial mechanism to minimize the

impact of loss in farm income by factoring in a large number of uncertainties which affect the crop yields. It provides a good alternative both to farmers and government: farmers get on actuarially fair insurance with swift payments at little administrative costs to the government (Lilleor and Bie, 2005).

**Methodology**:

The study was conducted based on secondary data collected from different published sources such as economic survey of India, economic survey of Assam, statistical handbook of Assam, official website of Agricultural Insurance Company of India.

Different analytical tools used in the study were as follows:

**(a) Compound Growth rate analysis**

The CGR (compound growth rate) measures the average growth of an amount over time. In other words, the CGR assumes a constant rate of growth, thus smoothing the expansion rate. CGR was computed by using the formula:

$$CGR = \text{Antilog } (b) - 1 \times 100$$

Where,'b' is the co. efficient and which was derived by using the formula

$$Y = a.b^t$$

Where,

Y: Time series data

a: Intercept

t: Time in years

b: co-efficient

The logarithmic form of the above equation was obtained as,

$$\ln Y = \ln a + t \ln b$$

**(b) Percentage analysis**

In order to analyze increase or decrease in current year over the p, per cent changes were calculated. Per cent variation was calculated by the formula

$$= \frac{V_{present} - V_{past}}{V_{past}} \times 100$$

Where,

$V_{present}$: present or future value

$V_{past}$: past or present value

**Discussion:**

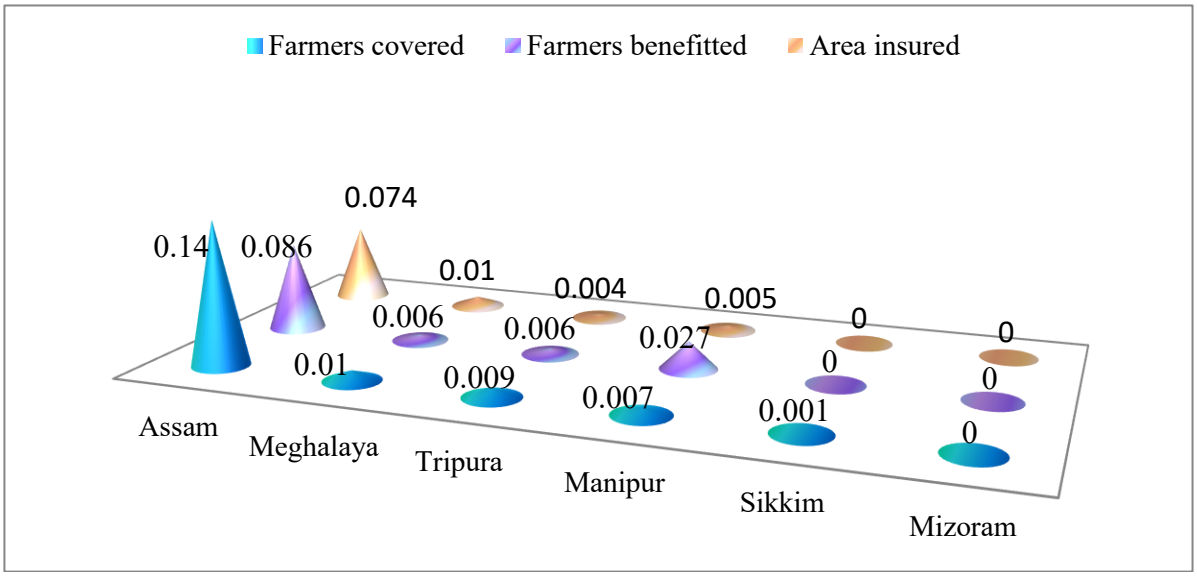
**Status of NAIS in NE States of India:**

India's crop insurance program is the world's largest with 25 million farmers insured (Olivier Mahul, 2012). The farmers of Andhra Pradesh topped the list by claiming Rs.4,411 crore and the farming community of Gujarat stood second in the list by claiming Rs.4262 crore for their crop losses (AICI). In 1999 the national agricultural insurance scheme (NAIS) replaced the Comprehensive Crop Insurance Scheme (CCIS) as the main instrument for providing risk management to India's farming community. NAIS was started as a part of Rashtriya Krishi Bima Yojana (RKBY). The scheme operates on the

basis of area approach i.e., defined areas (unit of insurance) for each notified crop for widespread calamities. In case of localized calamities such as hailstorm, landslide, cyclone and flood the scheme operates on the basis of individual approach.

Table 1 shows the present status of NAIS in North East states of India. Among NE states, Arunachal Pradesh and Nagaland are not yet covered under NAIS. NAIS performance wise Assam occupied the highest position and Mizoram and Sikkim were the bottom listed states among all NE states (table 1). As compared to other states of India NE states' share was very less to total farmers covered and benefitted, total area insured under NAIS in India. Among NE states Assam contributed the highest shares which were only 0.14, 0.086 and 0.074 per cent to total farmers covered, benefitted and area insured in India under NAIS respectively as shown in Figure 1.

**Fig. 1 Status of NE states under NAIS (in per cent to total India)**




**The scenario of agricultural crop insurance in Assam**

The economy of Assam is predominantly agrarian. About 99 per cent area of total land mass of the State is rural and almost 50 per cent of the total land area is used for cultivation. Agriculture sector continues to support more than 75 per cent population of the state directly or indirectly providing employment of more than 53 per cent of the workforce. A general profile of land area of Assam is given in table 2.

After critical analysis of the sectoral growth of the state economy it has been observed that the growth of the agriculture and allied sector was not encouraging during last few periods. It is reported that every year, large scale crop failure occur in Assam due to various natural calamities such as flood, drought etc. and damaging the crops in wide spread areas and making agriculture as the most risky business. Though such farmers are given some support from the government under various schemes but the help is not enough. Thus implementation of the crop insurance scheme in Assam is highly essential.

**NAIS in Assam**

Crop insurance programme "National Agricultural Insurance Scheme" (NAIS) has been implemented in the state since Rabi 1999-2000. The AICI pays 100 per cent amount of premium collected towards claim if any. The scheme provides 10 per cent subsidy to

small & marginal farmers. Total premium subsidy is shared equally between G.O.I and G.O.A.

In table 3, achievements under NAIS in Assam are shown for the period of 1997-98 to 2009-10. From the table it is seen that as compared to the period of 1997-2001 all particulars had been increased at higher rates in the periods of 2001-2006 and 2006-10 (shown in the parentheses).

At present (up to 2012), 2.84 lakh numbers of farmer were covered under NAIS, out of which 15.49 per cent farmers were benefitted, 2.16 lakh ha of crop areas were covered and Rs 11.74 crore claims were entertained (table 4).

**Crop covered under NAIS in Assam**

Total eight numbers of crops are covered under NAIS in Assam and categorized into two groups as shown in table 5. Crop wise sum insured limits and premium rates are different under NAIS (table 6). Under Rabi crops potato has the highest sum insured limit as well as premium subsidy rate as shown in table 6.

It is noted that sum insured limits are only for non-loanee farmers. In case of loanee farmers, entire crop loan amount is compulsorily covered as 'sum insured' at the above premium rate. Small and marginal (S&M) farmers are eligible for premium subsidy of 10% on full premium.

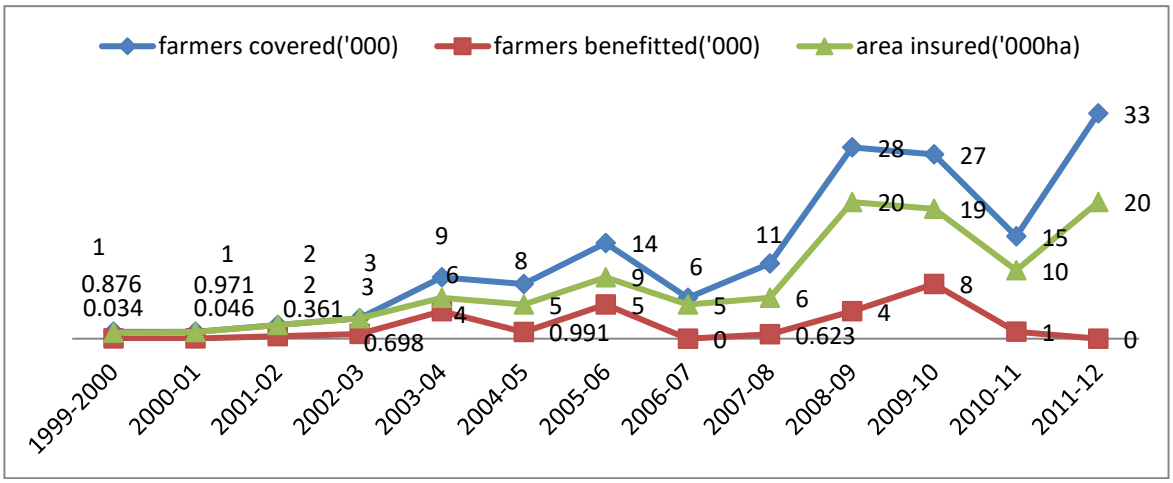
**Performance of NAIS in Assam**

A scenario of performance of NAIS in Assam for Rabi season is shown in table 7 from the year of 1999-2000 to 2011-12. There was a considerable increase in all aspects from 1999-2000 to 2011-12. Claims were seen as fluctuated, it was because of the variation in crop damage caused by flood or drought in the previous seasons.

During that period of 1999-2000 to 2011-12, highly significant and positive compound growth rates were found for all aspects considered under NAIS (table 8).

During the same period, numbers of farmers covered and benefitted, area insured under NAIS in Assam were also increased significantly (shown in figure 2).

**Fig.2.Performance of NAIS in Assam (Rabi)** *Source: AICI*

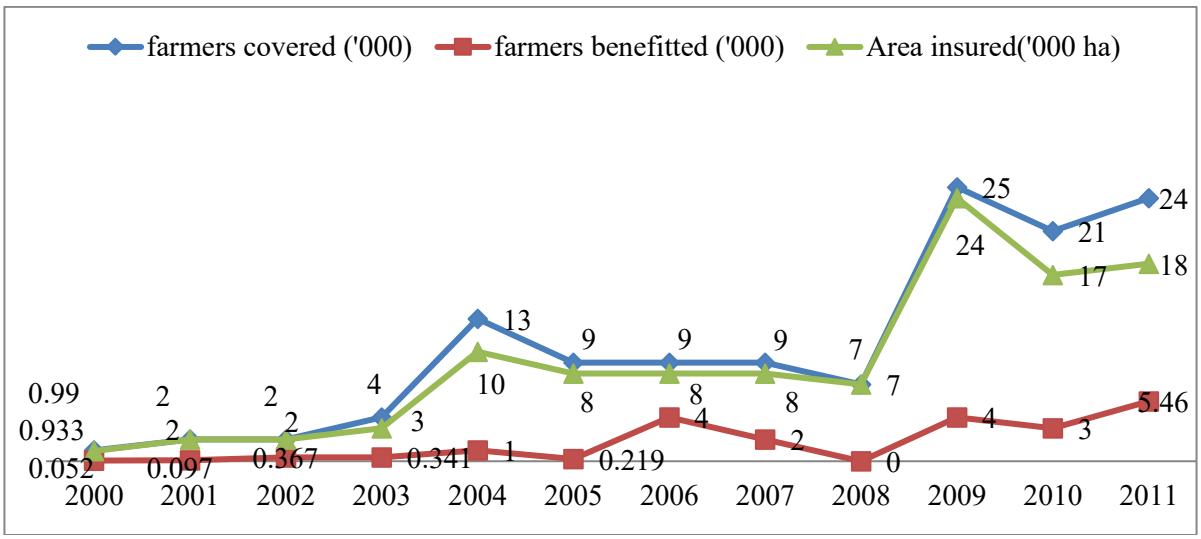


Compound Growth Rate of farmers covered was 32.88**, farmers benefitted was 41.13* and area insured was 28.13**(*signficant at 5 per cent ,**significant at 1 per cent significance level) under NAIS in Assam for rabi season.

Similarly, table 9 shows the performance of NAIS in Assam from 2000 to 2011 for kharif season. Here also highly significant and positive compound growth rates were found for all aspects during that period as shown in table 10.

Figure 3 shows the trends of farmers covered and benefitted and area insured under NAIS in Assam for the kharif season during that period.

**Fig.3.Performance of NAIS in Assam (Kharif)** *Source: AICI*




Compound Growth Rate of farmers covered was 30.25*, farmers benefitted was 48.64* and area insured was 28.97 **significant at 1 per cent significance level under NAIS in Assam for kharif season.

**District wise crop coverage under NAIS in Assam**

Under NAIS district wise crop coverage is different in Assam. Based on the number of crops covered for rabi season (2011-12), all districts of the state are categorized into five groups as shown in table 11.

Although NAIS is showing a highly significant and increasing growth in its performance, it is still far away from the desired destination. When the crop areas and farmers affected by flood or drought were compared with crop areas insured and farmers covered under NAIS in Assam (from 2006-07 to 2011-12), it was found that a very less amount of areas as well as very less number of farmers were covered under NAIS in the state (figure 4 & 5). It is noted that both flood/drought affected and non affected crop areas and farmers were included under total crop areas and total number of farmers insured under NAIS.

**Fig.4.Comparison between crop areas affected by flood/drought and crop area insured under NAIS in Assam**

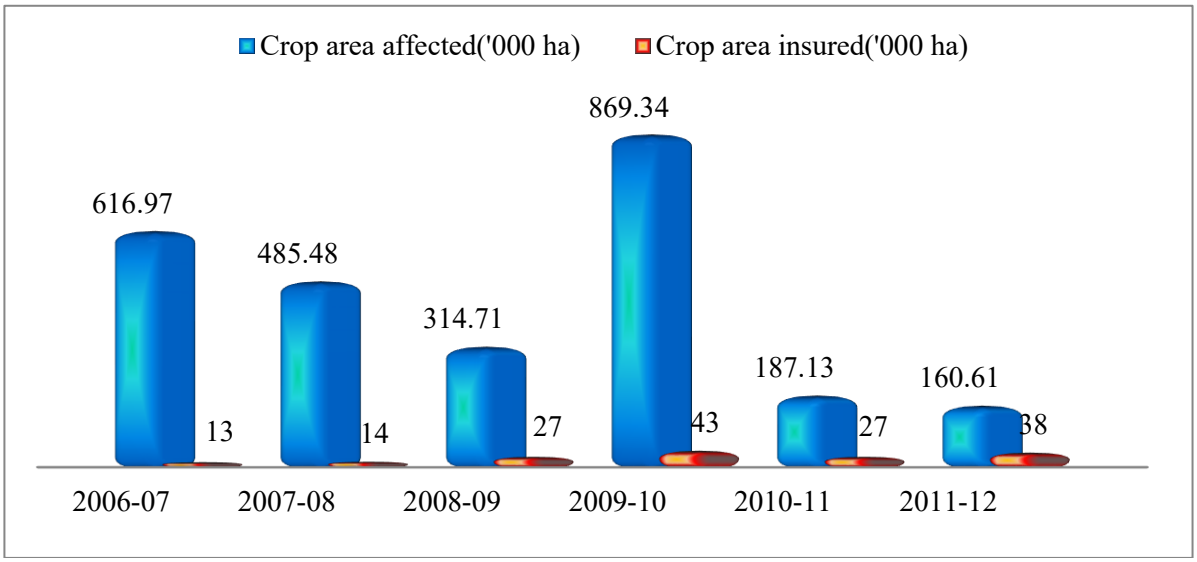
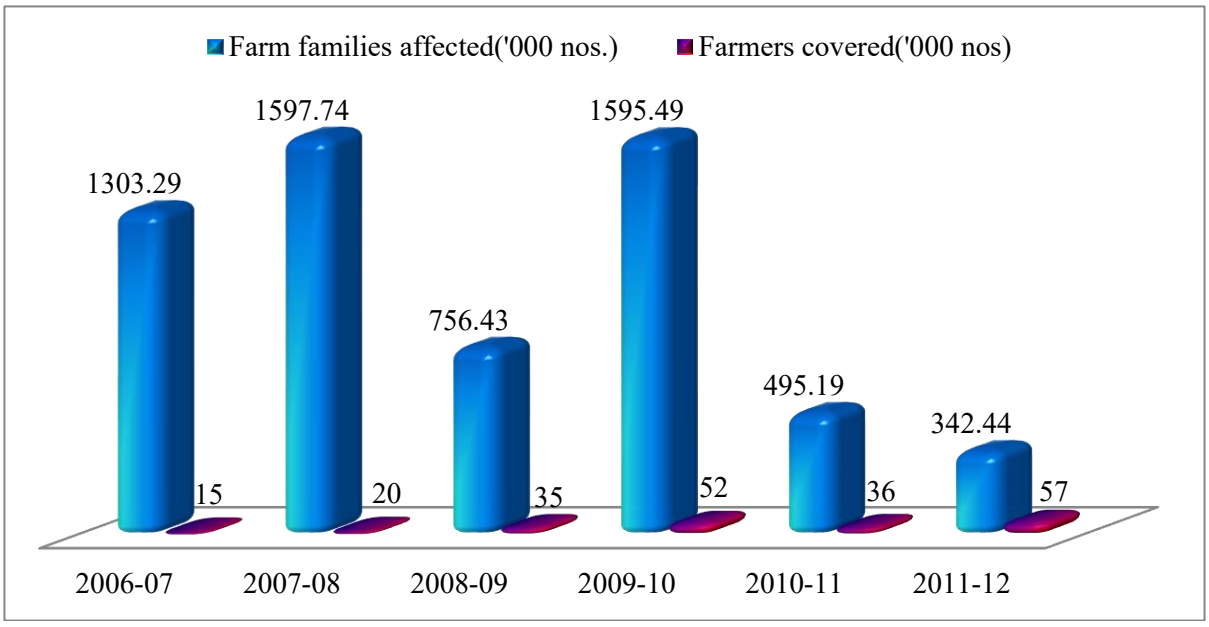



**Fig.5.Comparison between farm families affected by flood/drought and farmers covered under NAIS in Assam**




*Source: Statistical Handbook of Assam 2011*

**Modified National Agricultural Insurance Scheme (MNAIS) in Assam**

In Assam, Modified National Agricultural Insurance Scheme is implemented in two districts, viz., Kamrup and Dhubri from rabi 2010-11. Table 12 shows the status of MNAIS in Assam for the year of 2010-11.

Crop wise sum insured limits and premium rates under MNAIS are different in both two districts viz., Kamrup (rural) and Dhubri of Assam. Table 13 shows the sum insured limits and premium rates for summer paddy in those two districts.

In case of loanee farmers, entire crop loan amount is compulsorily covered as 'sum insured' at the above premium rate.

**Problems and prospects of crop insurance in Assam:**

***Problems:***

One of the major problems is unawareness. Most of the North Eastern farmers are unaware about crop insurance. Even no claims at all have been made by the farmers. of Assam and other north eastern states in the last year (2011-12) for their crop losses. On the other hand, NAIS has not been able to provide desired solution to the risk hedging in the agriculture sector in the state. Reasons are:

- The slow response of banks in issuance of kissan credit cards which has affected a large number of farmers of the state from getting benefit from NAIS
- Mismatch of crops covered under NAIS and crop grown by farmers of Assam, some important crop like ginger, chili etc. are not covered.
- Delays in claims settlements
- Crop Cutting Experiment (CCE) quality is likely to vary considerably between states due to disparities in the levels of accountability, expertise and capacity of the agencies responsible for CCEs.
- A lack of accuracy in CCEs increases the basis risk experienced by farmers by increasing the non-sampling error.
- No Involvement of private sector which results in low investment in the scheme.

***Prospects:***

Different possible prospects are listed below:

- Provision for conducting awareness programmes for farmers (AICI-NCAP sponsored awareness meeting at AAU during 2011, December) to promote awareness about crop insurance.
- Provision for covering other economically important and extensively growing crops of the state under crop insurance scheme.
- Proper co-ordination of crop insurance scheme with farmers' convenience.
- More crop area coverage under MNAIS as MNAIS is considered as more improved than NAIS.
- Publication of leaflets related to crop insurance in local languages so that farmers can better understand.

**Conclusion**

Crop insurance acts as a life saver of the farmers of the state like Assam where every year, large scale crop failure occur due to various natural calamities such as flood, drought etc. The crop insurance scheme National Agricultural Insurance Scheme (NAIS) has benefitted a large number of farmers in Assam to overcome the financial loss resulting from such crop failure due to natural disasters. However, although NAIS is showing a significant growth in the state, but still this scheme has failed to cover a considerable number of farmers of the state which demands for more improvement in the scheme to be done. A well planned and well executed crop insurance scheme always needs proper co-ordination as well as integration of government and farmers to achieve the desired goal. So lastly it can be concluded that by making provision for a better crop insurance scheme government can provide better standard of living to farmers and likewise ensure a better socio economic development of the state.

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**Table 1: Status of NAIS in NE states of India from Rabi 1999-2000 to Kharif 2011-12 (as on 19.10.2012)**

| State / union territory | No. Of farmers covered (in '000') | Area insured ('000ha) | Sum insured | Gross premium | Premium subsidy | Claims | No. Of farmers benefitted ( in '000') |
|---|---|---|---|---|---|---|---|
| | | | All are in Rs. Crore | | | | |
| Assam | 284 | 216 | 473 | 13 | 1 | 12 | 44 |
| Manipur | 14 | 15 | 40 | 1 | 0.09 | 3 | 14 |
| Meghalaya | 27 | 29 | 42 | 2 | 0.32 | 0.47 | 3 |
| Mizoram | 0.121 | 0.134 | 0.232 | 0.01 | 0.001 | 0.112 | 0.119 |
| Sikkim | 2 | 1 | 3 | 0.04 | 0.01 | 0.013 | 0.086 |
| Tripura | 19 | 12 | 26 | 0.73 | 0.08 | 0.58 | 3 |
| **India** | **192778** | **291406** | **255360** | **7556** | **819** | **24839** | **51042** |

*Source: AICI*

**Table 2.Assam's general profile of land area (2009-10)**

| **Total geographical area** | **78.44 lakh ha** |
|---|---|
| Total cultivable land | 30.16 lakh ha |
| Net area sown | 28.11 lakh ha |
| Flood prone area | 4.75 lakh ha (16.9 per cent of net area sown) |
| Drought prone area | 0.94 lakh ha (3.3 per cent of net area sown) |

*Source: Statistical hand book of Assam, 2010*

**Table 3.Achievements under NAIS in Assam**

| **Particulars** | **1997-98 to 2000-01** | **2001-02 to 2005-06** | **2006-07to 2009-10** | **Total (1997-98 to2009-10)** |
|---|---|---|---|---|
| **Farmers covered (no.)** | 3580 | 66292 (1751.73) | 94772 (2547.26) | 164644 |
| **Area covered (ha)** | 2418.70 | 44787.83 (1751.73) | 82460.09 (3309.27) | 129666.62 |
| **Sum insured(lakh Rs)** | 307.27 | 5792.61 (1785.18) | 14326.94 (4562.65) | 20426.82 |
| **Premium received (lakh Rs)** | 72.87 | 142.49 (95.54) | 250.88 (244.28) | 466.24 |
| **Claim entertained(lakh Rs)** | 1.41 | 250.88 (1692.90) | 311.87 (2018.43) | 564.16 |

*Source: Assam agriculture at a glance, deptt of agriculture, Assam*
*(Figure in parentheses indicates per cent change in current period over the base period i.e.1997-98 to 2000-01: Authors' calculation )*

**Table 4.Agricultural insurance (NAIS) of Assam at a glance (as on 19.10.2012)**

| **Particulars** | **Amount** |
|---|---|
| Farmers covered | 2.84 lakh nos. |
| Crop area covered | 2.16 lakh ha |
| Sum insured | Rs.473.38 crore |
| Gross premium received | Rs. 13.34 crore |
| Premium subsidy | Rs. 112.24 lakh |
| Claims entertained | Rs 11.74 crore |
| Farmers benefited | 44000 nos. (15.49 per cent of total farmers covered) |

Source: AICI, Guwahati

**Table 5.Crop covered under NAIS in Assam**

| Parameters | Kharif 2010 | Rabi 2010-11 |
|---|---|---|
| Crops covered | Ahu paddy, sali paddy, jute | Summer paddy, wheat, rape & mustard, potato, sugarcane |
| Unit of insurance | Revenue circle/gr. Of revenue circles/ district | Revenue circle/gr. Of revenue circles/ district |

*Source: AICI*

**Table 6.Crop wise sum insured limits & premium rate under NAIS in Assam (rabi 2012-13)**

| Notified crops | Sum insured limits(Rs./ha)* | Premium rate (%) ** |
|---|---|---|
| Summer paddy | 32,100 | 2.00 |
| Wheat | 11,300 | 1.50 |
| Rape & mustard | 10,700 | 2.00 |
| Potato | 66,300 | 6.00 |
| Sugarcane | 58,100 | 3.10 |

(*Applicable only for non-loanee farmers, ** applicable for both loanee and non- loanee farmers.) *Source: AICI, Guwahati*

**Table 7.Performance of NAIS in Assam for rabi season**

| Year | Sum insured | Gross premium | Premium subsidy | Claims |
|---|---|---|---|---|
| | (all amounts are in Rs. thousand) | | | |
| 1999-2000 | 11030 | 272 | 112 | 50 |
| 2000-01 | 12585 | 301 | 148 | 18 |
| 2001-02 | 26771 | 750 | 299 | 1211 |
| 2002-03 | 32789 | 886 | 265 | 120 |
| 2003-04 | 58887 | 1477 | 263 | 2738 |
| 2004-05 | 86740 | 2440 | 221 | 957 |
| 2005-06 | 136668 | 4115 | 395 | 13038 |
| 2006-07 | 91150 | 2460 | 246 | 768 |
| 2007-08 | 135999 | 5038 | 505 | 446 |
| 2008-09 | 417148 | 12437 | 1232 | 6600 |
| 2009-10 | 571995 | 17553 | 1751 | 32924 |
| 2010-11 | 310330 | 12926 | 1288 | 1626 |
| 2011-12 | 739114 | 27343 | 2730 | 0.00 |
| **Rabi seasons total** | **2631206** | **87998** | **9455** | **60919** |

*Source: AICI*

**Table 8.Compound growth rate of performance of NAIS in Assam for rabi season**

| Particulars | CGR |
|---|---|
| Sum insured | 41.24* |
| Gross premium | 46.47* |
| Premium subsidy | 26.70* |
| Claims(up to 2010-11) | 53.80* |

* Means significant at 1 per cent level of significance
(Based on authors' calculation)

**Table 9.Performance of NAIS in Assam (Kharif)**

| Year | Sum insured | Gross premium | Premium subsidy | Claims |
|---|---|---|---|---|
| | (All amounts are in Rs. thousand) | | | |
| 2000 | 7114 | 157 | 70.0 | 75 |
| 2001 | 24139 | 527 | 204 | 160 |
| 2002 | 17477 | 361 | 100 | 79 |
| 2003 | 24280 | 660 | 128 | 717 |
| 2004 | 72590 | 1322 | 128 | 5937 |
| 2005 | 89084 | 1710 | 156 | 131 |
| 2006 | 104932 | 1758 | 158 | 9190 |
| 2007 | 117210 | 2050 | 202 | 6684 |
| 2008 | 82647 | 1723 | 169 | 536 |
| 2009 | 480181 | 9778 | 930 | 6870 |
| 2010 | 462550 | 9867 | 982.96 | 5971 |
| 2011 | 619654 | 15510 | 1542 | 20218 |
| **Kharif Seasons Total** | **2102604** | **45423** | **4769** | **56569** |

*Source: AICI*

**Table 10.Compound Growth Rate of performance of NAIS in Assam for kharif season**

| particulars | CGR |
|---|---|
| Sum insured | 45.19* |
| Gross premium | 44.92* |
| Premium subsidy | 26.19* |
| Claims(upto 2010-11) | 56.74* |

* Significant at 1 per cent significance level
(Based on authors' calculation)

**Table 11.District wise crop coverage under NAIS in Assam (rabi 2011-12)**

**A. Districts covering all five crops:**

| District | Crops covered |
|---|---|
| Nalbari | Summer paddy, wheat, rape & mustard, potato and sugarcane |
| Baksa | |
| Sonitpur | |
| Darrang | |
| Udalguri | |
| Nagaon | |
| Morigaon | |
| Golaghat | |
| Karbi Anlong | |

**B.District covering 4 crops:**

| District | Crops covered |
|---|---|
| Kokrajhar | Summer paddy, rape & mustard, potato, wheat |
| Bongaigaon | -do- |
| Chirang | -do- |
| Goalpara | -do- |
| Barpeta | -do- |
| Dhemaji | -do- |
| Kamrup(rural) | Wheat, rape & mustard, potato and sugarcane |

| | |
|---|---|
| Jorhat | Summer paddy, rape & mustard, potato and sugarcane |
| Lakhimpur | -do- |
| Cachar | -do- |
| Karimganj | -do- |

**C. Districts covering 3 crops:**

| District | Crops covered |
|---|---|
| Dhubri | Wheat, rape & mustard ,potato |
| Hailakandi | Summer paddy, rape & mustard, potato |

**D.Districts covering 2 crops:**

| District | Crops covered |
|---|---|
| Kamrup (metro) | Summer paddy, rape & mustard |
| Sivasagar | Rape & mustard, potato |
| Tinsukia | -do- |
| N.C. Hills | Rape & mustard , sugarcane |

**E.District covering only one crop:**

| District | Crops covered |
|---|---|
| Dibrugarh | Rape & mustard |

*Source: AICI, Guwahati*

**Table 12.Status of MNAIS in Assam**

| Items | Kamrup (R) District | Dhubri District |
|---|---|---|
| Village panchayats covered | 144 nos | 168 nos. |
| Farmers covered | 903 nos. ( loanee farmer: 893 nos. & Non-loanee farmer:10 nos.) | 1194nos.(loanee farmer:1186 nos.& Non-loanee farmer:8 nos.) |
| Area covered | 869.71 ha | 694.48 ha |
| Sum insured | Rs.2.74 crore | Rs.2.24crore |
| Premium received | Rs.9.58 lakh | Rs.10.10 lakh |

*Source: Directorate of Agriculture, Assam*

**Table13.Crop-wise sum insured limits & premium rate under MNAIS in Assam (rabi 2010-11)**

| Notified crops | Districts | Sum insured limits(Rs./ha)* | Premium rate(%)** |
|---|---|---|---|
| Summer paddy | Kamrup (rural) | 35,370 | 2.10 |
| | Dhubri | 40,485 | 2.70 |

(*Applicable only for non-loanee farmers, ** Applicable for both loanee and non- loanee farmers.) *Source: Directorate of Agriculture, Assam*

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# Utilization Pattern of Self-Help Groups Finance of Rural Women Beneficiaries in West Garo Hills District, Meghalaya

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**Abstract:**

This present study examines the utilization patterns of SHGs finance received by rural women under NERCoRMP in West Garo Hills district, Meghalaya.. The study revealed that the SHG finance was the most critical and basic need that has significant potentials for the transformation of the rural economy. The data pertaining to study was related to year 2010-2011. Majority of the SHG women members felt that loan amount was not adequate and the loan amount obtained through SHGs was totally utilized for the purpose for which purpose it was given. The results highlighted that the seed and labour cost on filed preparation under agriculture and plantation crops, stock and housing under livestock sector, housing and machinery and equipments under business and cottage industries and education under domestic affairs were the major items of utilization of investment borrowings constituting more than 70 per cent, 85 per cent, 85 per cent and 90 per cent respectively in all the size groups. There was no diversion of loan sanctioned for particular activities and the entire loan sanctioned were fully utilized for the purpose the beneficiaries have taken and the loan amounts were utilized for the particular items as per their order of requirements.

**Keywords:** *SHG, Utilisation Pattern, Garo Hills.*

## Introduction:

The Self-Help Groups finance plays an important role in poverty alleviation efforts of many developing countries. Over the years, there has been phenomenal growth in activities of micro credit across the developing world along with a transition in the paradigm and modalities of micro credit. In the field of micro credit there have been spectacular achievements as well as challenges too (Mondal *et al,* 2012). The broad conclusion of the various numerical exercises made so far to ascertain the availability of production credit to rural women was the inadequacy of the supply of institutional credit to meet the production credit requirement of income generation activities. Now the question arises whether such credit supply though inadequate in its coverage and volume has been properly utilized to increase production, productivity, employment,

income, savings, assets, standard of living etc. or not (Kalita, 1996; Anthony, 2003 and Parwate et al, 2012). The utilization of loan is normally examined in the context of the purpose for which the credit is advanced and the purpose of which it is actually used. The difference between these two indicates the extent of misutilization or diversion of credits. It may lead to increase in overdues due to credit being misutilized or non-productive. Thus, the utilization signifies the use of funds in part or in full for the purpose for which the loan is originally sanctioned (Chaudhary *et al,* 2000; and Ayaz and Hussain, 2011). The finance under SHG and other FIs were advanced to the sample beneficiaries for the purposes of investment expenditure for various income generating activities. It was observed that the sample beneficiaries of all the size groups utilized full amount of the finance made available to them for their proposed purpose of investment expenditure without diversion of funds for any other purposes. This might be due to adequate availability of funds given by the financial sources to the sample beneficiaries or committed contributions of sample beneficiaries for the particular income generating sectors from their own sources. Thus, the present study is designed with the following specific objectives - (i) to study the utilization patterns of SHGs finance and (ii) to examine the sector-wise utilization of funds received from the SHGs as loans.

**Methodology:**

The present study was conducted in West Garo Hills District of Meghalaya covering four Development Blocks viz., Rongram, Selsela, Dadengre and Gambegre. The study was based on the primary data of households of SHG beneficiaries under NERCRMP, West Garo Hills District of Meghalaya. Multi-stage random sampling technique was adopted for selection of sample SHG beneficiaries. At the first stage, list of SHG beneficiaries under SHG finance during 2010-2011 was collected from the North Eastern Region Community Resource Management Project (NERCORMP) Office, Dakopgre, Tura. Then four Community and Rural Development Blocks were selected randomly in the second stage. In the third stage, 5 villages were selected randomly from each block and finally 10 women SHG beneficiaries were selected randomly from each selected villages. Thus a total of 200 sample women beneficiaries were selected for the present study. The primary data was collected from the sample beneficiaries by using pre-tested structured schedules of interview method. Then, the collected samples were stratified into three size groups viz., Group I (Less than Rs. 90500.00), Group II (Rs. 90501.00 – 16900.00) and Group III (Rs. 169001.00 and above) based on annual income under SHG finance by using the Cumulative Root Frequency Rule. Thus, the sample beneficiaries constitute 118, 52 and 30 samples in Group I, Group II and Group III respectively. Data were analyzed by tabular and regression equation. The utilization of SHGs finance was examines by applying the multiple linear regression equation of the following forms with SHG finance as one of the independent variables.

$$Y = b_0 + b_1x_1 + b_2x_2 + b_3x_3 + b_4x_4 + e$$

Where,

Y = Amount of SHG finance received (Rs.)

$X_1, X_2 X_3 X_4$ = Expenditure on various items (Rs.)

e = Error term

b, $b_0$, $b_1$, $b_2$, $b_3$ and $b_4$ were the unknown parameters estimated with the help of Ordinary Least Square Method. Positive and statistically significant regression coefficient such as b and $b_1$.$b_4$ were indicated the utilization of SHG finance for the simple and multiple regression models respectively showing that there was no diversion of loan sanctioned

for specific income generating activities and the entire loan sanctioned were fully utilized for the purposes which the beneficiaries have taken.

**Results and discussions**

**Magnitude of Financial Assistance:**

Table 1 shows that the sample beneficiaries as a whole received a total sum of financial assistance of Rs. 1077450.00 during 2010 – 2011 from the SHGs and other financial institutions like Society for Micro Economy Development Affairs (SoFMEDA), Banking Institution and Learning Centre of Excellence for Holistic Aspiration of Mother (BILCHAM), District Industries Centre (DIC), etc. Out of these, the highest amount constituting 36.72 per cent was received by the beneficiaries of Group II followed by 36.49 per cent by Group I beneficiaries and 26.77 per cent by Group III beneficiaries. On the basis of per farm financial assistance, an average amount of Rs. 20558.89 was received by various size groups of sample beneficiaries. Between different size groups, the amount of financial assistance per farm was found to be increased with the increase in size groups being Rs. 3332.62 in the lower size groups i.e., Group I and Rs. 9616.66 in higher size groups i.e., Group III beneficiaries. This might be due to the fact that the loan taken by the beneficiaries were based on their ability to repay the amount as the size groups were based on incomes of beneficiaries. It was also revealed that the loan was received as per the size of their incomes. The similar results were reported by Kalita (1996). Thus, higher the size groups, higher the financial assistance received by the beneficiaries. The beneficiaries of Group II received maximum financial assistance from the SHG and other FIs followed by the Group I and Group III respectively. On an average, the sample beneficiaries received financial assistance of Rs. 20558.89 per farm during the reference year. The financial assistance per farm increased with the increase in size groups.

**Item-wise Utilization of Investment Finance on Agriculture and Plantation Crops:**

It is evident from the table 2 that the finance purposively received by the sample beneficiaries in various size groups in the study area were utilized for seed, field preparation, FYM, weeding, fencing, machinery and equipments, harvesting, and marketing and transportations. Amongst various items, the loan amount was utilized maximum (42.36 per cent) on cost of seed and labour for field preparation (18.87 per cent) in the average farm situation followed by weeding (13.94 per cent), harvesting (7.78 per cent), fencing (7.51 per cent), FYM (4.88 per cent), machinery and equipments (4.17 per cent) and marketing and transportation (0.45 per cent) respectively. The extent of utilization for seed was found to be highest in all the size groups of which varied from 32.00 per cent in Group III beneficiaries and 52.57 per cent in Group II beneficiaries. The highest allocation of investment borrowings for seed and field preparation attributed to the fact that the finance was given for the establishment of farms on agriculture and plantation crops. The proportionate use of investment borrowings for other items did not show any specific trends amongst the size groups. The similar findings were reported by Arunachalam and Palenisamy (1991), Anthony (2003) and Parwate *et al* (2012). Thus, the results highlighted the fact that seed and labour cost on filed preparation were the major items of utilization of investment borrowings accounting more than 70 per cent from both the items in all the size groups of beneficiaries where maximum amount was spent by Group II beneficiaries with 52.57 per cent and 21.75 per cent. The balance amount of investment borrowings were shared by weeding, fencing, FYM, harvesting, machinery and equipments, and marketing and transportations in order of their importance.

Table 3 indicates 8 different independent variables where $X_1$, $X_2$, $X_3$, $X_4$, $X_5$, $X_6$, $X_7$ and $X_8$ represents seed, FYM, weeding, fencing, labour, machinery and equipments, harvesting,

and marketing and transportation. The regression co-efficient of the loan was positive and statistically significant at 5 per cent probability level in all the size groups of beneficiaries and thereby indicating the proper utilization of received amount by the women beneficiaries.

**Item-wise Utilization of Investment Finance on Livestock:**

The table 4 indicated that the finance purposively received by the sample beneficiaries in various size groups in the study area was utilized for stock, housing or shed, feed, labour, machinery and equipments, and marketing and transportations. Amongst various items, the loan amount was utilized maximum i.e., 51.47 per cent and 36.51 per cent on cost of stock and housing in the average farm situation followed by feed (11.4 per cent), machinery and equipments (0.25 per cent), labour (1.18 per cent) and marketing and transportation (0.17 per cent) respectively. The per farm utilization pattern of investment borrowing between different size groups also depicted a similar picture like the average farm situations. The extent of utilization for stock and housing were found to be highest in all the size groups which varied from 42.62 per cent in Group II beneficiaries to 55.71 per cent in Group I beneficiaries in the case of stock and 30.98 per cent in Group I to 43.16 per cent in Group III in the case of housing. The reason for highest allocation of investment borrowings for stock and housing attributed to the fact that the finance was given for the establishment of farms for livestock. The proportionate use of finance borrowed for feed was highest in all the size groups, while among the size groups, Group III beneficiaries observed highest (14.20 per cent) and Group II beneficiaries observed lowest (8.20 per cent). The rest of the items such as labour (0.54 per cent), machinery and equipments (0.54 per cent) and marketing and transportation were highest in Group I beneficiaries while Group III beneficiaries has not utilized loans for these items. The similar findings were reported by Kalita (1996) and Mondal *et al* (2012). Thus, it was cleared form the table that stock and housing were the major items of utilization of investment borrowings constituting more than 85 per cent in both the items in all the size groups of beneficiaries where maximum amount was spent in Group II beneficiaries with 52.57 per cent in the case of stock and 21.75 per cent in Group III beneficiaries in the case of housing.

The table 5 indicates that there are 6 different independent variables where $X_1$, $X_2$, $X_3$, $X_4$, $X_5$, and $X_6$ represents stock, housing, feed, labour, machinery and equipments and marketing and transportation. The regression co-efficient of the loan was positive and statistically significant at 5 per cent probability level in all the size groups of beneficiaries.

**Item-wise Utilization of Investment Finance on Business and Cottage Industries:**

Table 6 shows the item wise utilization pattern of investment borrowings (per farm) amongst various size groups of beneficiaries on business and cottage industries. The finance purposively received by the sample beneficiaries in various size groups in the study area were utilized for machinery and equipments, raw materials, housing, labour, and marketing and transportations. Amongst various items, the maximum loan amount was utilized (55.97 per cent and 30.96 per cent) on housing and machinery and equipments for the average farm situation. This was followed by raw materials (5.80 per cent), labour (4.61 per cent) and marketing and transportation (2.63 per cent) respectively. Among different size groups of beneficiaries, per farm utilization pattern of investment borrowing also shows a similar picture like the average farm situations. The extent of utilization for housing and machinery and equipments were also highest in all the size groups, which varied from 50.70 per cent in Group I beneficiaries to 64.06 per cent in Group II beneficiaries for the expanses on housing and 23.43 per cent in Group II to 44.73

per cent in Group III in the case of machinery and equipments. The highest allocation of investment borrowings for housing and machinery and equipments attributed to the fact that the finance was given for the establishment of business and cottage industries. The proportionate use of finance borrowed for raw materials was highest in all the size groups, while among the size groups, Group II beneficiaries observed highest (12.50 per cent) and no utilization was observed in Group III beneficiaries (0.00 per cent). The rest of the items such as labour (11.75 per cent), and marketing and transportation (7.89 per cent) were highest in Group I beneficiaries while no utilization of fund on labour in case of Group II beneficiaries and no utilization of funds on marketing and transportation in case of Group III beneficiaries. The similar findings were reported by Mathew (2006). The findings of the analysis showed that housing and machinery and equipments were the major items of utilization of investment borrowings showing more than 85 per cent in both the items in all the size groups of beneficiaries where maximum amount was spent in Group III beneficiaries with 44.73 per cent in the case of housing and 64.06 per cent in Group II beneficiaries in the case of machinery and equipments.

From the table 7, there are 6 different independent variables where $X_1$, $X_2$, $X_3$, $X_4$, $X_5$, and $X_6$ represents machinery and equipments, raw materials, housing, labour, and marketing and transportation. The analysis revealed that the regression co-efficient of the loan was positive and statistically significant at 5 per cent probability level in all the size groups of beneficiaries.

**Item-wise Utilization of Investment Finance on Domestic Affairs:**

The finance purposively received by the sample beneficiaries in various size groups in the study area were utilized for education, food, health, housing, religious ceremony, and others. The item wise utilization pattern of investment borrowings (per farm) amongst various size groups of beneficiaries on domestic affairs is presented in Table 8. The table indicated that, the maximum loan amount (93.90 per cent) was utilized on children education for the average domestic affairs which was followed by housing (6.09 per cent); and there was no funds spent for other items like food, health, religious ceremony and others from the loan. Amongst different size groups of beneficiaries, per domestic affairs utilization pattern of investment borrowing also explained the similar picture like the average situations of domestic affairs. The extent of utilization for education was highest in all the size groups, varied from 86.66 per cent in Group II beneficiaries to 95.04 per cent in Group I beneficiaries. The reason for highest allocation of investment borrowings for education attributed to the fact that the finance was given for the education of children for pursuing their higher studies. The proportionate use of investment borrowings for other items did not show much variation amongst the size groups. The proportion of funds utilized on housing was observed to be highest (13.33 per cent) in Group II while it was lowest (4.95 per cent) in Group I beneficiaries. There was no fund utilized for other items like food, health, religious ceremony, and others. The analysis revealed that the education was the major items of utilization of investment borrowings requiring more than 90 per cent in all the size groups of beneficiaries where maximum amount was spent in Group I beneficiaries with 95.04 per cent. The remaining amount of investment borrowings were shared only by housing as per the requirement. The maximum utilization of loan on education was resulted that the SHGs and FIs were given first priority for children education than other domestic needs. As children's education was considered the future of rural economic growth, the finance under SHG and other FIs prioritized to uplift their economic conditions in next generation.

Regression estimates show that 6 different independent variables such as $X_1$, $X_2$, $X_3$, $X_4$, $X_5$, and $X_6$ represents education, food, health, housing, religious ceremony, and

others. Result of multiple regression analysis for the items of utilization in domestic affairs is presented in Table 9. The analysis revealed that the regression co-efficient of the loan was positive and statistically significant at 5 per cent probability level in all the size groups of beneficiaries.

**Conclusion:**

The regression co-efficient of the loan in all the income and non-income generating sectors were positive and statistically significant at 5 per cent probability level in all the size groups of beneficiaries. This revealed that the finance under SHG and other FIs had positive significant on utilization of funds on all the sectors of income and non-income generating activities showing that there was no diversion of loan sanctioned for specific income generating activities and the entire loan sanctioned were fully utilized for the purposes which the beneficiaries have taken. Thus, it can be concluded that the amount of loans were utilized properly for the particular items as per their requirements. The amount of loans was utilized for the particular items as per their order of requirements.

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**Table 1. Magnitude of Financial Assistance (Rs.) Received by the SHG Beneficiaries across Various Size Groups from SHG and Other FIs during 2010-2011**

| Size Groups | Total financial assistance | Per farm | CV of Total Financial Assistance |
|---|---|---|---|
| Group I | 393250 | 3332.62 | 66.59297 |
| | (36.49) | | |
| Group II | 395700 | 7609.61 | 172.6687 |
| | (36.72) | | |
| Group III | 288500 | 9616.66 | 106.9791 |
| | (26.77) | | |
| Total | 1077450 | 20558.89 | 346.2408 |
| | (100.00) | | |

Figures in parentheses indicate percentage to column total

**Table 2. Item Wise Utilization of Investment Finance Borrowings (Rs. Per Farm) on Agriculture and Plantation Crops from SHG and Other Financial Sources across Various Size Groups**

| Size Group | Seed | Field Preparation | Manure | Weeding | Fencing | Machinery & Equipments | Harvesting | Marketing & Transportation | Total |
|---|---|---|---|---|---|---|---|---|---|
| Group I | 63140 (42.51) | 26200 (17.64) | 5180 (3.49) | 25600 17.24) | 17100 (11.51) | 5370 (3.62) | 5940 (4.00) | 0.00 (0.00) | 148530 (100.00) |
| Group II | 102000 (52.57) | 42200 (21.75) | 6500 (3.35) | 17000 (8.76) | 3200 (1.64) | 2100 (1.08) | 20000 (10.31) | 1000 (0.51) | 194000 (100.00) |
| Group III | 18400 (32.00) | 9900 (17.22) | 4500 (7.82) | 9100 (15.82) | 5400 (9.39) | 4500 (7.82) | 5200 (9.04) | 500 (0.86) | 57500 (100.00) |
| Average | 61180 (42.36) | 26100 (18.87) | 5393.33 (4.88) | 17233.33 (13.94) | 8566.66 (7.51) | 3991 (4.17) | 10380 (7.78) | 500 (0.45) | 133343.30 (100.00) |

Figures in parentheses indicates percentage to total finance borrowed

**Table 3. Result of the Linear Regression Analysis of Utilization Pattern of SHG Finance in Agriculture and Plantation**

**Crops by SHG Women Beneficiaries across Various Size Groups**

| Variables | Group I | | Group II | | Group III | | As a whole | |
|---|---|---|---|---|---|---|---|---|
| | Regression Coefficient | T – Stat | Regression Coefficient | T - Stat | Regression Coefficient | T – Stat | Regression Coefficient | T - Stat |
| $X_1$ | 0.1231 | 3.9178* | 0.9796 | 1.8256* | 0.2621 | 4.4532* | 0.0976 | 4.1267* |
| $X_2$ | 0.7498 | 6.4121 | 0.5104 | 1.6162* | 0.6183 | 22.5712 | 0.3719 | 8.9801 |
| $X_3$ | 0.0976 | 4.2524* | 0.9827 | 1.1338* | 0.2863 | 9.5736 | 0.0943 | 7.3201 |
| $X_4$ | 0.3719 | 1.5916 | 0.1758 | 0.1987* | 0.7710 | 4.2938* | 0.5104 | 2.1254* |
| $X_5$ | -0.0943 | 3.6297* | 0.5422 | 6.5547* | 0.7218 | 7.5146 | 0.9827 | 5.3480* |
| $X_6$ | 0.1114 | 4.1289* | 0.4508 | 5.6747* | 0.6843 | 3.0445* | 0.1758 | 3.8721* |
| $X_7$ | 0.03960 | 1.8002* | 0.2005 | 3.5066* | 0.4694 | 11.3628 | 0.1239 | 2.1008* |
| $X_8$ | 0.2460 | 2.89973* | 0.0030 | 3.0304* | 0.0964 | 6.5535 | 0.2171 | 3.1245* |

* - significant at 5 per cent probability level.

**Table 4. Item Wise Utilization of Investment Finance Borrowings (Rs. Per Farm) on Livestock from SHG and Other FIs across Various Size Groups**

| Size Group | Stock | Housing/Shed | Feed | Labour | Machinery & Equipments | Marketing & Transportation | Total |
|---|---|---|---|---|---|---|---|
| Group I | 71200 (55.71) | 39600 (30.98) | 15100 (11.81) | 700 (0.54) | 700 (0.54) | 500 (0.39) | 127800 (100.00) |
| Group II | 28040 (56.08) | 17700 (35.40) | 4100 (8.20) | 0.00 (0.00) | 100 (0.20) | 60 (0.12) | 50000 (100.00) |
| Group III | 7800 (42.62) | 7900 (43.16) | 2600 (14.20) | 0.00 (0.00) | 0.00 (0.00) | 0.00 (0.00) | 18300 (100.00) |
| Average | 35680 (51.47) | 21733.33 (36.51) | 7266.66 (11.4) | 233.33 (0.18) | 266.66 (0.25) | 186.67 (0.17) | 65366.67 (100.00) |

Figures in parentheses indicate percentages to total finance borrowed

**Table 5. Result of the Linear Regression Analysis of Utilization Pattern of SHG Finance on Livestock by SHG Women Beneficiaries across Various Size Groups**

| Variables | Group I | | Group II | | Group III | | As a whole | |
|---|---|---|---|---|---|---|---|---|
| | Regression Coefficient | T – Stat | Regression Coefficient | T - Stat | Regression Coefficient | T – Stat | Regression Coefficient | T - Stat |
| $X_1$ | -0.0441 | 4.1801* | 0.3417 | 1.3343* | -0.9246 | 2.9262* | -0.7861 | 3.1098* |
| $X_2$ | -0.7863 | 1.4779* | 0.7028 | 3.0191* | -0.5744 | 2.4802* | 0.3925 | 2.1281* |
| $X_3$ | 0.4922 | 5.5312* | -0.2657 | 2.5993* | 0.1989 | 2.3833* | -0.9019 | 4.5412* |
| $X_4$ | -0.9016 | 7.9601* | 0.0789 | 1.2953* | 0.6535 | 4.9087* | 0.4212 | 1.2391* |
| $X_5$ | 0.9755 | 7.9257* | 0.3420 | 3.9472* | 0.0987 | 5.2107* | 0.2841 | 3.2185* |
| $X_6$ | 0.2026 | 1.6227* | 0.2503 | 7.4675* | 0.5545 | 4.1280* | 0.0608 | 2.1582* |

* - significant at 5 per cent probability level.

**Table 6. Item Wise Utilization of Investment Finance Borrowings (Rs. Per Farm) on Business and Cottage Industries from SHGs and FIs across Various Size Groups**

| Size Group | Machinery & Equipments | Raw Materials | Housing | Labour | Marketing & Transportation | Total |
|---|---|---|---|---|---|---|
| Group I | 14100 (24.73) | 2800 (4.91) | 28900 (50.70) | 6700 (11.75) | 4500 (7.89) | 57000 (100.00) |
| Group II | 15000 (23.43) | 8000 (12.50) | 41000 (64.06) | 0.00 (0.00) | 0.00 (0.00) | 64000 (100.00) |
| Group III | 85000 (44.73) | 0.00 (0.00) | 101000 (53.15) | 4000 (2.10) | 0.00 (0.00) | 190000 (100.00) |
| Average | 38033.33 (30.96) | 3600 (5.80) | 56966.67 (55.97) | 3566.66 (4.61) | 1500 (2.63) | 103666.70 (100.00) |

Figures in parentheses indicate percentages to total finance borrowed

**Table 7. Result of the Linear Regression Analysis of Utilization Pattern of SHG Finance on Business and Cottage Industries by SHG Beneficiaries across Various Size Groups**

| Variables | Group I | | Group II | | Group III | | As a whole | |
|---|---|---|---|---|---|---|---|---|
| | Regression Coefficient | T – Stat | Regression Coefficient | T - Stat | Regression Coefficient | T – Stat | Regression Coefficient | T - Stat |
| $X_1$ | 0.0239 | 7.5807* | 0.64888 | 8.7673* | 0.6745 | 3.7845* | 0.0547 | 2.4598* |
| $X_2$ | 0.1156 | 12.4643 | 0.2706 | 0.4507 | 0.7952 | 3.0980* | 0.4598 | 2.5478* |
| $X_3$ | 0.0745 | 1.1713* | -0.2339 | 8.2731* | 0.1772 | 2.2345* | 0.1066 | 3.4513* |
| $X_4$ | 0.1356 | 2.2319* | -0.0308 | 0.4706 | -0.5463 | 1.3213* | 0.2317 | 1.4389* |
| $X_5$ | 0.0978 | 2.9804* | 0.6509 | 3.9804* | 0.0968 | 3.0761* | 0.5640 | 3.7621* |
| $X_6$ | 0.1518 | 2.7612* | 0.0916 | 5.1384* | 0.0124 | 5.3461* | 0.7621 | 5.6154* |

* - Significant at 5 per cent probability level.

**Table 8. Item Wise Utilization of Investment Finance Borrowings (Rs. Per Farm) on Domestic Affairs from SHG and Other FIs across Various Size Groups**

| Size Group | Education | Housing | Total |
|---|---|---|---|
| Group I | 57500 | 3000 | 60500 |
| | (95.04) | (4.95) | (100.00) |
| Group II | 26000 | 4000 | 30000 |
| | (86.66) | (13.33) | (100.00) |
| Group III | 22000 | 0.00 | 22000 |
| | (100.00) | (0.00) | (100.00) |
| Average | 35166.67 | 2333.33 | 37500 |
| | (93.90) | (6.09) | (100.00) |

Figures in parentheses indicate percentages to total finance borrowed

**Table 9. Result of the Linear Regression Analysis of Utilization Pattern of SHG Finance on Domestic Affairs by SHG**

**Women Beneficiaries across Various Size Groups**

| Variables | Group I | | Group II | | Group III | | As a whole | |
|---|---|---|---|---|---|---|---|---|
| | Regression Coefficient | T – Stat | Regression Coefficient | T - Stat | Regression Coefficient | T – Stat | Regression Coefficient | T - Stat |
| $X_1$ | 0.7107* | 1.4889* | -0.1492 | 2.4590* | 0.265220781* | 2.5267* | 0.4321* | 2.5124* |
| $X_2$ | 0.5492* | 2.6435* | -0.9082 | 2.4315* | 0.0978 | 2.6745* | 0.0129 | 2.2865* |
| $X_3$ | -0.0553 | 3.1929 | 0.0124* | 1.5432* | 0.4523* | 3.3213* | 0.2183* | 3.5607* |
| $X_4$ | 0.1348* | 1.9857* | 0.1156* | 2.6752* | 0.2128* | 5.4512* | 0.5421* | 3.5781* |
| $X_5$ | 0.3896* | 4.5160* | 0.6234* | 3.2351* | 0.0623 | 1.6543* | 0.4983* | 1.6287* |

* - Significant at 5 per cent probability level.

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# Problems and Prospects of Tourism in Garo Hills of Meghalaya: An Exploration

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**Abstract:**

The tourism industry of India is very important from economic view point. The World Travel and Tourism Council calculated that this sector supported 39.5 million jobs with 7.7 per cent of its total employment. India ranked third among countries with the fastest growing tourism industries over the next decade. India has a large tourism sector which is expected to grow at an estimated rate of 32% annually to reach about 95 billion numbers by 2015. According to provisional statistics 6.29 million foreign tourists arrived in India in 2011, an increase of 8.9% from 5.78 million in 2010. Tourism is a very promising development tool for Meghalaya in general and Garo Hills in particular. Being interesting topography and natural positivity, the Garo Hills region may be treated as the heaven of natural beauty with full of green trees. The extravagant scenic beauty and the nerve racking experience of travelling along the road has attracted the imagination of thousands of travellers from home and abroad. The paper, therefore, is an attempt to explore of the problems and prospects of tourism in Garo Hills region of Meghalaya.

**Keywords:** *Tourism, Garo Hills, Tourist destinations, Prospects.*

## Introduction:

The tourism industry of India is very important from economic view point and grows speedily. The World Travel and Tourism Council calculated that tourism generated INR 6.4 trillion or 6.6% of the nation's GDP in 2012. It supported 39.5 million jobs, 7.7% of its total employment. The sector is predicted to grow at an average annual rate of 7.9% from 2013 to 2023 (WTTC, 2012). This gives India the third rank among countries with the fastest growing tourism industries over the next decade (WTTC, 2013). India has a large medical tourism sector which is expected to grow at an estimated rate of 30% annually to reach about 95 billion numbers by 2015 (wikipedia). According to provisional statistics 6.29 million foreign tourists arrived in India in 2011, an increase of 8.9% from 5.78 million in 2010. This ranks India as the 38th country in the world in terms of foreign tourist arrivals. Domestic tourist visits to all states and Union Territories numbered 1,036.35 million in 2012, an increase of 16.5% from 2011(Bihar Prabha, 2014). The most represented countries are the United States (16%) and the United Kingdom (12.6%). In 2011 Maharashtra, Tamil Nadu and Delhi were the most popular states for foreign tourists. Domestic tourists visited the states Uttar Pradesh, Andhra Pradesh and Tamil Nadu most frequently.

The World Tourism Organization reported that India's receipts from tourism during 2012 ranked 16th in the world and 7th among Asian and Pacific countries (GoI, 2014). The

Ministry of Tourism designs national policies for the development and promotion of tourism. In the process, the Ministry consults and collaborates with other stakeholders in the sector including various Central Ministries/agencies, state governments, Union Territories and the representatives of the private sector. Concerted efforts are being made to promote new forms of tourism such as rural, cruise, medical and eco-tourism. The Ministry also maintains the Incredible India campaign. India's rich history and its cultural and geographical diversity make its international tourism appeal large and diverse. It presents heritage and cultural tourism along with medical, business, educational and sports tourism.

Tourism is a very promising development tool for Meghalaya in general and Garo Hills in particular. Garo Hills can be in most cases a destination for recreation, leisure, business, adventure and learning as well as religious purpose visit. Garo Hills is blessed with unique natural beauty. Being interesting topography and natural positivity, the Garo Hills region may be treated as the heaven of natural beauty with full of green trees. The extravagant scenic beauty and the nerve racking experience of travelling along the road has attracted the imagination of thousands of travellers from home and abroad. The Garo Hills has opened boundless opportunities for thousands of people living in the hilly area and its enormous potentials can offer to tourism sector. The region, being the nature's gift has many places to travel which are becoming popular to the tourist all over the world. The places are still not overcrowded and pollution free. The sweet sceneries of meeting of air, clouds, hills, rivers, people of different ethnic communities, their lifestyle, their rich, diverse heritage is really imaginative and natural. With this backdrop, the present paper is an exploration of the problems and prospects of tourism in Garo Hills region of Meghalaya.

**Review of Literature:**

A body of literature already exist dealing with different aspects of tourism industries around the globe. This section highlighted a glimpse of the related literature on the problems and prospects of tourism sector.

Tourists are people who are "travelling to and staying in places outside their usual environment for not more than one consecutive year for leisure, business and other purposes not related to the exercise of an activity remunerated from within the place visited" (Uherek 2008). Tourism is considered as an industry and defined as per the demand approach as 'the activities of persons traveling to and staying in places outside their usual environment for not more than one consecutive year for leisure, business and other purposes' (World Tourism Organization, 1995).

The definition of tourism has no universal form. It is still now defined by various people by different ways based on their own justification. Tourism means going out and visiting place for religious purpose, gathering knowledge and having pleasure, fun, or for economic benefit. Tourism is travel for recreational, leisure or business purposes. (http://en.wikipedia.org/wiki/Tourism).

Tourism is the most important industry in the service sector of the Indian economy. It is one of the world's fastest growing industry and it can play role in accelerating the economic development of the country is widely recognized. For many developing countries, particularly the small country, they are mostly dependent upon tourism; this tourism offers a more reliable source of income (Thaker 2004).

Mathieson and Wall (1982) explained that the tourism is the movement of people to destination outside their normal places of work and residence, the activities undertaken during their study in those destinations, and the facilities created to cater to their needs. Tourism has become a major industry the last decades, as economic phenomenon tourism may have a strong positive impact on the destination areas, but simultaneously it

exercises a heavy strain on the resources that support tourism activities. Eco-tourism both at conceptual and empirical levels is significant in a number of respects. Traditionally it encapsulates scientific, aesthetic, and philosophical approaches which reflect the structure and function of the society, that if eco-tourism is properly developed it can not only attract tourists from far and near, but can also generate more revenue for the inhabitants of the region and for the state (Panigrahi 2005).

Henderson (2011) stated that international visitors perceive a negative impression towards a destination with improper arrangement of infrastructure of a country. The paper also mentioned political instability, security and safety as an influential factor domestic and foreign tourist. Basically a negative impression is very bad for developing tourism in a country. Building positive impression toward a country is must. And it is not only the duty of a Government, but also for the domestic and foreign tourist, the local communities and the respective organization that are responsible for the development of the tourism. Forsyth (1997) viewed that environmental protection enhances performance if holiday packages can be differentiated. He gave environmental practices can be taken wisely than it will gain more competitive advantage than giving emphasis on ethical or green products.

Tourism asset are the most important indicator for developing tourism. An increasing number of international tourists are arriving in developing countries, improving transportation access, develop tourist attractions, facilities and services and became a desirable known tourist destination (Cernat and Gourdon 2007). The above review indirectly indicates that there is need to explore the various tourism destinations in and around.

**Garo Hills: A Brief Profile:**

North East India is situated in the eastern most corner of India surrounded by the Himalayas, the plains of Bangladesh and the hill ranges of Myanmar. The North-East region is full of scenic beauty, which can attract tourists of almost any taste and represents different unique ethnic heritage and culture. The region houses a large number of tribes rich in their unique culture, heritage and rituals, and with a huge number of dialects unique to the tribes (RCILTS, 2002). The lush green semi-tropical forests of the region house, besides others, the famous one-horned Asiatic rhino, wild buffalo, and elephants. Many other endangered species of flora (including a wide variety of orchids) and fauna are also found in the forests of the region.

The Garo Hills is part of the Garo-Khasi range in Meghalaya, India. They are inhabited mainly by tribal dwellers, the majority of whom are Garo people. It is one of the wettest places in the world. The range is part of the Meghalaya subtropical forests eco-region. People who reside in the Garo Hills are known as the Garos. Besides the Garo hills, there are Garo settlements in the plains of Assam and Bangladesh. The Garos call themselves Achik-mande. In the Garo language Achik means Hills and mande, Man. So, Achik-mande means the Hills people.

The Garo Hills have an area of approximately 8,000 sq. Kms. Garo Hills comprises 5 districts. Tura is the largest town with a population of about 70,000 located at the foothills of often cloud covered Tura peak. Through the Garo Hills, two mountain ranges pass, called the Arbella range and the Tura range, which forms the great Balpakram valley in between. From the Tura peak one can get the amazing view of the sunset at 1,400m and its peak can reach by a 5 km trek, by hiking or rock climbing. The town is centrally located to other popular game/wild life sanctuaries in the district such as Balpakram and Nokrek, natural caves (the Siju cave being one of the longest in Asia). These places are rich reserves of natural flora and fauna. The localities have their own customs and traditions very different from city dwellers and also indulge in superstitious acts.

The above profile of the area under study indicates magnetic character of the region reflected from the fact that interesting topographical existence, foot hills, flora and fauna, cultural inheritance of Garo society and population size etc.

**Objective of the Study:**

1. To identify the different tourist destinations in Garo Hills for exploring the opportunities.
2. To find out the barriers for developing tourism in Garo Hills and to provide some proposition to remove them.

**Methodology:**

This study is basically descriptive in nature and based on secondary information. The study is based on the published books, different published research works, newspaper, magazines, reports of various government authorities, and websites. A visit has been conducted during the period of April – May 2014 to collect the relevant information to find out the problems of tourism in the study area. District Tourism Officers of 3 Districts, different officials of line departments, local people, domestic and foreign tourists have been interviewed to obtain the relevant data.

**Tourist Attractions in Garo Hills:**

The Garo Hills districts are the hub of natural resources and exquisiteness. The nature remains unchanged. There are a great number of mountains, lake, waterfalls and forests at Garo Hills which has no alternative or similarities in any part of the world.

- Tura: Tura, the district head quarter of West Garo hills is situated 323 km from Shillong via Guwahati at an altitude of 657 metres. Its original name was DURA the part name of DURAMA IMBAMA believed to be the youngest of the three most powerful goddesses who lived there in the past. The highest point being Nokrek Peak at 1412 metres which provides an interesting range of orchids including wild life like wild elephant, rare varieties of birds etc. Tura provides some of the finest views of the hills against a backdrop of the low-lying plains and the sweeping curve of the mighty Brahmaputra. A sunset view can be best seen from Tura peak at 1400 metres and its summit can be reached by a 5 km trek which is a part hiking and part rock climbing.

- Tura Peak: A beautiful and majestic hill stands on the eastern side of Tura at a height of 872 m above sea level overlooking the town of Tura. Local legend has it that the peak provides a sacred shelter or abode to the 'Gods' and it is also claimed that Tura was traditionally known as Dura, but due to mispronunciation by the British gave it the present name of Tura. The Tura range has been declared a reserve forest with an observatory, a Cinchona plantation and a tourist bungalow located at its vicinity. A magnificent view of the lower Brahmaputra valley as well as the golden yellow plains of Bangladesh can be seen all year round from the peak. A foot-track or path developed during the British Raj is still in existence and can be used by tourists and adventurers alike to reach Tura peak with ease and comfort.

- Nokrek Biosphere reserve: 2 km away from the Nokrek peak is the Nokrek Biosphere reserve. This first Biosphere reserve in the North -Eastern region was declared as the National Gene Citrus sanctuary in 1985. The park covers a vast area of 47 Sq. Km of dense forests. The park and Biosphere is famous for having abundance of traditional

herbs and medicines. Mysterious and large gorilla like animal has been sighted inside the National park time and again.

- Bhaitbari: Located on the western frontier of the state, Bhaitbari is a small village of west Garo Hills District. The site is famous for the archaeological finds having been uncovered after protected 'excavations' on the area. The finds are of artefacts which reveals the existence of planned places of worship.

- Siju Bird Sanctuary: Just across the Siju cave on the other side of Simsang River in the South -Garo Hills is the bird sanctuary where one can spot many rare and protected wild birds. During winters, some migrating birds have been visiting this place. The area is a heaven for orinthologists.

- Siju caves: Located on the cliff overhanging the right bank of the Simsang River in South Garo Hills district, the cave is locally known as Dobakol or the cave of Bats. The cave consists of innumerable internal chambers and labyrinths which have not yet been fully explored. The depth of the cave is yet to be fathomed. The cave is totally dark with a perennial stream flowing out of it, which abounds with different forms of aquatic life. The formation of stalagmites and stalactites in these caves resemble those of Blue Grotto in the Isle of Capri.

- Chibrage: A confluence of two rivers is just about 25 minutes drive from Tura. An ideal picnic spot with its lush green surrounding and breath taking beauty. The traditional hanging bamboo cane bridge suspended over the Ganoi River from bank to bank lures many tourists.

- Balpakram National Park : 167 km away from Tura town , Balpakram valley is known for the sanctuary of the typical fauna of the region . The Balpakram Wild Life Sanctuary has gained the status of a National Park. The Balpakram plateau is created by an awe inspiring mini grand canyon which separates the Garo hills from the Khasi hills across the Sibbari rivulets. The plateau commands an enchanting view of the beautiful plains of Bangladesh. The literal meaning of Balpakram is the land of perpetual wind.

- Imilchang Dare: A waterfall of immense visual beauty is to be found close to the Tura-Chokpot Road in West Garo Hills district. The stream, on which it is located, flows through a deep, narrow winding bed of crevice rocks till it suddenly emerges on to a broad wide opening and cascades in a thick, wide formation, over a broad chasm, creating an electrifying waterfall of unique beauty. The deep, wide pool at the bottom of the fall with its wide and expansive surroundings make it an exciting swimming pool, full of fish of varied size and colour, besides being an ideal picnic spot.

- Sisobibra: 12 km away from William Nagar, Sisobibra is a historical place where the Garo warriors fought the last battle against the British under the command of Pa Togan Nengminja Sangma.

- William Nagar: The head quarter of East Garo Hills district has all the amenities of a modern town and is the largest growth centre in Garo Hills next to Tura. This

township has been named to honour first Chief Minister of Meghalaya Capt Williamson A. Sangma.

- Rongbang Dare: This sprightly fall, though perennial, is at its best during the monsoon months. It presents a romantic visual of lasting satisfaction to the motorists driving from Asanangre towards William Nagar. Clustered on either side by vast evergreen bamboo bushes, the falls itself appears to be on the sway, leaving the viewer with memories of ecstatic joy.

- Baghmara: Baghmara is the growing head quarter of South Garo Hills district. It is situated on the banks of the Simsang River and is famous for its tasty fish. The rare carnivorous pitchers plants locally called Memang Koksi grow abundantly in and around Baghmara.

- Pelga Falls: It is located at the distance of 7 kms from Tura has become increasingly hot spot for anglers and picnickers in recent years. The tourism department developed this place by constructing a footpath and view point. A typical traditional Garo bamboo bridge constructed over Ganol River is another added attraction.

- Sasatgre Village**:** Located on the hilly crescent-like saddle, at the foot of the Nokrek peak, in the West Garo Hills district, Sasatgre village is accessible by a jeepable road from Oragitok village which lies on the Tura-Asanangre-Williamnagar State highway. Sasatgre has been blessed by nature in so far as orange plantations are concerned and the village is surrounded by healthy, dark green orange bushes, which are highly productive. The village now falls on the periphery of the Nokrek Gene Sanctuary-cum-Biosphere Reserve.

- Rangapani: 40 kms from Tura, near Mankachar on the Assam border there still lies the earthly remains of the great general Mir-Jumla the army general of great Moghul Emperor Aurangzeb. Mir-jumla died of malaria while returning from his excursions to the North - East. His tomb maintained by the local Muslim association lies in this village.

- Nengkong: 14 kms north of Baghmara is the well known caves Tetengkol, which balwakol measuring 5,33kms in length is one of the longest cave in the Indian Sub-continent. The other cave is Dobakkol Chibe Nala almost 2kms long and another, a little over 1 km long called Bok-bak dobakkol are also in the vicinity of the area.

- Emangre: Location at South Garo Hills District, this is the only village where the traditional wood carving on the posts and beams of the "Nokpante" or the bachelor's dormitory still survives.

- Dombeware: 3 kms from Eman Asakgre, there is a legendary lake on top of the hill believed to have been created by a merman when he eloped away with a beautiful wife of one boastful man. Some people say Dombe, the beautiful woman is still alive in the underground water Kingdom.

**SWOT Analysis of Tourism in Garo Hills:**

To find out the competitive advantage of Garo Hills as a popular tourist destination it is necessary to find the strength, weakness, opportunity and threat. It will be helpful for

policy makers to develop a planning map to establish Garo Hills as a popular tourist destination.

**Strengths**

- A place blessed with picturesque natural scenery, caves, rivers, water-falls, lakes, flora and fauna, etc.
- Meghalaya is the only state in the country which has matriarchal society.
- Pollution free environment.
- Rich in cultural heritage and ethnological diversity.
- Liberal behaviour of local people towards tourist.

**Weakness**

- Poor transportation system as being the hilly state, transport & communication in general, is difficult and expensive.
- Lack of accommodation and insufficient number of restaurant.
- The infrastructure for development more specifically for drinking water, health services, sanitation and hygienic way side amenities are grossly inadequate.
- Many attractive locations of Garo Hills still remain unexplored.
- Lack of security.
- Jhum Cultivation being the single major cause of ecological degradation in the Garo hills districts, a wide scale destruction of the ecology has been caused.

**Opportunity**

- In view of the economic backwardness, Government of Meghalaya has been facilitating a number of incentives and special packages.
- Building awareness among tourist, policy maker and local community; Training program to local community.
- Huge campaign to position Garo Hills as attractive tourist destination so as to create a positive attitude toward tourism, Building positive attitude toward country. Like positive Bangladesh.
- With the opening of international border opportunity for border trade in an organized manner at Dalu and Baghmara.
- To flourish handicraft and locally made organic food.
- Establishing better transportation system, including launching luxury bus, luxury boat, helipad etc.
- Making cost effective accommodation facility.
- Increasing strong security system for both inbound and outbound tourist.
- Development of a small airport at Garo Hills.
- Job creation and enriching standard of living of people

**Threats**

- Fear of abduction
- Poor coordination among tourist, local community and policy makers.
- Misinterpretation or misconception about tourism in local communities.
- Conflict between ethnic minor community and migrated Bengali for co-existence in hill tract area
- Non-sustainable behaviour of Garos and tourist, and sometimes by other communities.
- Destructing nature.

**Problems of Tourism in Garo Hills:**

Although Garo Hills has huge potential to flourish as a very expected tourist destination, the following problems are prevalent in the process of growth and development of tourism in Garo Hills:

a) **Lack of transportation system:** Sound transportation system is a very crucial element for the development of any country. Tourist friendly transportation is very necessary for smooth and free movements for the tourist. In Garo Hills there is a poor transportation service that is not up to the mark. There are some vehicles for visiting tourist spots and some public bus services which are not at a domestic standard, international level left behind. It needs to develop it in international standard if Garo Hills and Meghalaya wants to collect foreign currency. No electricity across the roads which makes the journey risky at night.

b) **Low rate of literate people:** Garo Hills is a least populated region among the other districts of Meghalaya. In Garo Hills people are living in a scattered way. So it is difficult to ensure mass education for all. Poor educational facilities are the main cause of low literacy rate at Garo Hills.

c) **Absence of training institution related to tourism:** Lack of effective and efficient training institution is another problem against fostering tourism at Garo Hills. District wise training program are very limited in number.

c) **Lack of other infrastructural facility:** Garo Hills is a very remote area. As a least populated district, people used to live in a great distance. So lack of medical services, telecommunication facilities, hygiene sanitary services, lack of internet connections are disturbing both domestic and foreign tourist.

e) **Lack of market information:** There is a lack of information about the potential tourist of Garo Hills. Because there are few tourists who come to visit Garo Hills compared to Shillong or Cherapunjee (popular tourist spots in Meghalaya). So without information it is difficult to evaluate the prospective number of tourists and their demand. And this information is so necessary to develop infrastructural facility.

f) **Safety and security:** Safety and security is one of most necessary element for tourism development. If any tourist feel insecure in a tourist spot, if there is fear of abduction or fear of losing precious possession, then how attractive the tourist spot is, people will not feel urgency to see the spot. In Garo Hills Meghalaya Police and district administration and other Para-military forces are engaged to ensure the security of the tourist. But it is not enough to protect tourists from abduction. Local people should be encouraged to ensure the security of tourists.

g) **Lack of contact with the market:** Most of the hotels in Garo Hills are not using any promotional campaign with the customer. A person used to come to Garo Hills and then starts to find for their accommodation. Only few hotels use booking system which is too hard to get. Foreigners are not well-known about the tourist spot of Garo Hills.

i) **Conservation:** If tourism develops at Garo Hills the local community should be careful and attentive to preserve its natural beauty because this natural beauty can ensure their better life by providing jobs to them. Garo Hills potentiality as a tourist destination depends on nature. So we should keep in mind the need to preserve and protect the natural beauty by educating all including tourist, tour operator and local community.

**Recommendations:**

The following practical recommendations may be offered in order to make Garo Hills region as a vibrant tourist destination:

- Local community should be properly educated to preserve their natural resources.
- Local administration should devote and utilize their fund to maintain the natural beauty.
- Government should take initiatives by organizing several types of training program for both local male and female workers to make them busy. And also awareness should be introduced among them.
- Infrastructural development should be expedited keeping natural living and vegetation undisturbed.
- Tourist spots should be calm, untouched but as well as it should have fun, exciting, relaxing , educative, informative and accurate information of tourist spot should be delivered to the tourist.
- There are different types of ethnic communities living in Garo Hills as they posses different types of culture norms and languages, tourist should be properly educated to respect their cultural differences to avoid unexpected complexity.
- Effective and participative working network should be introduced between public and private sector.
- The tourist spot of Garo Hills should be easily accessible through introducing secured transportation system. It is very necessary to make easy communication to reach Garo Hills by building roads, helipad for helicopter and so forth.
- Tourist information centre can be introduced across the Garo Hills for getting information about their expected destination, transportation and residing place and other necessary information.
- Tourist guide book should be available everywhere in India. In foreign mission we can send our tourist bulletin, brochures and tourism related magazines to encourage foreign officials to visit Garo Hills.
- Tribal Shopping centre should be established at every tourist spots to make handicraft and woodcraft available to both domestic and foreigner tourist.
- Meghalaya Tourism Development Corporation should open a branch at Garo Hills to provide information for further research in tourism.
- Establishing more informative sign boards on roads for tourist.

**Conclusions:**

It is evident from the above discussion that tourism in Garo Hills and Meghalaya is an expanding sector. It is a significant source of foreign exchange earnings and employment generation in our country. The paper has identified the relative factors that satisfy tourist interest. Lack of proper planning, lack of coordination among administration, lack of transportation and lack of accommodation facilities are the major problems of tourism in Garo Hills. The region has potential to harness, individually and collectively, for development of tourism sector. However, the progress in cooperation in the region is quite slow, with no substantive achievement. Low levels of inter-regional tourism within the state

need to be addressed. The Government of Meghalaya should take vigorous steps to remove the barriers standing in the way by establishing a good transportation system, training institutions, establishing tourist zone, announcing Wi-Fi zone in the tourist destination. The introducing of adventure tourism, culture tourism and rural tourism at Garo Hills is the need of the day to exploit the opportunities gifted by nature in order to restore the economic development of the region.

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# Rural Micro Entrepreneurship: An Empirical Study on Motivational Factors of Entrepreneurs in the Sonitpur District of Assam

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**Abstract:**

India is one of the fastest growing economies of the world today. But there is a large area of darkness in the rural hinterland. About 720 million people live in 6 lakh villages in rural India. Of the total workforce, 60% of workers are engaged in agriculture. About 19 crore people living in rural India are below the poverty line. The share of agriculture has increasingly declined in recent years resulting in continuous migration from the rural to urban areas in search of better employment opportunities and living standard. Thus, there is need to strengthen employment opportunities in the rural areas by promoting rural entrepreneurship. The same scenario prevails in the state of Assam too. The economy of the state is heavily dependent on agriculture. The cultivators and agricultural labourers' constitute 64% of the total working population. Inspite of being endowed with immense potential for development of resource- based and demand-based industries, the pace of rural industrialization in Assam has not been satisfactory. The study is made in the Sonitpur district of Assam based on data collected from 60 entrepreneurs through structured questionnaire. The findings suggest that the entrepreneurs were primarily motivated by the need for personal development, autonomy and recognition. The study also provides new insights on the various operational problems faced by rural micro entrepreneurs in the district. It concludes with few suggestions based on findings of the study.

**Key Words:** *Rural entrepreneurship, rural industrialization, micro entrepreneurs*

## Introduction:

India's heart lies in villages. The development of country like India can be achieved only by transforming the rural areas. The progress in growth and development that does not fulfill the needs of rural area and its people, especially the poor, cannot be claimed as development in India. India may be one of the fastest growing economies of the world today; but there is a large area of darkness in the rural hinterland. About 720 million people live in 6 lakh villages in rural India. Of the total workforce, 60% of workers are engaged in agriculture. The contribution of agriculture to GDP is merely 20%. About 19 crore people living in rural India are below the poverty line. ( Singh & Namboodiri,2006)

It is now recognized that development planning in India has to concentrate on generation of more employment, as it is the only effective way of poverty alleviation, reduction of inequity and meaningful growth (Kamalakannan, 2006).The unemployment problem in rural India, involving 70% of the Indian labour force, can never be solved by industrialization or globalization. The answer to this problem lies only in the creation of a massive number of jobs where rural Indians can be gainfully employed. Such jobs can become a reality only if micro and small business enterprise emerge intensively all over rural India. (Santana and Jegadeesan, 2008 )

Assam, a part of north-east India, is one of the most culturally and geographically distinct parts of the country. 86% of Assam's population lives in villages. Agriculture accounts for more than one-third of Assam's income and employs 69% of the workforce. Average literacy rate in rural areas is 70.44%.The unemployment problem is more pronounced in the rural areas of Assam as there is a gradual increase in educated unemployed. (Economic Survey, Assam 2011). The basic rationale of developing microenterprises is that they provide additional employment opportunities and ensure more equitable distribution of income and better standard of living to the rural inhabitants.

**Rural Entrepreneurship and Rural Entrepreneurs:**

The term rural entrepreneurship refers to the self employment programs exclusively meant for rural people.(SangramKeshari-2006) .In other words, establishing industrial and business units in the rural areas refers to rural entrepreneurship. Rural entrepreneurship implies rural industrialisation. Rural Entrepreneurship can be defined as entrepreneurship emerging at village level which can take place in a variety of fields of endeavour such as business, industry, agriculture and acts as a potent factor for economic development. The notion of "rural entrepreneurship" is not limited to agriculture and related activities such as food processing, but rather it covers industrial development in general. In addition, the concept is not restricted to villages but also pertains to small towns and surrounding areas. Broadly speaking, the concept relates to areas where industry and tourism are not developed. (KulawczukPrzemyslaw-2010)

Rural entrepreneurs may be defined as "Any individual or group of persons carrying out economic activity with profit motive in the rural areas with or without any proper infrastructure facilities and if it is eco-friendly can be termed as rural entrepreneurs." Rural entrepreneurs are broadly classified into Agricultural Entrepreneurs, Micro Entrepreneurs, Small Business entrepreneur and Rural Artisans. (Vasant Desai-2010)

**Rural Entrepreneurship and Micro Enterprises in Assam:**

The microenterprise sector is one of the fastest growing industrial sectors all over the world. It has shown an outstanding performance over the past five decades as a highly vibrant and dynamic sector of the Indian economy. The microenterprises are important not only as a means of creating employment for the people and raising their income as well as the real income of the nation, but also because they contribute directly to the development of agriculture and indirectly to the development of the urban industries. Rural industries help in value addition to agricultural produce and enable farmers to augment their income. The State of Assam is endowed with a vast deposit of mineral resources like petroleum, natural gases, coal, limestone, forest and water resources, but it has been considered as an 'A 'category industrially backward state of India. The existing industrial profile of Assam shows a lopsided picture (Neeitco Survey, 2001). Table 1 exhibits the number of registered Micro and Small Enterprises (MSEs) in the state. Besides, it also indicates the year-wise growth of the permanently registered MSEs in the state. It is clear from Table 1 that the number of MSEs registered every year keeps on

fluctuating. However, with the announcement of the North-East Industrial Policy (NEIP) in 1997, the number of new units registered in the consecutive years stabilized due to the expansion of a number of schemes and concessions that benefited this sector.

**Table 1: Growth of Micro and Small Enterprises in North Eastern Region.**

| Year | Number of MSEs registered | Annual growth in registration | Total number of MSMEs as on 31st march |
|---|---|---|---|
| 1997-98 | 2193 | -9.79 | 34,258 |
| 1998-99 | 2241 | 1.41 | 36,482 |
| 1999-00 | 1821 | -18.12 | 38,303 |
| 2000-01 | 2116 | 16.12 | 40,419 |
| 2001-02 | 2528 | 19.47 | 42,947 |
| 2002-03 | 2246 | -11.16 | 45,193 |
| 2003-04 | 2364 | 5.3 | 47,558 |
| 2004-05 | 2067 | -12.6 | 49,625 |
| 2005-06 | 2082 | 0.73 | 51,707 |
| 2006-07 | 2172 | 4.32 | 53,879 |

Source: MSME INDIA

**Literature Review**:

A number of studies have been conducted to identify motivating factors leading to entrepreneurial development in India and abroad. In order to understand the study gap, the following related literatures have been reviewed.

Dey (1980) also enquired about to highlight the problems of small scale industries in a backward district like Cachar. He covered the areas such as economic profit, sickness, market, finance of small scale industries in Cachar. He fined that a lots of problems are resulted due to joint ventures nature of small scale industries in Cachar. Deolumkar (1984) conducted a study on 264 small-scale units to understand entrepreneurships development in the developed, developing and backward states of India. In spite of the abundant natural resources, industrial development was slow mainly due to untapped entrepreneurial talent rather than due to lack of basic facilities and financial support. The study suggested for timely action of the government to accelerate the process of entrepreneurship development in India. The study of Kanitkar (1994) aims at understands the emergence of successful entrepreneurs and owners of micro-enterprises in rural India. Based on the case studies of 86 village-based entrepreneurs drawn from different regions of India, the article examines that socio-economic profile of the entrepreneurs, their motivation for shifting from an agriculture-based occupation to anon-farm activity, their approach to raising resources for their enterprises and the factors that facilitated entry of the village based entrepreneurs in to a business activity.

Andersan (1995), in his thesis, attempted to understand what it is that rural entrepreneurs do within the rural context. The central argument of the thesis was that in order to understand the entrepreneur, we must place his entrepreneurial action in its social context, i.e., we must study the process of entrepreneurship. This study therefore endeavored to investigate the actions of the entrepreneur in one context, rurality. Consequently, this study was a detailed examination of the rural environment and the interrelationships of this environment and entrepreneurs. Its purpose was to try and establish the nature of the relationships between rurality and to specify the conditions of the entrepreneurial process. Nayak and Dey (1996) in an article mention that production

and employment per unit were found to be high in ancillary units followed by small scale industry and small scale enterprise. As far as productivity of labour was concerned it was estimated to be maximum in by small scale industry and minimum in small scale enterprise. But capital productivity was maximum in ancillary industrial undertakings and minimum in small scale enterprise

Mali (1998) in his study has observed that small and medium enterprises (SMEs) and micro enterprises have to face increasing competition in the present scenario of globalization, they have to specifically improve themselves in the fields of management, Marketing, product diversification, infrastructural development, technological upgradation. Moreover, new small and medium enterprises may have to move from slow growth area to the high growth area and they have to form strategic alliance with entrepreneurs of neighbouring countries. Data bank on industries to guide the prospective entrepreneurs including investors from abroad is also needed.

Ramalaingam and Gayatri (2001) in their article suggested that innovation is a strategic tool for development of rural entrepreneurship. Since most of the India populations reside in rural villages, entrepreneurship awareness has to be created among them. The multidimensional aspects of Rural Entrepreneurship are studied with the help of small sample size. The findings suggest that a small innovation in the rural area would definitely catch up the most of the population that would lead to improvement of quality of life of many people in the country.

Kaippachery (2005) analysed the impact of economic reforms structure schedule on the 82 rural small-scale enterprises (RSSEs) located in kannur district of kerala. The results found negligible impact of the reforms on employment, earning capacity and availability of raw material whereas output, productivity, market access, diversification, safety of labour and capital were found to be more vulnerable to unsustanibilty. To support economically unsustainable RSSEs, the study suggested development of rural financial markets, trades fares, advertisement, displays etc., to improve marketing of rural industrial products ,cost reduction, improvements in the quality of products, cost reduction, improvement in the quality of products and dissemination of market information to customers. Mecchari, and Pelloni (2006) presents and analyses the results emerging from a questionnaire submitted to a sample of 123 rural entrepreneurs and business in a mountainous area of central Italy. In particular, they test for six hypotheses concerning the correlation between different factors, reflecting entrepreneur and business specific characteristics, and the adoption of instruments of institutional assistance. Their study also examines and proposes potential polices for fostering entrepreneurship and the development of the rural region under study.

Mandal (2007) in his paper encompasses the present scenario of Khadi and Village Industries in the North east States, particularly Arunachal Pradesh, in relation to growth, development, problems and solutions. The author opined that top priority should be given to those small scale industries like KVIs which need light machine tools and other equipments in order to produce qualitative products because today, a state's progress is measured by the quality of goods it produces

Afrin, Islam and Uddin (2008) Ahmed in their study tried to identify the factors related to the development of entrepreneurship among the rural women borrowers through micro credit programs. The findings shows that the financial management skills and the group identify of the women borrowers have significant relationship with the development of rural women entrepreneurship in Bangladesh. Rajkonwar and Neog (2008) made a study on role of scheduled banks in the development of agricultural entrepreneurship in Karbi

Anglong district of Assam. The study comes to conclusion that the agriculture and allied activities of the district has been deprived of the adequate finance in the lending process of the scheduled banks. Singla and Syal in their study "Rural entrepreneurs" observed that to stop the trend of immigration of rural youths to urban areas in search of better prospects, the first essential step shall be creating meaningful job opportunities and encouraging rural entrepreneurs particularly in the area of agro and allied industries, horticulture, dairy and other enterprise in which sufficient raw materials, market and initial expertise is already available.

Permal, in a study on "Rural Entrepreneurship and Rural employment" stresses that unless the rural industrial expansion is continuously maintained, rural unemployment cannot be eliminated. The study also showed that industrial service sector has not been fast enough to absorb the growing rural force. Hence, additional employment will have to be found within the rural areas in such activities, which offer scope for labor absorption.

Panda, Beswamber and Pattanaik, in their study discusses the role in NGO in Orissa. Author collected data from 40 numbers of NGO in coastal area and discusses the importance of NGO in the context of various micro- social movement. Though they are active in building awareness among the people of coastal Orissa but these organizations still have a long way to create full- fledged movement. Srivastava and Syngkon (2008) study makes an in depth analysis of the development of small scale industrial (SSI) sector in the rural areas of the states of NER of India. The study also focuses specifically on the role and profile of entrepreneurs. The findings reveal that the manufacturing, assembling, processing, activity is the dominant group among the various SSIs activities in the NE states in rural and urban areas. It is observed that in most of the North Eastern states, concentration and growth of SSI activities is higher in rural areas than in urban areas. The study also brings to light the rising number of women and tribal entrepreneurs in the region.

Khanka (2009) conducted a survey of 248 first generation entrepreneurs in Assam in NE India to understand their entrepreneurial motivation. The study clearly showed that the entrepreneurs were primarily motivated by the need for economic achievement, personal growth, autonomy and recognition. The desire to contribute to the community was not found to be an important reason to become an entrepreneur. The study did not reveal any significant difference in the motivations of men and women entrepreneurs. Barua and Mali (2011), in their study, found that the micro, small and medium enterprises in Assam had registered an average growth of 20.63% per annum from 1987-88 to 2006-07.This was accompanied by an average annual growth of 45.3% in investment and 89.5% in output. However, there was an element of upward bias in estimates of growth in investment and output as price rise over the years had significantly inflated their values. The whole study was based on secondary data. It can be concluded from the study that entrepreneurial performance indicated by the output is largely affected by the quantum of investment rather than the level of employment

**Need of the Study:**

The review of literature showed that many studies were conducted on rural entrepreneurship, but no study on management of micro enterprises for rural entrepreneurship development has been conducted till now on Assam in general and Sonitpur district in particular. There is a need for many more micro studies on rural entrepreneurship because of variations in geographic, social, cultural, political and economic conditions from state to state and from region to region within a state. Further,

there is also need to throw light on the factors that motivate the rural micro entrepreneurs to establish their units, and the problems faced by the micro entrepreneurs in operating their units. Sonitpur district is the industrially backward area though it has been endowed with several facilities beneficial for growth of rural entrepreneurs compared to other districts in Assam. So, it is felt that this district is ideally suited for a study on rural micro entrepreneurship.

**Objectives of the Study:**

The specific objectives of the study are:

1. To identify the factors influencing rural entrepreneurs to start and manage their enterprise.
2. To analyse the operational constraints in enterprising among rural entrepreneurs.
3. To offer suggestion for the promotion of rural entrepreneurship in the district.

**Methodology Adopted:**

This section describes the methodology adopted which includes the sampling technique, basic research questions, the collection of data, the period of study and the tools of analysis.

***Sampling technique***

Keeping the above objectives in mind, a sample of 60 rural micro entrepreneurs in sonitpur district were randomly selected from the list obtained from District Industries Centre, Sonitpur.200 entrepreneur were registered in District Industries Centre during three years from 2007-08 to 2009-10 and 60 entrepreneurs that is nearly 30 percent of total population were selected for primary data collection by adopting simple random sampling method.

***Basic research questions***

Based on the literature review discussed a set of research questions framed for the current study are as follows.

- What are the motivational factors behind rural entrepreneur to go for entrepreneurship
- What are the problems faced by the rural entrepreneurs

***Collection of data***

The present study is based on Primary as well as secondary data. Primary data has been collected through interview schedule after considering all the relevant aspects which were gleaned out by the researcher on the basis of review of literature. Further, the researcher had preliminary discussion with the officials of the District industries centre and few entrepreneurs registered in District Industries Centre, Sonitpur District. The secondary data were collected from published, unpublished reports, handbooks, action plan, pamphlets of Director of Industries and commerce, Assam, District Industries centre, Sonitpur District, Khadi and Village Industries Board, Sonitpur, district, AFC, IIE, SIDBI, NISIET, IDBI, NEDFI, NEC, Journals, books, magazines and newspapers. For this purpose, researcher visited many libraries. Some important information/knowledge was also gathered from internet. All the respondents were personally visited by the researcher and requested to provide needed information.

***Period of study***

The study was carried out from April 2007 to march 2010 for primary data collection. The reference period of survey was 2007-2010

***Tools of analysis***

To find out the problems faced by rural entrepreneurs simple percentage analysis has been administered. Percentage and rank analysis has also been used to find out the demographic profile of rural entrepreneurs and to draw inferences .Chi- square with cross tab technique by Spss has been used to analyse the motivational factors.

**Brief Profile of the Study Area:**

The Sonitpur district is an administrative district of Assam. The district headquarters are located at Tezpur. According to the 2011 census, Sonitpur district is the third most populous district of Assam (out of 27) and has a population of 1,925,975 with a population density of 365 inhabitants per sq.km. Its population growth rate over the decade 2001- 2011 was 15.67%. There are 1876 villages in the district with a rural population of 1754835. Agriculture is the prime occupation of the people of the district, Traditional dependence on agriculture is one of the reasons for lack of entrepreneurship among the educated youths. They are mostly concentrated on white collared jobs. Absence of major industries in the district is also partly responsible for lack of entrepreneurial activities (Nic, Sonitpur district)

**Concept of Micro Enterprise**

Since the word 'micro' represents small, the Micro, Small and Medium Enterprise Development (MSMED) Act, 2006 defines it as the enterprise engaged in the manufacturing or production of goods, whose investment in plant and machinery does not exceed 25 lakh, and enterprise engaged in providing or rendering of services, whose investment in equipment does not exceed 10 lakh. Rural small-scale enterprises are those industrial and business undertakings where owners, individuals, friends or relatives supply capital; they operate locally, and the size of business as well as management is small. Small manufacturing and service enterprises such as brick kiln industry, stone crushing industry, bakery, cane and bamboo, washing soaps, food products, rice mill, cycle repairing, scooter repairing, computer & Xerox, jewelry designing, supari processing are some of the examples of rural microenterprises.

**Major Findings:**

The two essential dimensions that are involved in the process of entrepreneurship are the persons (the entrepreneur) and the society in which he or she operates. The socio-economic origins of the entrepreneurs are considered in micro enterprises as it influences to a great extent in development of micro entrepreneurship. Moreover, such enterprises usually employ fewer professional specialists, operate with less formality and reflect to a greater degree the personality and attitudes of the entrepreneur. Therefore, it is essential to study the socio- economic background of rural entrepreneur to extract any meaningful conclusions on the entrepreneurial activities and the enterprises which are run by rural entrepreneurs.

**Table-2: Socio-economic background of rural micro entrepreneurs**

| Particulars | Classification | Number | Percentage |
|---|---|---|---|
| Marital status | Married | 44 | 73 |
| | Unmarried | 16 | 27 |
| | Illiterate | 10 | 17 |
| Educational qualifications | Primary | 17 | 28 |
| | Secondary | 26 | 43 |
| | Graduate | 07 | 12 |
| Gender | Male | 46 | 77 |
| | Female | 14 | 23 |
| | General | 29 | 48 |
| Caste | SC | 08 | 13 |
| | ST | 05 | 08 |
| | OBC | 18 | 31 |
| Type of family | Joint | 41 | 68 |
| | Nuclear | 19 | 32 |
| | 20-30 | 14 | 23 |
| Age | 31-40 | 35 | 58 |
| | 41-50 | 07 | 12 |
| | 50 and above | 04 | 07 |
| | Manufacturing | 22 | 36 |
| Type of activity | Service | 38 | 64 |
| | Own funds only | 17 | 28 |
| Sources of finance | Own funds and borrowed funds | 43 | 72 |
| | Assamese | 25 | 42 |
| Community | Bengali | 18 | 30 |
| | Marwari | 02 | 03 |
| | Behari | 09 | 15 |
| | Others | 06 | 10 |
| Form of Ownership | Sole proprietorship | 52 | 87 |
| | Partnership | 8 | 13 |

Source: Field survey

Table 2 portrays the socio-economic background of rural entrepreneurs. Majority of the respondents (73%) were found to be married, while the remaining (27%) were unmarried. It is clear that a majority of the respondents were carrying out the entrepreneurial activity as a means of their livelihood. 43% of the entrepreneurs have secondary-level of education, while 28% have primary level education, 12% are graduates, while 17% are illiterates. It can be inferred that a sample of 100% educated entrepreneurs could be used for the development of rural microenterprises with skill developing training programs. 77% of the respondents were males, while 23% of the respondents were females. It signifies the need for more encouragement to women to take up entrepreneurial ventures. 48% of entrepreneurs belonged to the general category, followed by 31% belonging to the other backward castes, 13% scheduled castes, 8% schedule tribes, Thus, it is observed that the weaker section and depressed class people are less involved in business and entrepreneurial activities. It was found that a majority of the respondents, i.e., 68 %, belonged to joint families, while the remaining 32% belonged to nuclear families. It can thus be said that joint family system is still an important determinant of entrepreneurship. A majority 58% of the total respondents were in the age group of 31-40 years, followed by 23% in the age group of 21-30 years and 12% in the age group of 41-50 years. Only 7% of respondents were above 50 years of age. It may be interpreted that microenterprise has facilitated rural entrepreneurs in different age groups. A majority of

the respondents (64%) are engaged in service enterprise, while the remaining (36%) are in manufacturing enterprise. It may be interpreted that entrepreneurs like to invest more in service enterprises in comparison to manufacturing enterprises. 72 % of the respondents used their owned and borrowed funds while 28% of the respondents used own funds only. It was found that 42% of the respondents were from Assamese background, 30% from Bengali community, 15% Biharis, 10% represented other communities and 3% belongs to Marwari community, which is natural corroborating with demography of the district. Sole proprietorship was the preferred form of business organization in the district under reference, 87 % of the respondents opted for it, followed by partnership that constituted 13%. The rural micro entrepreneurs preferred proprietorship form of business organization.

**Factors influencing the idea of starting the enterprise**

This study enquires in to motivational aspects such as ambition, motivators in starting the enterprise, reasons compelling the starting of the enterprise, facilitating factors and so on. An analysis of the factors that have motivated and facilitated the emergence of entrepreneurship is the purpose of this section.

**Entrepreneurs' Ambitions**

Among the subjective factors that act as motivator for an individual's life, an ambition rank first. It is ambition that gives colour and direction to an individual's career. The study enquires entrepreneur's ambition that influenced their entry into entrepreneurship. As shown in table-3 they include personal development, reward –achievement factor, social approval and recognition, independence and team ability. Table-3 shows that 11 entrepreneurs of manufacturing sector (50%) and 21 (55.3%) entrepreneurs of service sector had the ambition of personal development. To get independency in their business was the ambition of 6(35.3%) of manufacturing sector and 11 (64.7%) entrepreneurs of service sector , while social approval and recognition was the ambition of 3(13.6%) entrepreneurs of manufacturing sector and 3 (7.9%) entrepreneurs of service sector, Reward-achievement factors is the ambition of another 19(4.5%) manufacturing sector and 11 (64.7%) entrepreneurs of service sector while 1(4,5%) entrepreneurs of manufacturing sector and 1(2.6%) entrepreneurs of service sector had team ability as their ambition. It is evident from table that the value of $X^2$ (chi-square) was more than the calculated value (.713). So it was found to be insignificant at 0.01 % level .This shows that there is not a significant relationship between ambitions of rural micro entrepreneurs and the nature of the firm.

Table-3: Type of activity and ambition factors of entrepreneurs

| Ambition | Type | | | | | |
|---|---|---|---|---|---|---|
| | Manufacturing | | Service | | Total | |
| | No | % | No | % | No | % |
| Personal development | 11(34.4) | 50.0 | 21(65.6) | 55.3 | 32(100) | 53.3 |
| Reward-achievement factors | 19(33.3) | 4.5 | 2(66.7) | 5.3 | 3(100) | 5 |
| Social approval &recognition | 3(50.0) | 13.6 | 3(50.0) | 7.9 | 6(100) | 10 |
| Independence | 6(35.3) | 27.3 | 11(64.7) | 28.9 | 17(100) | 28.3 |
| Team ability | 1(50.0) | 4.5 | 1(50.0) | 2.6 | 2(100) | 3.3 |
| Total | 22 | 100 | 38 | 100 | 60 | 100 |

Note: Figures in parentheses represent percentages
The calculated value of Chi-square=.713
Table value of chi-square at 0.01 percent level=13.23
Source: field survey

**Compelling reasons for becoming Entrepreneur**

Many a time, it is the compulsion rather than the ambition that directs a person to undertake some kind of activity and later on it leads to success. Hence it is appropriate to examine the reasons that might have compelled the rural entrepreneurs to pursue entrepreneurship. It can be observed from the table-4 that the important reasons appeared to have compelled respondents in the study area was to be self –earning and independent, in which 11(50 %) entrepreneurs in manufacturing sector and 15 (57.77%) entrepreneurs in service sector wanted to be self earner & independent. Unemployment was another reason for becoming entrepreneur for 4(40%) in manufacturing sector and 6 (15.8%) in service sector entrepreneurs .To earn money was also another compelling reason to become an entrepreneur in respect of 5(22.7%) entrepreneurs in manufacturing sector and 8(21.1%) entrepreneurs in service sector .To utililize technical knowhow was also another reason to become entrepreneur in respect of 1 (25%) in manufacturing sector and 3 (7.9 %) in service sector. For 1(4.5%) entrepreneurs in manufacturing sector and 6(15.8%) entrepreneurs in service sector use of spare time was found to be a compelling reason. It is evident from the table-4 that the value of $X^2$ (chi-square) was more than the calculated value (2.163). So it was found to be insignificant at 0.01 % level .This shows that there is not a significant relationship between compelling reasons for starting the enterprise of rural micro entrepreneurs and the nature of the firm.

Table-4: Type of activity and compelling factors of entrepreneurs

| Compelling reasons | Type | | | | | |
|---|---|---|---|---|---|---|
| | Manufacturing | | Service | | Total | |
| | No | % | No | % | No | % |
| Use spare time | 1(14.3) | 4.5 | 6(85.7) | 15.8 | 7(100) | 11.7 |
| Self earning & independent | 11(42.3) | 50.0 | 15(57.7) | 39.5 | 26(100) | 43.3 |
| Utilize technical know how | 1(25.0) | 4.5 | 3(75.0) | 7.9 | 4(100) | 6.7 |
| Unemployment | 4(40.0) | 18.2 | 6(60.0) | 15.8 | 10(100) | 16.7 |
| To make money | 5(38.5) | 22.7 | 8(61.5) | 21.1 | 13(100) | 21.7 |
| Total | 22 | 100 | 38 | 100 | 60 | 100 |

Note: Figures in parentheses represent percentages
The calculated value of Chi-square=2.163
Table value of chi-square at 0.01 percent level=13.23
Source: field survey

**Facilitating Factor**

Ambitions or compulsions alone may not make a person an entrepreneur. The encouragement that entrepreneurs gets from his family members or friends and relatives, the property he has acquired or inherited etc., are also the factors influencing entrepreneurship. The factors facilitating the emergence of entrepreneurship are given in table-3.Factors marked by entrepreneurs were rated by weighted score. The table-5 indicates that support from family members was ranked first (weighted score of 30 .00%) of all facilitating factors. Family's occupation was ranked second (weighted score of 25.00%), followed by education and training ranked third (weighted score

20.00%).Success stories of other entrepreneurs was ranked fourth (weighted score 18.33%). Previous experience in the same line of activity was given fifth rank (weighted score of 6.67%) as a facilitating factor. It could be inferred that support from family members, family's occupation and entrepreneurial education and training are the key facilitating factors for entering in to entrepreneurial activity. It is evident from the table-5 that the value of $X^2$ (chi-square) was more than the calculated value (6.154). So it was found to be insignificant at 0.01 % level .This shows that there is not a significant relationship between facilitating factors influencing the choice of the present line of activity of rural micro entrepreneurs and the nature of the firm.

Table-5: Type of activity and facilitating factors of entrepreneurs

| Facilitating factors | Type | | | | | |
|---|---|---|---|---|---|---|
| | Manufacturing | | Service | | Total | |
| | No | % | No | % | No | % |
| Family's occupation | 8(47.1) | 36.4 | 9(52.9) | 23.7 | 17(100) | 28.3 |
| Previous successful start up | 6(50.0) | 27.3 | 5(50.0) | 15.8 | 12(100) | 20.0 |
| Educational and training | 2(16.7) | 9.1 | 10(83.3) | 26.3 | 12(100) | 20.0 |
| Success stories of other entrepreneurs | 5(45.5) | 22.7 | 6(54.5) | 15.8 | 11(100) | 18.3 |
| Support from family members | 1(12.5) | 4.5 | 7(87.5) | 18.4 | 8(100) | 13.3 |
| Total | 22 | 100 | 38 | 100 | 60 | 100 |

Note: Figures in parentheses represent percentages
The calculated value of Chi-square=6.154
Table value of chi-square at 0.01 percent level=13.23
Source: field survey

**Motivators in Starting the Enterprise**

Motivators play a prominent role in the establishment of any enterprise. They are the parents, friends, financial institutions who motivate any person to set up an enterprise. They are helpful in giving the idea about how the business should be started. Hence, it becomes necessary to find the motivators in launching the projects/ enterprises. Data has been collected regarding the people/institution that influenced the respondents in starting the enterprise and the results are presented in table-6. Majority 9 (39.9 %) entrepreneurs in the manufacturing sector and 14(60.9%) of entrepreneurs in the service sector was influenced by self, 4(21.1%) % of the entrepreneurs in the manufacturing sector and 15(78.9%) of entrepreneurs in the service sector influenced by parents; 6 (66.7%) entrepreneurs in the manufacturing sector and 3(33.3%) of entrepreneurs in the service sector were influenced by financial institutions,2(28.6%) entrepreneurs in the manufacturing sector and 5(71.4%%) of entrepreneurs in the service sector were influenced their life partners, 1(50.0 % ) entrepreneurs in the manufacturing sector and 1(50.0%) of entrepreneurs in the service sector influenced by friends. It is evident from the table-6 that the value of $X^2$ (chi-square) was more than the calculated value (5.403). So it was found to be insignificant at 0.01 % level .This shows that there is not a significant relationship between motivators instilling the spirit of entrepreneurship of rural micro entrepreneurs and the nature of the firm.

**Table-6: Type of activity and motivators**

| Motivators | Type | | | | | |
|---|---|---|---|---|---|---|
| | Manufacturing | | Service | | Total | |
| | No | % | No | % | No | % |
| Parents | 4(21.1) | 18.2 | 15(78.9) | 39.5 | 19(100) | 31.7 |
| Spouse | 2(28.6) | 9.1 | 5(71.4) | 13.2 | 7(100) | 11.7 |
| Friends | 1(50.0) | 4.5 | 1(50.0) | 2.6 | 2(100) | 3.3 |
| Self | 9(39.1) | 40.9 | 14(60.9) | 36.8 | 23(100) | 38.3 |
| Financial institutions | 6(66.7) | 27.3 | 3(33.3) | 7.9 | 9(100) | 15.0 |
| Total | 22 | 100 | 38 | 100 | 60 | 100 |

Note: Figures in parentheses represent percentages
The calculated value of Chi-square=5.403
Table value of chi-square at 0.01 percent level=13.23
Source: field survey

**Reasons for locating enterprise in his /her area**

The location of an enterprise is most important factor, which can actually indicate the success or failure of any unit in the very beginning. Hence, portraying the reasons for locating the enterprise in Sonitpur district by rural entrepreneurs in this aspect is considered important. The options were carefully selected keeping in mind the conditions of rural entrepreneurs from the different sectors. The table-7 given below portrays that availability of low cost resources, availability of raw materials were important reasons for the selection of location. 6 (27.3%) entrepreneurs in manufacturing sector and 10(26.3%) entrepreneurs in service sectors selected the place because of the resources available at lesser cost, where as 9(40.9%) entrepreneurs in manufacturing sector and 10(26.3%) of entrepreneurs in service sectors were attracted by the availability of raw materials, 2(9.1%) in manufacturing sector and 8(21.1%) entrepreneurs in service sectors were attracted by the availability of labour entrepreneur,2(9.1%) of the entrepreneurs in manufacturing sector and 4(10.5%) entrepreneurs in service sectors selected the place for easy access of transport facilities, 3(13.63%) of entrepreneurs in manufacturing sector and 6(15.8%) entrepreneurs in service sectors have chosen the place because of the reasons like nearness to the market, hometown, good climatic conditions and so on It is evident from the table-6 that the value of $X^2$ (chi-square) was more than the calculated value (2.210). So it was found to be insignificant at 0.01 % level .This shows that there is not a significant relationship between influencing the factors for locating the enterprise of rural micro entrepreneurs and the nature of the firm.

Table-7: Type of activity and reasons for locating enterprise

| Motivators | Type | | | | | |
|---|---|---|---|---|---|---|
| | Manufacturing | | Service | | Total | |
| | No | % | No | % | No | % |
| Low cost resources | 6(37.5) | 27.3 | 10(62.5) | 26.3 | 16(100) | 26.7 |
| Availability of raw materials | 9(47.4) | 40.9 | 10(52.6) | 26.3 | 19(100) | 31.7 |
| Availability of Labour | 2(20.0) | 9.1 | 8(80.0) | 21.1 | 10(100) | 16.7 |
| Transport facilities | 2(33.3) | 9.1 | 4(66.7) | 10.5 | 6(100) | 10.0 |
| Others | 3(33.3) | 13.6 | 6(66.7) | 15.8 | 9(100) | 15.0 |
| Total | 22 | 100 | 38 | 100 | 60 | 100 |

Note: Figures in parentheses represent percentages
The calculated value of Chi-square=2.210, Table value of chi-square at 0.01 percent level=13.23
Source: field survey

**Operational and managerial problems:**

The different problems faced by the respondents are presented in Table 8. Ranking was done on the basis of intensity of the problems faced by the entrepreneurs in operating and managing their business. A majority (78%) of the respondents faced the problem of lack of proper training and knowledge. This creates a problem managing their units properly. 77% of the respondents opined that there were too many formalities of the banks for which they had to approach to local moneylenders for financing their units, while 74% faced the problem of inadequate information on different source of finance.71% of the respondents suffer from adequate infrastructural facilities in operating and managing their units. Absence of credit institutions in rural areas was one of the major hindrances for 68% respondents. Marketing of products (67%) is another area where the rural microenterprises find themselves handicapped. As the units are resource-constrained, they do not have a separate marketing department. 65% of the respondents stated that they did not possess proper information on different markets for marketing of their products. 64 % of the respondents used outdated technology in manufacturing their products. They mostly suffer from technical know-how. 62% stated insufficiency of demand for their products. 60% faced the problem of shortage of skilled labour. Another important problem faced by 59% respondents was delay in supply of raw materials to the enterprise. 55% of the respondents faced the problem of lack of sufficient guidelines and counseling from NGOs and Government. Apart from the problems mentioned above, there are numerous other problems that are faced by the rural micro entrepreneurs in running and managing their units.

Table-8: Problems faced by the sample in operating and managing their business

| Factors | Percentage | Rank |
|---|---|---|
| 1.Shortage of skilled workers | 60 | 10 |
| 2.Lack of sufficient infrastructural facilities | 71 | 4 |
| 3,Insufficient and outdated technology and technical know -how | 64 | 8 |
| 4.Inadequate information on markets | 65 | 7 |
| 5.Lack of marketing facilities for their products | 67 | 6 |
| 6.Delay in supply of raw materials | 59 | 11 |
| 7.Lack of proper training and knowledge | 78 | 1 |
| 8.Insufficient demands for products | 62 | 9 |
| 9.Lack of sufficient guidelines and counseling by NGOs and from the Government | 55 | 12 |
| 10. Inadequate information on source of finance | 74 | 3 |
| 11. Absence of credit institutions in rural areas | 68 | 5 |
| 12.Too many formalities of banks | 77 | 2 |

Source: compiled from data

**Policy Recommendations**: Entrepreneurship is the outcome of interaction of the individual, environment with socio-cultural factors. It has been recognized on the basis of many experiments that entrepreneurship can be induced. The Government having recognized this is making numerous efforts to inculcate a spirit of enterprise among its people. Entrepreneurship is the one of the best ways of improving the socio-economic status of rural entrepreneurs in society. The following suggestions can be put forwarded for the protection and enhancement of demand potentiality leading to fertile ground for rural entrepreneurship. Entrepreneurship would be conducive for rural capacity

utilization and development and solving rural problems like, unemployment, poverty, low level standard of living etc.

- Training institutes promoting rural entrepreneurship should give priority to the potential rural entrepreneurs in the age group of 20-30 years as this is the age group when most of the rural entrepreneurs intend to enter into entrepreneurial profession after acquiring their educational qualifications.
- The rural micro entrepreneurs must start professionalizing management practices in their units. The challenge comes from the globalization of the economy which presents a constantly shifting kaleidoscope of competitive pressures and opportunities. A greater degree of innovations and increased efficiency are likely to take place through effective, result oriented management planning.
- As it was observed in the study that parent and self are the main motivators for rural entrepreneurs to take up entrepreneurship. The reason for becoming an entrepreneur could be multifarious so friends, realtives spouse and others role also can play a good motivator to influence the entrepreneur.
- The study leads to the understanding that entrepreneurship should be looked upon as a skill which can be developed and cultivated. The study also leads to the understanding, that promotion of entrepreneurship involves inputs or facilitation at various levels and over at a period of time.
- The educational system through its various levels, needs to encourage the children to develop good communication ability, self confidence and o Case studies of successful entrepreneurs and face to face interaction with persons who have distinguished themselves as successful entrepreneurs may go a long way in preparing the children for entrepreneurship
- Formation of Rural entrepreneurship Development Bank of India, on the line of Industrial Development bank of India, is essential to promote entrepreneurship in the rural areas. It role would be to make available finance, knowledge, technical expertise, managerial advice, help in marketing, string etc. it has to take case from beginning to end. Even its role would be to come up with plans
- The District Industry centre, Department of Industry and Commerce, local industry associations and banks play an important role in solving the problems of micro and small entrepreneurs in rural areas by developing advisory boards.
- One of the common problems faced by rural micro enterprises is lack of marketing information and marketing of products. In this regard the government and other agencies have to disseminate the information through database on the internet. This can be undertaken by the market research firms and other established institutes.
- Proper infrastructural facilities are a pre- requisite for the development of entrepreneurship in a particular area. Entrepreneurs in rural areas have to bear additional cost the absence of proper infrastructural support and this reduces their profitability. So government needs to take extensive measures to develop the infrastructural facilities in rural and backward areas.
- Industrial policy of the state should be strengthened to encourage the unemployed persons to seek entrepreneurial career by providing financial and non-financial assistance.
- The important caste in the field of entrepreneurship in Sonitpur district was forward caste (48%) followed by other backward castes (31%). The government

agencies at central and state level should encourage schedule caste and schedule tribe young graduates for rural entrepreneurship. Moreover, various incentives, schemes and subsidies available for them should be advertised.

- The goverment needs to focus more on setting up of Agro- based industries using the resources based on primary sector (agriculture) in the region and big industries to support ancillary small and micro units which will, in turn, boost micro units in this backward region under globalisation.

**Conclusions:**

Entrepreneurship plays a vital role in the growth of our economy. It acts as a catalyser in fostering the initiative to undertake economic activities for the production and distribution of wealth. In rural areas larger amount of potential, remain untapped due to lack of supportive means and management. The constraint the rural entrepreneur face is basically related to finance, which must be removed by attending, immediately by authorities concerned. Proper entrepreneurial skill and marketing talent are to be given to rural entrepreneurs through proper training programmes for carrying entrepreneurial activities. What the rural micro entrepreneurs need is encouragement and support from the family members, government and societies .With right assistance from varied groups, they can join the mainstream of national economy and thereby contribute to the economic growth of the country.

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# Classroom Management Ability among Elementary School Teachers Teaching at Multi-grade Settings in Meghalaya

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**Abstract:**

Elementary education is the necessary foundations for strengthening human resources and its quality and efficacy assume special significance within the larger framework of personal, social and national development. The whole national development is based on the foundations of elementary education. But due to various reasons we are far away from the constitutional obligation. Several million of children continue to remain outside the fold of elementary education. Besides the Yaspal Committee (1993) suggestions still our elementary education system is fragile. The SSA programme, however, has been attempted to decentralize the management structure of elementary education by transferring the responsibility for planning and management of elementary education to local governing bodies both for quantitative and qualitative improvement. However, the main problem is arising teacher-pupil ratio in classroom. Particularly in rural areas of the country in general and Meghalaya in particular, many schools have either one or two teachers those who are managing all four classes, which create a big challenge for providing good quality education to all children in such type of multi-grade schools. Multi-grade teaching is considered to be an instructional arrangement where children of more than one grade are taught together by a single teacher in the same classroom. In the other type of setting, separate classrooms for different grades are used by the single teacher to teach these grades at the same time which is the challenge to them in respect to management of course content, discipline, teaching-learning and examination and some other activities that have been highlighted here in this paper and some suggestions given in respect to the problems that how to overcome those problems from the state by which the state will able to achieve the target of quality elementary education.

**Keywords:** *Elementary education, management, Classroom, Meghalaya*

## Introduction:

Education is a process of human enlightenment for the higher and better quality life. Elementary education is the necessary foundations for strengthening human resources and its quality and efficacy assume special significance within the larger framework of personal, social and national development. The whole national development is based on the foundations of elementary education. It is with these objectives our constitution framers pledged to provide free and compulsory primary education to each and every child. In pursuance of the spirit of our constitution, our country has made tremendous strides in the expansion of qualitative elementary education. But due to various reasons we are far away from the constitutional obligation. Several million of children continue to remain outside the fold of elementary education. These courses attributed to rampant

poverty in rural, hilly and remote areas and also among disadvantaged sections of the society. Besides the Yaspal Committee (1993) suggestions still our elementary education system is fragile. But now SSA programme has been attempted to decentralize the management structure of elementary education by transferring the responsibility for planning and management of elementary education to local governing bodies both for quantitative and qualitative improvement. However, the main problem is arising teacher-pupil ratio in classroom. Particularly in rural areas of the country in general and Meghalaya in particular, many schools have either one or two teachers those who are managing all four classes, which create a big challenge for providing good quality education to all children in such type of multi-grade schools. This Challenge is also increasing in geometric rate when enrolment rate is increasing; there is shortage of space, shortage of trained personnel, formal didactic methods and unsystematic classroom management which have been discussed below.

**What is multi-grade class room?**

Multi-grade classroom is an organizational pattern widely used in schools in our country which feature is typical. This practice is for practitioner, parent, and policymaker, bringing together in recent times only after a prolonged suffering of all. It considers its effects on achievement and attitude, and the requirements of teaching and learning in multi-grade classrooms. In rural, small elementary schools the incidence of students served in multi-grade classrooms may well be much higher in our country. Although rural, small schools may combine grades to save money or may be governmental apathetic attitude or may be failure of government machinery in the guise of the "ungraded classroom," In the 1980s to 2000 "open education" and individualized instruction became influential curriculum and instructional models in the multi-grade classrooms. Energized by developmental theories of learning, a large influx in SSA money and child-centered models of instruction became a major educational innovation. As a result, multi-grade classrooms received new attention.

**What is multi-grade teaching?**

Multi-grade teaching is considered to be an instructional arrangement where children of more than one grade are taught together by a single teacher in the same classroom. In the other type of setting, separate classrooms for different grades are used by the single teacher to teach these grades at the same time. Both multi-grade and multi-class teachings need careful planning and preparation in order to organize instructional activities in the classroom. The ground reality is such that most of the primary schools of the state are compelled to run primary grades with a small number of teachers. To address this problem, various teaching learning practices are in operation among which multi-grade teaching and subject teaching or grade teaching or mono-grade teaching have to be used as tentative instructional arrangement. The shortage of teachers is of course a potent cause for the introduction of multi-grade teaching in the school.

**Role of Multi-grade class room and school**

These multi-grade classrooms play a very important role on providing education in areas where access to education is problematic. Rural schools are a major 'weapon' for accomplishing "Education For All", the goal of UNESCO to be achieved in the years to come in global level. The usual situation in elementary education is that multi-grade school settings are engaged to provide high rates of students' enrolment in elementary education, but do not support and improve education in these settings. This teaching occurs within a graded system of education when a single class contains two or more learner grade levels. It is consisted with the usual pattern of classroom or more

classrooms consist of learners from different grades. In India its history is very long that starts from ancient Gurukul period. Multi-grade teaching is a term used to describe the teaching in elementary education of children from a number of grades usually in one class. It involves the teaching of children from two or more grade levels in one classroom which requires the employment of particular teaching methodologies and classroom administration. Hence, objectives of multi-grade teaching are to create access to education for all children, bring schools closer to communities, overcome the shortage of teachers, modernize teaching methods, reduce drop-outs and repeater rates and increase the participation rate and literacy rates.

**Management of Multi-grade class room by teachers'**

To handle such type of classroom teacher must be well trained in all respect. But in our country most teachers have been trained to work in single-grade classrooms. Their knowledge of teaching method is based on whole-class instruction and small-group instruction. When such trained person placed in a multi-grade setting, they discover that the time requirements and skills needed to be effective are not part of their prior training and experience and such teachers are facing the biggest challenge to work in those systems. For many rural educators, multi-grade instruction is not an experiment or a new educational trend, but a necessity imposed, in part, by economic and geographic conditions. The teacher can manage the multi-grade classes in the following manner:

**a) Meaningful engagement of students'**

In-spite of all the above in the multi-grade classroom, more time must be spent in organizing and planning for instruction. Extra materials and strategies must be developed so that students will be meaningfully engaged. This additional coordination may help the teacher to meet with small groups or individuals, while other work continues. Though the teacher cannot be everywhere or with each student simultaneously at multi-grade settings s/he shares instructional responsibilities with students. Students also learn how to help one another and themselves. Hence, teacher emphasizes the similarities among the different grades and teaches to them. Multi-grade teachers recognize that whole-class instruction must revolve around open task activities if all students are to be engaged. Cooperation is a necessary condition of life in the multi-grade classroom. All ages become classmates, and this closeness extends beyond the walls of the school to include the community. It is obvious that a combined class of students differs a lot from the conventional type of a student class of a single grade. But the students of the multi-grade class should be taught in different way. It is true that the function of the teacher in the multi-grade classroom is multidimensional or to be more accurate it is much more complicated and demanding than the role of the teacher in the Mono-grade class respectively. However, in Meghalaya many teachers in multi-grade environments are either untrained or trained with mono-grade pedagogy; have a few teaching and learning resources; and regard the multi-grade classroom as a poor cousin. In addition, at the majority of the cases, the multi-grade teachers are very young without significant experience, "chosen" by the state to teach at the specific rural areas. These teachers are left alone without resources and support to handle the demanding multi-grade classes which affects in a negative way on classroom management.

**b) Meaningful time management**

It has been found out from the available literature that this problem is common to all the teachers those who are teaching at multi-grade settings of this state Meghalaya relate with space problem to accommodate large number of students, Insufficient time to cover syllabus and do other activities, more physical and mental stress to handle all students at

a time. Extra burden to distribute Mid-Day meal and completing clerical work for office purpose make teacher to feel incapable towards their children. More problems are coming when children are bringing their younger siblings to school to provide relief to their working parents. Traditional open learning delivery technique which creates monotony among the learner is a challenge for the multi-grade teaching. Improper monitorial assistance from the students, improper organization and management of group work, Selection of group leader, improper peer tutoring and more practical for understanding of peers by local language and individualized practiced leads big challenge for teachers teaching at multi-grade settings to manage their work properly.

**c) Students' emotional and social state of mind management**

Besides all the above causes there are some other causes which are regulating and increasing the classroom indiscipline i.e. students irregularities in school, teaching in the class without any teaching learning materials, chronic poor condition of parents force them to lead a measurable life in school, lack of knowledge on importance of education in life, improper social background of the students because maximum learners are first generation learner and from rural background, students are not neat and tidy in their appearance and manner due to their impoverished family background, lack of attention. From teacher side they are unable to use appropriate method of teaching in multi-grade setting because of lack of training and improper training, shortage of time and involvement in different work etc. are creating classroom management problem. In such situation the role of teacher is very important to deal all those problems in a systematic manner.

**d) Teachers' own task analysis and plan of action**

Managing a multi-grade classroom is difficult because there is more than one grade level in the classroom. Hence, the teacher must be skilled in managing instruction to reduce the amount of 'dead time' during which children are not productively engaged on task. This means that teachers must be aware of different ways of grouping children, the importance of independent study areas where students can go when they have finished their work, and approaches to record keeping which are more flexible than those prevalent in the mono-grade classroom. Students may need to be taught the value of independence and cooperation by involving them in classroom decision making. These are seen as a key to improving the quality of teaching and learning in the multi-grade classroom. This is to ensure that time spent away from the teacher is spent productively.

Placing learners of varying ages together within one classroom does not automatically bring about success. The qualities of the learning experiences that occur, as well as the classroom environment, play a fundamental role in the outcomes of multi-age classrooms. Teachers need to re-examine the strategies that they are using, often opting to incorporate new methods within the daily teachings. Every aspect of planning in the multi-grade classroom is geared toward strategies that teach and encourage learners towards a high level of independence.

**e) Curriculum integration**

Within a multi-grade classroom, teachers often choose to integrate the curriculum creating a holistic approach for the process of learning. In addition, removing the traditional, rigid boundaries of a graded structuring of instructional time enhances creativity of teachers who are empowered to develop curriculum innovations and teach to each learner's individual rate of learning. Pro-social behaviours, including sharing, taking turns and helping are more apparent within multi-grade classes.

**f) Encouragement of Independent learning through group work**

Multi-grade teaching is seen as producing children who are independent learners and who learn actively and in collaboration with each other through group work. To encourage children to become independent and active learners, teachers need to understand and practice this approach to learning themselves and be collaborative, innovative and flexible teachers.

It is in evident that, teachers play various roles in a typical classroom, but surely one of the most important is that of classroom manager. Effective teaching and learning cannot take place in a poorly managed classroom. If students are disorderly and disrespectful, and no apparent rules and procedures to guide the behavior may lead chaos. In these situations, both teachers and students suffer. Teachers struggle to teach, and students most likely learn much less than they should. In contrast, well-managed classrooms provide an environment in which teaching and learning can flourish. It takes a good deal of effort to create and the person who is most responsible for creating it is the teacher. But the real picture here in the state of Meghalaya is totally opposite which need urgent attention.

**g) Various other roles of the teacher to manage class room activities properly**

After all, it is true that, many educational policy makers, planners, professional support staffs and the public at large are unaware of the extent and the nature of the needs of multi-grade classes. Since curriculum, educational materials, teacher preparation and assessment systems are predicted on mono-graded schools and classes. Therefore, to control/manage the causes of multi-grade classroom at elementary schools, teacher need to initiate different approaches, those are:

The challenges faced by multi-grade teachers could be avoided with provision of specific multi-grade training and support. Immediate step need to be taken to provide in-service training to teachers on various aspects of multi-grade teaching competencies including curriculum adaptation, classroom organization, teaching strategies and learner assessment. District officials should also be trained specially in regard to the support they can provide to teachers. Accompanying this training should be the distribution of multi-grade teachers' Handbooks to which multi-grade teachers could refer whenever necessary. There is also a need for the Department of Basic Education to provide administrative assistance and also to provide guidelines for a basic minimum number of teachers for each multi-grade primary school. Prospective teachers could be required to do their teaching practice in one multi-grade school as part of their pre-service training.

It may also be suggested that parents and community representatives should form part of any truly integrated curriculum design panel, especially where local content is required. The multi-grade teaching curriculum should be improved by developing subject matter in a way which makes it relevant to the social conditions of the communities and the needs of the target clientele. The local community could be invited to participate as tutors, school advisory councils, local school-management, co-ordinators, contributors of funds, materials and facilities and Para-professional teaching staff.

Greater awareness by policy makers of the extent of de-facto multi-grade classes within state education systems and a commitment to meet the needs of learners and teachers in these classes, a restructuring of state curricula and learning materials for multi-grade classes as per the national norms. There is need to design reproduction and distribution of large quantities of self-study materials to support individual peer and small group learning is essential. Effective implementation of multi-grade teaching requires

establishment of mechanisms for regular supervision, monitoring and support at regional/district and teacher/classroom level.

There is requirement of the classroom climate which should be purposeful, task-focused, relaxed, friendly, flexible, interesting and with an established sense of order. Pupils should be encouraged and supported to learn and the relationships should be based on mutual respect and rapport. Teachers have to facilitate cooperation among pupils and help them out with self-learning activities.

Besides all those activities teachers in multi-grade schools have a variety of tasks that they need to undertake. Those are observation of pupils activities, organization of the learning programme, selection and presentation of learning materials, matching work to pupils, training learning behaviour, organizing a learning environment, assessing and recording pupils' progress and development, etc. If teachers of multi-grade schools have the above points in mind, then it is expected that their work will be facilitated and they will be successful in their role to a great extent.

Teaching in multi-grade settings requires more preparation on the part of the teacher. It is difficult to maintain track of the needs of learners of more than one grade. In the multi-grade classroom, more time must be spent in organizing and planning for instruction. Extra materials and strategies must be developed so that students will be meaningfully engaged. This additional coordination lets the teacher meet with small groups or individuals, while other work continues. Since the teacher cannot be everywhere or with each student simultaneously, they can share instructional responsibilities with students. At an early age, students are expected to develop independence. Instructional grouping practices also play an important role in a good multi-grade classroom. The teacher emphasizes the similarities among the different grades and teaches to them. Teaching different courses at different grade levels to pupils at different developmental levels and keeping all students engaged in meaningful work at all times, is a challenge which requires a high degree of managerial capacity and also requires that the teacher be willing to allow students to take responsibility for their own learning.

The role of government has not been encouraging in this regard. Instead of facilitating its school in multi-grade setting, government education office has hindered the process. There are no rewards or encouragement for the teachers who implement multi-grade ideas and strategies. Instead of supporting the teachers, government officials evaluate them based on their own criteria such as completion of course and following syllabus set by them. Moreover, the untimely transfers of multi-grade trained teachers further worsen the situation which needs to be controlled. In practice, weak management capacity, insufficient funding, inadequately trained teachers, and weak system support make it difficult to realize the positive potential of decentralization at multi-grade schools which needs to be checked.

Multi-grade schools are often located in remote and difficult to reach areas. They may be far from the educational center and receive little pedagogical support. Therefore, it is essential that the community be involved in the life of the school. Parents can be asked to come in to act as a resource person, the curriculum of the school might extend out into the community, or the community can be asked to support the school in other ways to improve the quality of educational services in Multi-grade teaching schools. The role of multi-grade teacher should be a facilitator for teaching and learning, a counselor, a planner, an evaluator, a designer for teaching learning materials to deal different grade students in one class, a Para professional trainer to train older siblings and community members for school teaching-learning, a government extension worker, a best manager of

students, course of study, time, available physical facilities. Hence, teachers' position and work ability needs to be recognized and rewarded.

To control the causes of multi-grade classroom management at Elementary schools, teacher needs to solve individual problem of students by the student leader in open platform. As the teachers have not been trained to attend multi-grade situation are to handle the classroom efficiently, in many cases students have to wait up to 30 minutes to one hour after start of the class before being assigned any task, while teacher assigned work to other grades. The general problem is that teachers do not know which work should be done first and how to integrate the work between different grades. Therefore, multi-grade teachers need guidance and some knowledge on class room management through in-service training programme.

In many cases some element of conflict where teachers blame the children for not being interested to be a discipline one; at the same time, children also point out the problems as instruction not being compatible with their teachers teaching styles that force them to create noise/to be delinquent in classroom. From teachers' perspective, the understanding of each child in the class in terms of their achievement should also be stressed. When the children are under pressure to understand their teacher's teaching due to non-linearity of content presentation and methodology they lead constant fear in the classroom which affects the classroom environment. Hence, this state calls for the creation of awareness among the teachers about the inter-relation between children, syllabus and proper classroom management.

**Peer tutoring** is the process between two or more students in a group where one of the students acts as a tutor for the other group-mate(s). Peer tutoring can be applied among students of the same age or students belonging to different age groups. Encouragement of peer tutoring is a useful strategy for multi-grade schools. There is strong evidence that peer tutoring has clear positive results on learning and this makes it a valuable weapon in the teachers' hands. The main reason for peer tutoring is that, children understand easily tutors who are children, since they are cognitively closer to each other. Usually children find their own ways of communicating with other children and many times they can present a subject to other children better than an adult. Children-tutors can give to their class-mates their own models of understanding a subject, using their personal experience, fresh ideas, examples from children's every-day life, even popular communicating symbols that make learning easier. For an effective peer tutoring in a multi-grade class it is essential to adopt the structured type of tutoring. If all the above suggestions will be incorporated in policy, plan and in programme of actions, then the crises in multi-grade class room management will be overcome from the state and the state will able to achieve the target of quality elementary education.

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# Regional Rural Banks in India: Analysis of Growth of Deposit Mobilisation and Credit Channelization

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**Abstract:**

The Regional Rural Bank concept in the country started to grant financial support to the rural based economy in 1975. The deposit mobilization is an integral part of banking activity. The deposit mobilization is a significant indicator of bank's performance. The basic principle of branch expansion is to tap deposit and culminate savings habit of the community. Further, tapping of potential savings and marshalling them for productive purposes in particular is the main objective. The Govt. has directed the banks to make all possible efforts to access to new deposits that can only expedite the pace of lending activities. Realising these, present study tries to analyse the growth of RRBs in the country and the deposit mobilization and credit utilization by the RRBs in the economy. An attempt attempt is also made to find out the extent of population group wise deposit accumulation and credit utilization by the RRBs.

**Key Words:** *RRBs, Deposit, , Loans & Advances.*

**Introduction:**

In July 1975 the Government of India appointed a Working Group on 'Rural Banks' under the Chairmanship of Mr. M. Narasimham to examine the gravity of the rural finance and to cater the financial needs of the rural masses. Considering the need for rural finance the committee viewed that existing commercial banks and co-operative banks are not enough to support the financial needs of the rural people. Therefore in order to support the rural economy the committee recommended a new type of institution called as Rural Bank which combined with the local feel and familiarity of co-operative banks, and the degree of business organization and a modern outlook of commercial banks. The Govt. of India recognized the recommendations of the committee and accordingly, Regional Rural Banks ordinance 1975 was propagated which was later replaced by the Regional Rural Banks Act. On 2nd October 1975 five Regional Rural Banks were established in the country which number had increased to as high as 196 till 2004-05 but over the time its number reduced to 82 in 2010-11. The main objectives behind the establishment of RRBs were to boost up rural economy by providing deposit and credit facilities to small and marginal farmers, landless labourers and rural artisans, to inculcate banking habit in the rural masses; to help small entrepreneurs in the establishment of industries; to eradicate unemployment of rural areas etc. The authorized capital of RRBs was Rs. 1 crore and paid up capital was Rs. 25 crores which is contributed by the central and the state govt. and the sponsor banks in the ratio of 50: 15: 35.

**Review of Literature**

The Narasimham Committee (1998) emphasized that while discharging their functions as purveyors of rural credit and mobilisers of rural savings, RRBs should not ignore the importance of financial viability and operational efficiency. The productivity, profitability and solvency of the RRBS must be maintained and sustained to enable them to function as an effective and efficient institution of rural credit'.

Kausik (1999) in his study on credit productivity of RRB has found an inverse relationship between credit assets and credit productivity which has been establish due to low income generation, lack of appropriate skills and infrastructural facilities. He suggested that RRBs should supply adequate credit along with skill and training facilities to the beneficiaries.

The issue whether location matters for the performance has been addressed in detail by Malhotra (2002). The RRBs followed usually the same methods of operation and procedures as followed by commercial banks which have not found favourable for the rural masses. In many cases, banks have not been located at the right place. For instance, the sponsoring banks are also running their branches in the same areas where RRBs are operating.

Bose (2005) concluded that the inception and expansion phase (1976-1990) saw rapid growth of the RRBs activities; the reform phase (1991-2002/3) raised the profitability of these banks at the cost of massive rural disintermediation, particularly of the targeted borrower categories; and the most recent phase of stock taking and perhaps some repositioning to strike a balance in the conundrum of `viability versus outreach'.

Hadi and Bagchi (2006) assessed the performance of RRBs in India in general andin West Bengal in particular. The study reviewed the progress of the RRBs in West Bengal in terms of expansion of branches, credit expansion and deposit mobilization since inception till the end of June 2001.

Shivappa (2007) in a study examined the growth in advances, deposits and financial performance of the RRBs. The study covered the RRBs as a whole and discussed mostly theoretical issues rather than any analytical depth.

Kumar (2008) opined that amalgamation became a death blow to the credit starved rural poor, most of whom are small and marginal farmers, agricultural and landless labourers, and artisans. The study recommended for an immediate de-amalgamation of RRBs in the interest of the vast majority of the rural poor. However, in the context of present day competition with other banking and non-banking institutions, improvement of performance level is essential for the survival of RRBs.

Similarly, (Ibrahim, 2010) opined that the RRB in India was established in the year 1975 and the prime objective behind its establishment was to provide banking facility to the rural people in the country and thereby accumulating the rural saving and out of it to give credit to the rural people like small and marginal farmers, small scale industries, village artisans and craftsmen etc who failed to get credit from cooperative institutions.

**Branch Expansion of RRBs:**

Keeping in view the above facts of review of literature, the following sections attempted to analyze the performance of RRBs in terms of branch expansion, districts covered, population served, deposit, credit and C/D ratio, population group wise deposit and credit etc. In order to examine the performance of RRBs at all India level, the data have been collected for the period 2000-01 to 2010-11.

The establishment of RRBs in 1975 made a new trend of banking structure to the rural economy of the country. Since then, 196 RRBs have joined the banking system. The table-1 shown below exhibits that in the year 2000-01, the total numbers of RRBs in all India level were 196 and over the time its numbers reduced to 82 in 2010-11. This decrease in numbers is due to restructuring strategies adopted and amalgamation of various RRBs in the country which started by the Govt. of India after the implementation of the Narasimham Committee recommendations. Although the numbers of RRBs have decreased over the years but the branch network have increased to 15, 658 in 2010-11 from 14, 301 branches in 2000-01. During the period of 11 years under consideration, 1357 number of branches has increased in order to cover more number of districts. This has been confirmed by the fact that the number of districts covered by the RRBs in the country has increased from 484 in 2000-01 to 621 districts in 2010-11. It indicates that an additional 137 numbers of districts were covered by setting up of new branches in the various uncovered and under-banked districts of the country. The population served per branch of RRBs is interestingly high i.e, roughly 84.6 thousand in 2000-01 which slightly improved and figured at 77.3 thousand populations served per branch in 2010-11. The scenario is extremely terrible while compared with the population per branch of commercial bank as a whole which covered 18 thousand populations by each branch during 2010-11 (IBA, 2011). The number of employee per branch found to be very low i.e, around 4 to 5 persons throughout the period. In 2000-01, the average number of employee per office was 4.90 which have declined to 4.14 during the year 2010-11. This decrease in average number of employee per branch may be due to computerization of the in certain branches of RRBs.

**Deposit and Credits of RRBs:**

The resource mobilization is an integral part of banking activity. The deposit mobilization is a significant indicator of bank's performance. The basic principle of branch expansion is to tap deposit and culminate savings habit of the community. Further, tapping of potential savings and marshaling them for productive purposes in particular is the main objective. The Govt. has directed the banks to make all possible efforts to access to new deposits that can only expedite the pace of lending activities. There has been a substantial rise of deposits of RRBs during the period under consideration as depicted in table-2.

The total amount of deposit in the year 2000-01 was Rs. 37,027 crores and this figure has gone up to Rs. 1,63,928 crores in 2010-11 recording 4.43 times increase in total deposit over the years. Although there has been decrease in the total numbers of RRBs in the country, the quantum of deposit is increasing over the years. At the same time, deposit per branch has increased over the years. The average deposit per branch in 2000-01 was Rs. 2.59 crores which has gone up to Rs. 10.47 crores per office during the year 2010-11. But still the scenario of deposit per branch of Indian commercial banks is much higher than the RRB as a whole during the same span. The figures for commercial banks as a whole increased fromRs. 14.56 crores in 2000-01 to Rs.44.65 crores in 2010-11(IBA, 2011). The per capita deposit in RRBs is also very low; the figure for the same was Rs. 0.31 thousands in 2000-01, increased to Rs. 1.35 thousands in 2010-11. It could thus be inferred from the above analysis that the reform measures introduced following Narasimham committee recommendations in 1991 and 1998 have positive impact in mobilizing the rural deposits as reflected from the increase in deposit per branch of RRBs. But the fact remained that the RRBs failed to maintain the deposit performance of commercial banks of the country.

The loans and advances offered by the RRBs in the country are also increasing over the years in a continuous manner which is clearly shown in table-2. The total amount of loans

and advances of RRBs in the country was Rs. 15,794 crores in 2000-01; the amount has gone up to a total of Rs. 98,244 crores. It is clear that the total amount of loans and advances of RRBs in the country has increased by more than 5 times over the period. The per branch advances was Rs. 1.10 crores in 2000-01 which has increased to Rs. 6.27 crores in 2010-11. The RRBs are not in a position deploy credit for socio economic development alike commercial banks in India as the credit per office of RRBs is much lower while compared the figure for credit per commercial banks in India throughout the period. The credit per commercial banks increased to Rs.41.55 crores in 2010-11 from Rs. 7.79 crores in 2000-01(RBI, 2010-11).The per capita loans and advances of RRBs are also very low throughout the period under consideration.

In 2000-01, the credit deposit ratio of the RRBs in the country was 41.0 per cent which increased to 59.6 per cent in 2010-11. The trend of credit deposit ratio of commercial banks is much higher than that of the RRBs; the figure was 45.9 per cent in March 2001 which has reached to the level of 73.9 per cent in March 2008 (RBI, 2008). Hence the apparent fact remains that the RRBs failed to maintain the C/D ratio of commercial banks of the country during the period. The reason of significantly low C/D ratio of RRBs may be due to nature of loans sanctioned, non-recovery of loans, stubborn cheaters, lack of direction of end use of bank credit, lack of implementation of bankable schemes and so on.

In order to see the nature of relationship between growth of deposits and growth of advances, coefficient of correlation (r) analysis has been employed. For this purpose, 'r' value between deposit per office and advance per office has been calculated for the period of 11 years from 2000 to 2011 and it is shown in table-3.The high positive correlation (r =0.997) value between deposit per office and advances per office are statistically significant and firmly confirms that along with the increase of deposits, loans and advances has increased at the same proportion. This implies that the RRBs is deploying credit at the same rate what they have mobilized for this purpose although they have not attained the stipulated C/D ratio of 60 per cent.

**Population Group- Wise Deposits of RRBs:**

The population group-wise deposits and credit of RRBs viz, rural, semi-urban, urban and metropolitan area is presented in table-4. It is clear from the table that there is a quantum jump of rural deposit from Rs. 22,307.06 crores in March 2000 to Rs. 84,115.62 crores in March 2010 recording an increase of 3.8 fold during 2000-2010. But the percentage share of rural deposit declined from 69.63 per cent to 59.23 per cent during the same period. The semi-urban deposit was Rs.7,268.64 crores in March 2000 which increased to Rs. 36,625.67 crores in March 2010. The percentage share of semi-urban deposit increased from 22.69 per cent to 25.79 per cent. It shows positive growth of semi-urban deposits both in quantum and percentage term over the years. The urban and metropolitan deposits also increased both in total and in percentage level.

In order to study the extent of deposit mobilization in the rural areas, the correlation matrix analysis is employed among the population group wise deposit during 2000-2010. The result obtained is presented in table-5. It is observed that the 't' values (calculated) of the highly positive correlations are higher than the tabulated values. It means that 'r' values are statistically significant and indicates that with the increase in total deposits, the population group wise deposits has also increased in the same proportion.

**Population Group- Wise Credit Channelization of RRBs:**

There has been a quantum increase of population group wise credits of RRBs during the period 2000-2010. But the percentage share of credit to total credit has declined in case of

rural credit. The table-6 presents the facts relating to population group-wise credit of RRBs.

From the table, it is observed that over the years, coefficient of variation of metropolitan credit is on fluctuating trend than that of other population groups ie, rural, semi-urban and urban. As the percentage share of credit in rural areas has declined, it may be perceived that a negative attitude of banks to fulfill the socio economic objectives and thereby the motto of rural development has weakened although RRBs were created basically to serve the weaker sections of the village based society.

To find out the extent of credit utilization among the population group wise credit of RRBs in India the correlation matrix analysis is employed among the variables during 2000-2010. The table-7 presents the results of correlation which shows that there is high relationship exist among the variables. It can further be interpreted that along with the increase in total credit, the credit of rural, semi- urban and urban areas have also been increasing proportionately.

**Conclusion:**

Regional Rural Bank in the country was started with the hope of supporting the rural economy with financial base on the one side and as well as to sustain the business viability by the Bank on the other side. Although from the side of extending financial helps by the RRBs to the rural economy over the years cannot be ignored but its growth especially from the point view of business viability is not worthy. The total number of RRBs in the country in 2000-01 was 196 which reduced down to as low as 82 RRBs in 2010-11.Though it happened due to the amalgamation process started by the Govt. of India but it occurred only due to the heavy financial losses incurred by many of the RRBs in the country. But after the banking reforms by the Govt. the branch expansion by the existing number of RRBs in the country has been increasing which is 15,658 numbers of branches covering at least 621 numbers of districts in the country in 2010-11. Although over the years the deposit, credit both in total and population group wise is increasing but still it is far behind in the comparison of commercial banks in the country. The RRBs in the country needs to work more vibrantly with modern skill and completely supported by individuals who are highly expert in rural finance. As like any other commercial bank the RRBs also need to work to earn profit to do rural financial business in the nooks and corners of the country. Similarly over the years the credit deposit ratio of the bank is improving and the correlation analysis shows positive sign of proportionate increase in terms of deposits and the use of credit both in total and population group wise deposit mobilization and credit utilization.

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## Appendix

## TABLES

### Table-1

**Branch Network of Regional Rural Banks in India**

| Year | No. of RRBs | No. of Branches | No. of Employee per office | No. of Districts Covered | Population Per Branch* |
|---|---|---|---|---|---|
| 2000-01 | 196 | 14,301 | 4.90 | 484 | 84622.99 |
| 2001-02 | 196 | 14,390 | 4.86 | 511 | 84099.61 |
| 2002-03 | 196 | 14,433 | 4.82 | 516 | 83849.06 |
| 2003-04 | 196 | 14,446 | 4.79 | 518 | 83773.60 |
| 2004-05 | 133 | 14,484 | 4.76 | 523 | 83553.81 |
| 2005-06 | 94 | 14,494 | 4.73 | 525 | 83496.17 |
| 2006-07 | 90 | 14,520 | 4.70 | 534 | 83346.65 |
| 2007-08 | 90 | 14,761 | 4.60 | 594 | 81985.87 |
| 2008-09 | 86 | 15,181 | 4.51 | 616 | 79717.64 |
| 2009-10 | 82 | 15,475 | 4.22 | 619 | 78203.13 |
| 2010-11 | 82 | 15,658 | 4.14 | 621 | 77289.14 |

*population per branch of RRB is calculated with the total population as per 2011 census divided by the number of branches

**Source:** *Reserve Bank of India, Basic Statistical Return of Scheduled Commercial Banks, Various Issues*

**Table-2**

**Performance of Regional Rural Banks in All India Level**

| Year | Total Deposits (Rs. In Crores) | Deposit per branch (Rs. in Crores) | Per Capita Deposit (Rs. In thousands) | Total Loans and advances (Rs. in Crores) | Loans and advances per branch (Rs. in Crores) | Per Capita Loans and Advances (Rs. In Thousands) | Credit-Deposit Ratio (%) |
|---|---|---|---|---|---|---|---|
| 2000-01 | 37,027 | 2.59 | 0.31 | 15,794 | 1.10 | 0.13 | 41.0 |
| 2001-02 | 43,220 | 3.00 | 0.36 | 18,629 | 1.29 | 0.15 | 41.8 |
| 2002-03 | 48,346 | 3.35 | 0.40 | 22,158 | 1.54 | 0.18 | 44.2 |
| 2003-04 | 57,010 | 3.94 | 0.47 | 26,115 | 1.81 | 0.22 | 46.3 |
| 2004-05 | 62,143 | 4.29 | 0.51 | 32,871 | 2.27 | 0.27 | 52.8 |
| 2005-06 | 71,329 | 4.92 | 0.59 | 38,520 | 2.66 | 0.32 | 55.6 |
| 2006-07 | 83,144 | 5.73 | 0.69 | 47,326 | 3.26 | 0.39 | 58.3 |
| 2007-08 | 99,093 | 6.71 | 0.82 | 57,568 | 3.90 | 0.48 | 59.5 |
| 2008-09 | 1,20,189 | 7.92 | 0.99 | 65,609 | 4.32 | 0.54 | 56.4 |
| 2009-10 | 1,45,035 | 9.37 | 1. 20 | 79,157 | 5.12 | 0.65 | 57.6 |
| 2010-11 | 1,63,928 | 10.47 | 1.35 | 98,244 | 6.27 | 0.81 | 59.6 |

**Source:** *Reserve Bank of India, Basic Statistical Return of Scheduled Commercial Banks, Various Issues Consolidated RBI Report on Trend and Progress of Banking in India from 2000-01, 2010-11 RBI, Statistical Tables Relating to Banks in India 2003*

**Table-3**

| Variable | Correlation (r) | 't' value (cal.) |
|---|---|---|
| Deposit Per Office & Advance Per Office | 0.99 | 21.06 |

*t0.05 (9 df.)=1.833 (tab), t0.01 (9 df.)=2.821 (tab)*

**Source-** Calculated by the Researcher

**Table-4**

**Population Group-wise Deposits of Regional Rural Banks in India (As on March)**

*(Amount Rs. in Crores)*

| Year/Population Group | Rural | Semi-Urban | Urban | Metropolitan | Total |
|---|---|---|---|---|---|
| 2000 | 22,307.06 (69.63) | 7,268.64 (22.69) | 2,393.70 (7.47) | 65.28 (0.20) | 32,034.68 (100) |
| 2001 | 26,312.89 (69.33) | 8,568.89 (22.58) | 2,994.39 (7.89) | 77.08 (0.20) | 37,953.23 (100.0) |
| 2002 | 30,154.59 (68.43) | 10,218.22 (23.19) | 3,589.09 (8.14) | 101.23 (0.22) | 44,063.12 (100.0) |
| 2003 | 33,745.05 (68.09) | 11,664.81 (23.54) | 4,039.04 (8.15) | 109.25 (0.22) | 49,558.14 (100.0) |
| 2004 | 37,711.63 (67.45) | 13,433.77 (24.03) | 4,619.74 (8.26) | 143.88 (0.26) | 55,909.02 (100.0) |
| 2005 | 40,957.13 (66.65) | 15,154.59 (24.66) | 5,160.81 (8.40) | 174.37 (0.28) | 61,446.90 (100.0) |
| 2006 | 44,359.98 (62.98) | 17,978.85 (25.53) | 7,403.50 (10.51) | 691.91 (0.98) | 70,434.24 (100.0) |
| 2007 | 50,913.97 (62.37) | 21,361.13 (26.17) | 8,489.90 (10.40) | 865.50 (1.06) | 81,630.50 (100.0) |
| 2008 | 59,661.45 (61.19) | 25,883.31 (26.54) | 10,883.46 (11.16) | 1,081.20 (1.11) | 97,509.41 (100.0) |
| 2009 | 71,646.76 (60.43) | 31,651.27 (26.69) | 13,862.90 (11.69) | 1,409.34 (1.19) | 1,18,570.27 (100.0) |
| 2010 | 84,115.62 (59.23) | 36625.67 (25.79) | 19,271.04 (13.57) | 1,998.52 (1.41) | 1,42,010.85 (100) |
| **CV** | **42.54** | **53.38** | **70.24** | **108.10** | **48.62** |

*(Figures in the Parentheses Indicate per cent to Total Deposit)*

**Source:** *Statistical Returns of Scheduled Commercial Banks in India, Various Issue*

**Table-5**

**Matrix of Correlation among the Population Group wise Deposits**

| Variable | Total Deposit | Rural Deposit | Semi-Urban Deposit | Urban Deposit | Metropolitan Deposit |
|---|---|---|---|---|---|
| **Total Deposit** | | | 1 | | |
| **Rural Deposit** | | 0.99* (21.06) | | 1 | |
| **Semi-Urban Deposit** | 0.99* (21.06) | | 0.99* (21.06) | 1 | |
| **Urban Deposit** | 0.99* (21.06) | 0.99* (21.06) | 0.99* (21.06) | 1 | |
| **Metropolitan Deposit** | 0.98* (14.7) | 0.97* (12.13) | 0.98* (14.7) | 0.99* (21.06) | 1 |

t0.05 (9 df.)=1.833 & t0.01 (9 df.)=2.821

(Figures in parentheses indicate the respective't' values)

*Significant both at 5 per cent and 1 per cent level of significance.

**Source:** *Calculated by the Researcher on the basis of table-4*

**Table-6**

**Population Group-wise Credit of Regional Rural Banks in India (As on March)**

*(Amount Rs. In Crores)*

| Year/Population Group (March) | Rural | Semi-Urban | Urban | Metropolitan | Total |
|---|---|---|---|---|---|
| 2000 | 9,644.22 (73.47) | 2,683.83 (20.45) | 777.98 (5.93) | 20.06 (0.15) | 13,126.10 (100) |
| 2001 | 11,826.11 (73.17) | 3,491.50 (21.60) | 1,009.43 (6.25) | 24.57 (0.15) | 16,163.51 (100.0) |
| 2002 | 13,509.02 (71.59) | 4,105.31 (21.75) | 1,212.87 (6.43) | 41.56 (0.22) | 18,868.76 (100.0) |
| 2003 | 16,177.11 (71.51) | 4,921.71 (21.76) | 1,470.67 (6.50) | 53.44 (0.24) | 22,622.92 (100.0) |
| 2004 | 18,265.45 (70.19) | 5,917.39 (22.74) | 1,771.62 (6.81) | 65.88 (0.25) | 26,020.34 (100.0) |
| 2005 | 23,017.35 (70.41) | 7,529.16 (23.09) | 2,072.83 (6.34) | 69.49 (0.21) | 32,688.83 (100.0) |
| 2006 | 24,453.53 (66.73) | 9,124.13 (24.90) | 2,825.82 (7.71) | 240.03 (0.65) | 36,643.51 (100.0) |
| 2007 | 32,226.20 (67.34) | 11,759.79 (24.57) | 3,581.75 (7.48) | 287.38 (0.60) | 47,855.11 (100.0) |
| 2008 | 38,736.20 (66.91) | 14,434.77 (24.94) | 4,340.15 (7.50) | 375.44 (0.65) | 57,886.56 (100.0) |
| 2009 | 44,247.18 (66.21) | 16,693.32 (24.98) | 5,429.25 (8.12) | 459.16 (0.69) | 66,828.91 (100.0) |
| 2010 | 53623.12 (64.79) | 20,970.86 (25.34) | 7,529.29 (9.10) | 638.50 (0.77) | 82,761.76 (100) |
| **CV** | **55.64** | **65.08** | **73.11** | **101.83** | **59.50** |

*(Figures in the Parentheses Indicate per cent to total credit)*

**Source:** *Statistical Returns of Scheduled Commercial Banks in India, Various Issues*

**Table-7**

**Matrix of Correlation Analysis of Population Group wise Credit**

| Variables | Total Credit | Rural Credit | Semi-Urban Credit | Urban Credit | Metropolitan Credit |
|---|---|---|---|---|---|
| **Total Credit** | | | 1 | | |
| **Rural Credit** | | 0.99* (21.06) | | 1 | |
| **Semi-Urban Credit** | 0.99* (21.06) | | 0.99* (21.06) | 1 | |
| **Urban Credit** | 0.99* (21.06) | 0.99* (21.06) | 0.99* (21.06) | 1 | |
| **Metropolitan Credit** | 0.98* (14.7) | 0.98* (14.7) | 0.99* (21.06) | 0.99* (21.06) | 1 |

t0.05 (9 df.)=1.833 &t0.01 (9 df.)=2.821

(Figures in parentheses indicate the respective't' values)

*Significant both at 5 per cent and 1 per cent level of significance

**Source:***Calculated by the Researcher on the basis of table-6*

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# Application of Expectancy- Value Model in Understanding Farmers Perceived Value and Buying Behaviour towards Fungicide Used In Paddy in Jorhat District of Assam

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**Abstract:**

Expectancy-value theory was originally created in order to explain and predict individual's attitudes toward objects and actions. Expectancy is the subjective probability that a given behavior will lead to a particular outcome. In this paper an attempt has been made for determining the farmer's perceived value for various fungicide brands applicable in paddy by using the Expectancy-value theory. The study will help in assessing the current image of the companies, their products and of competitors. The study will also help a company to know how the consumer (farmers who purchase fungicide) forms preferences among the different brands which are available in the market and also what is their perceived value about different fungicide brands used in paddy in Jorhat pesticide market. This will provide a basis to understand the attitude and predict the behaviour of the farmer. Thus the findings of the present study may provide a basis for the company policy makers to formulate new plans, decide production and marketing strategies and design research works for future in- depth studies.

**Keywords:** *Farmers, Buying behaviour, Perceived value, Jorhat*

## Introduction:

A fungicide is a chemical pesticide compound that kills or inhibits the growth of fungi. In agriculture, fungicide is used to control fungi that threaten to destroy or compromise crops. Fungicides have a significant position in the various types of pesticides used in crops. Agriculture crops are sensitive to diseases caused by the fungus. Yet farmer's behaviour with respect to fungicides purchase has not attracted much systemic attention by the consumer behaviour researchers. An attempt has been made in this paper for understanding the farmer's perceived value regarding various fungicide brands applicable in paddy. Also, an attempt has been done to understand the buying behaviour of farmers towards fungicides used in paddy. For the purpose of the study, Expectancy-value theory developed by Martin Fishbein was used.

**Expectancy Value Model**

Expectancy-value theory was originally created in order to explain and predict individual's attitudes toward objects and actions. Martin Fishbein is credited with developing the expectancy-value theory (EVT) in the early to mid 1970's. It is sometimes referred to as Fishbein's expectancy-value theory or simply expectacy-value model. The primary work typically cited by scholars referring to EVT is Martin Fishbein and Icek Ajzen's 1975 book called *Belief, Attitude, Intention, and Behavior: An Introduction to Theory and Research*. The theory states that attitudes are developed and modified based on assessments about beliefs and values. Primarily, the theory attempts to determine the mental calculations that take place in attitude development. Expectancy-value theory has been used to develop other theories and is still utilized today in numerous fields of study.

An attitude is a function of a person's beliefs about an object and the evaluative responses (Fishbein and Ajzen, 1975).

An attitude can be conceptualized by the following equation:

$$Ao = (Bi \times Ei)$$

Ao = the attitude toward an object (o)
Bi = a belief about the object's attributes
Ei = the evaluation of an attribute

According to the expectancy- value theory, beliefs are of two types. There is first belief in something, and then belief about something. According to this theory, beliefs vary from attitudes because they are evaluative. Together beliefs and attitudes motivate towards an attitude object.

People usually believe that their behavior will lead to both positive and negative consequences. Their attitude is based on whether or not that end result is favorable. According to the expectancy-value model of attitude theory, information can have three effects on attitude change. First, information can change the weight of a particular belief. Second, information can effect the direction of a particular belief. Third, information can add new beliefs (Littlejohn, 2002).

As the result of various experiences, we form beliefs about an object that combine to produce an attitude. This attitude remains relatively stable across time and situations. The actual or symbolic presence of the object creates this attitude in the form of a generally favorable or unfavorable evaluative reaction. The attitude predisposes affective, cognitive, and behavioral responses to the object. These responses are consistent with the overall attitude (Krebs and Schmidt, 1993).

Expectancy is the subjective probability that a given behavior will lead to a particular outcome. Having high expectancies means the individual is confident the behavior will result in the outcome. Having low expectancies means the individual believes it is unlikely that their behavior will result in the reinforcement. Expectancies are formed based on past experience.

Fishbein's attitude theories give us a basis to understand attitude and predict behavior. Research in this area of communication will increase our understanding of persuasion and motivation. In addition, it will help prepare belief-targeted messages and test their effectiveness on our target audiences. His theories also help us to understand the development and formation of attitudes and beliefs. If we understand how attitudes are formed, we are better equipped to influence them.

"Attitudes are not absolutes. They are relative to the situation, to the selective perspective of the individual and to the communicative context in which they are expressed. They allow for broad generalizations on the one hand and infinitely complex differentiations on the other...This is not a reductionist philosophy, but one in which human individuality and identity emerges from interaction with the physical environment. In the complexity of attitudes lies our freedom; in their patterning, our dignity" (Eiser 1994, 243).

**Perceived Value Computation**

It was derived from Expectancy value model. The consumer arrives at attitudes (Judgments, preferences) towards brands through an attribute evaluation process. He or she develops a set of beliefs about where each brand stands on each attribute. The expectancy- value model of attitude formation posits that consumers evaluate products and services by combining their brand beliefs- the positive and negative- according to importance

In short it is based on attitude and weight generally put on the attributes by consumer. The expectancy value model is of the following form.

$$A_{jk} = \sum_{i=1}^{n} W_{ik} B_{ijk}$$

Where,

k= Consumer

j= Brand

i= Attribute

$A_{jk}$= Consumer k's attitude score for brand j

$W_{ik}$= Importance weight assigned to attribute i for consumer k

$B_{ijk}$= Consumer k's belief as to the amount of attributed i offered by a brand j

n= Number of attributes important in the selection of given brand

**Discussion on Various Attributes**

Attributes are the physical characteristics of the product. Attributes are either concrete (e.g., vitamin content) or abstract (e.g., fattening) but in both cases, they are directly related to the product itself. Consequences or benefits are the outcomes of product use. They represent what the product is perceived to be doing for consumer. Consumers tend to think about products in terms of their consequences, not their attributes (Steenkamp, J. E. M., 1997).

After a series of meeting with the dealers and retailers of various agrochemicals and few progressive farmers, following attributes where developed for the purpose of the study

**Price of Brand:** The prices of similar group of pesticides from various firms varied and this variation would influence the choice of the brand preferred by the farmer. A farmer tends to use the same brand repeatedly if only he was satisfied with price. Hence, it was used as an attribute.

**Quality of Brand/ Efficiency of Brand:** The opinion of the farmers regarding the control of pests by a particular brand was considered as it was bound to influence his attitude towards it. If the farmer found that a particular pesticide is efficient or more effective in

controlling the pest, then he considers the pesticide as of best quality. Hence, the same was included as an attribute.

**Package of the Brand:** The good package and different sizes of package also influence the farmer's brand choice. Small and marginal farmers require small packages since they are cultivating smaller areas and they may not prefer purchase of a larger package. Hence, the same was included as an attribute.

**Popularity of the Brand:** A highly popular and established brand creates a sense of one of the best brand available in the market. A farmer would definitely like to use the best brand of the market. Hence, the same was included as an attribute.

**Technical guidance/ Customer service:** The importance of technical guidance was very well explained by K. K. Unni, Vice Chairman, Aventis Crop Science India, Mumbai. According to him, "The farmer is much more educated and aware today. Therefore, the job of the salesman today is much more than recommending only agrochemical as a tool of crop improvement. The plant protection man must have all- round information, that is irrigation, seeds, cultivation practices, etc. in other words, plant protection man has become the crop production man too". The farmer tends to become more loyal to a company whose salesman provides technical guidance. Hence, the same was included as an attribute.

**Agrochemical Industry**

India is the largest agricultural economy and major user of agrochemicals. The agrochemical industry in general is a seasonal industry and being associated to agriculture production, is a core industry. For agriculture to be commercially viable, with various other inputs, it requires certain key agrochemicals and pesticide is one of them. There are three main segments in the pesticide industry- insecticides, herbicides and fungicides.

The ultimate buyer of their products is the farmer. But the farmer is much more educated and aware today. The emerging trends reveal that they are becoming progressively knowledgeable and therefore ask for greater assured performance from product and companies. This has lead to change in the marketing approach of the growth- conscious companies. It is the shift from sellers market to buyers market. Now, customer is the king ( Unii, 2000). The growing competition in the industry has brought the companies under pressure to win customers. These increasing competitions have made the customers more empowered. They can demand a right- they did not have it until recently. And "…business must adapt to the empowered consumer" (Kotler, 2003). Unfortunately, most marketing theory and practice centers on the art of attracting new customers rather than on retaining and cultivating existing one. The emphasis traditionally has been on making sales rather than building relationships; on reselling and selling rather than caring for the customer afterward. A company would be wise to measure customer satisfaction regularly, because key to customer retention is customer satisfaction. A highly satisfied customer stays loyal longer, buys more as the company introduces new products, and upgraded, existing products, talks favorably about the company and its products, pays less attention to the competing brands and is less sensitive to price, offers product or service ideas to the company, and costs less to serve than new customers because transactions are routine (Kotler, 2003). On an average, a satisfied customer tells three people about a good product experience, but the average dissatisfied customer grips to 11 people. If each of them tells still other people, the number of people exposed to bad word of mouth may grow exponentially (Goodman, 1986; Brown and Chandrashekharan,

1998).If a company wants to adapt to the empowered consumer, it must have to recognize the importance of satisfying and retaining customers.

With a gross cropped area of 1, 83,126 Ha and 1, 13,557 number of farm families; Jorhat district of Assam provides a big market for the agrochemical companies. Seeing the opportunity a number of agrochemical companies have entered into the Jorhat market. Because market has become so competitive, it is very important for the companies to know where it stands among the competitors in terms of creating a brand image and satisfying the ultimate consumer of agrochemicals i.e. the farmer. In this paper an attempt has been made to make image analysis and measure consumer satisfaction for various fungicide brands applicable in paddy. The surveys hasn't merely measured the customer satisfaction for different brands but have actually ranked brands on the basis of customer delight. The difference is simple. Certain brands exceed customer expectations. These are the brands that delight the customer, not merely satisfy him.

The study will help in assessing the current image of the companies, their products and of competitors. This will help a company in knowing the current awareness level of its products and those of competitors among the target audience i.e. the farmers. The study will also help a company to know how the consumer forms preferences among the brands in the choice set and also what is their perceived value about different fungicide brands used in paddy in Jorhat pesticide market. Thus the findings of the present study may provide a basis for the company policy makers to formulate new plans, decide production and marketing strategies and design research works for future in- depth studies.

## Methodology

For the preset study data were collected from the sample respondents. Jorhat being one of the agriculturally developed district in Assam is located in between $34^0$ to $35^0$ North latitude and $30^0$ to $45^0$ East longitude at an altitude of 71 m from the mean sea level. Jorhat district comprises of three sub- divisions- Jorhat, Titabor and Majuli. All the three subdivisions were selected for the purpose of study. Jorhat has 16 ADO circles- 7 in Jorhat subdivision, 6 in Titabor subdivision and 3 in Majuli subdivision. Six ADO circles namely Allengmara and Selenghat from Jorhat subdivision, Titabor and Bagchung from Titabor subdivision and Kamalabari and Jengrai from Majuli sub- subdivision were randomly selected for purpose of detailed investigation. Five villages from each subdivision with 2 from one of the ADO and 3 from other were randomly selected for the purpose of detailed investigation. 10 farm household from each selected villages were selected. Thus, 150 farmers spread over three subdivision and 15 villages formed the basic sample for this study. The distribution of farmers under various categories is given in Tables 1 and 2.

**TABLE 1:**

**DISTRIBUTION OF SAMPLE FARMERS ACCORDING TO SIZE CLASSES OF HOLDING**

| Sl. No. | Subdivision | Selected household | | | | Total Sample |
|---|---|---|---|---|---|---|
| | | Marginal ( below 1 ha) | Small (1 Ha to below 2 Ha) | Medium ( 2 Ha below 3 Ha) | Large ( 3 Ha and above) | |
| 1 | Jorhat | 2 | 16 | 20 | 12 | 50 |
| 2 | Titabor | 0 | 17 | 23 | 10 | 50 |
| 3 | Majuli | 1 | 16 | 24 | 9 | 50 |
| | Total | 3 ( 2.00) | 49 (32.67) | 67 (44.67) | 31 (20.67) | 150 (100.000 |

**TABLE 2:**

**DISTRIBUTION OF RESPONDENTS ACCORDING TO EDUCATIONAL STANDARD FOR DIFFERENT SIZE GROUPS**

| Sl.No. | Size groups | Respondent | Illiterate | Upto primary level | Upto high school level | Literate Upto PU/ HS level | Graduate above | Total |
|---|---|---|---|---|---|---|---|---|
| 1 | Marginal | 3 (2.00) | 1 (0.67) | 1 (0.67) | 1 (0.67) | 0 (0.00) | 0 (0.00) | 2 (1.33) |
| 2 | Small | 49 (32.67) | 18 (12.00) | 5 (3.33) | 14 (9.33) | 11 (7.33) | 1 (0.67) | 31 (20.67) |
| 3 | Medium | 67 (44.67) | 32 (21.33) | 6 (4.00) | 13 (8.67) | 14 (9.33) | 2 (1.33) | 35 (23.33) |
| 4 | Large | 31 (20.67) | 11 (7.33) | 2 (1.33) | 7 (4.67) | 8 (5.33) | 3 (2.00) | 20 (13.33) |
| | Total | 150 (100.00) | 62 (41.33) | 14 (9.33) | 33 (22.00) | 35 (23.33) | 6 (4.00) | 88 (58.67) |

The data collection was done by personal interview method. As the farmers of Jorhat district are not so technically sound about the pesticides, opportunities were provided to them to furnish information after referring the pesticide packets which were used ( if available) as well as through joint discussion and consensus with other family members, which also served as a crosschecking mechanism.

The collected data were tabulated, analyzed and interpreted in the light of the specific objective of the present study.

**Results**

**Fungicide usage by farmer**

**(i) Technical Product wise fungicide usage by farmer**

There are several brands (formulations) of pesticides for the same technical product. For example, the Technical product Endosulfan is available with different brand (formulation) names as Endocel, Thioden etc, from different manufacturers. So, in the present study, an attempt has been made to find out the various products used by the farmer in paddy.

As farmer are not literate enough to name the technical component of the brand they have used, so, only brand( formulation) name was obtained from the farmer and from these formulation names, the technical components are found out by consulting the experts. Technical product wise fungicide usage by farmer for paddy is presented in table 3. A perusal of the table shows that there are very less number of fungicide users in paddy. Only 39 percent of the total sample uses fungicides in their paddy crop. 16 percent of the growers opted for Mancozeb, 9.33 percent have used Cu- Oxychloride and only 6.67 percent have gone for Ediphenphos.

**TABLE 3:**

**TECHNICAL PRODUCT WISE FUNGICIDE USAGE IN PADDY BY DIFFERENT CATEGORIES OF FARMERS**

| Sl. No. | Product | Number of farmer | | | | | Rank |
|---|---|---|---|---|---|---|---|
| | | Marginal | Small | Medium | Large | Total | |
| 1 | Ediphenphos | 0 (0.00) | 1 (0.67) | 4 (2.67) | 5 (3.33) | 10 (6.67) | II |
| 2 | Mancozeb | 0 (0.00) | 0 (0.00) | 8 (5.33) | 16 (10.67) | 24 (16) | I |
| 3 | Cu-Oxychloride | 0 (0.00) | 0 (0.00) | 8 (5.33) | 6 (4.00) | 14 (9.33) | III |
| 4 | Carbendazim | 0 (0.00) | 0 (0.00) | 10 (6.67) | 2 (1.33) | 12 (8.00) | IV |
| 5 | Non Users | 3 (2.00) | 48 (32.00) | 38 (25.30) | 2 (1.33) | 91 (60.67) | |
| Total Respondent | | 3 (2.00) | 49 (32.67) | 67 (44.67) | 31 (20.67) | 150 (100) | |

Figures in parenthesis indicate percent to total respondents (paddy growers)

**(ii) Brand( formulation) wise fungicide usage by farmer**

Brand wise pesticide usage by farmer in paddy is presented in table 4. It is apparent from the table that as many as 8 fungicide brands have been used by rice growers. Indofil M 45 has topped the list with a user of 15.33 percent. Hinosan 50 EC with a user of 6.67 percent is second on the list.

**TABLE 4:**

**BRAND WISE FUNGICIDE USAGE IN PADDY BY DIFFERENT CATEGORIES OF FARMERS**

| Sl. No. | Product | Number of farmer | | | | | Rank |
|---|---|---|---|---|---|---|---|
| | | Marginal | Small | Medium | Large | Total | |
| 1 | Hinosan 50 EC | 0 (0.00) | 1 (0.67) | 4 (2.67) | 5 (3.33) | 10 (6.67) | II |
| 2 | Dithane M-45 | 0 (0.00) | 0 (0.00) | 0 (0.00) | 1 (0.67) | 1 (0.67) | VIII |
| 3 | Blitox 50 | 0 (0.00) | 0 (0.00) | 3 (2.00) | 0 (0.00) | 3 (2.00) | VI |
| 4 | Fytolan | 0 (0.00) | 0 (0.00) | 2 (1.33) | 1 (0.67) | 3 (2.00) | VI |
| 5 | Derosal | 0 (0.00) | 0 (0.00) | 5 (3.33) | 0 (0.00) | 5 (3.33) | V |
| 6 | Trust | 0 (0.00) | 0 (0.00) | 3 (2.0) | 5 (3.33) | 8 (5.33) | III |
| 7 | Indofil M 45 | 0 (0.00) | 0 (0.00) | 8 (5.33) | 15 (10.00) | 23 (15.33) | I |
| 8 | Bavistin | 0 (0.00) | 0 (0.00) | 5 (3.33) | 2 (1.33) | 7 (4.67) | IV |
| 9 | Non User | 3 (2.00) | 48 (32.00) | 38 (25.30) | 2 (1.33) | 91 (60.67) | |
| Total Respondent | | 3 (2.0) | 49 (32.67) | 67 (44.67) | 31 (20.67) | 150 (100) | |

Figures in parenthesis indicate percent to total respondents (paddy growers)

**(iii) Company wise fungicide usage by farmer**

Though it is clear from earlier findings and discussions of this paper that majority of farmers purchased products based on its brand (formulation) name and not on the basis of company name. But to see the overall position of the various companies in the market, it is very important to know that how many farmers have used the pesticides of a single company. So based on the responses of the farmers regarding brands they used, the number of user for various companies has been found out. The table 5 depicts that as many as 7 company's fungicides were use by respondent paddy growers during the study period. Indofil Chemicals Co. is far above its rivals with 15.33 percent paddy growers used its products. The second spot was hold by Bayer Crop Science (I) Ltd. whose products were used by 10.00 percent of paddy growers.

**TABLE 5: COMPANY WISE FUNGICIDE USAGE IN PADDY BY DIFFERENT CATEGORIES OF FARMERS**

| Sl. No. | Company Name | Number of farmer | | | | | Rank |
|---|---|---|---|---|---|---|---|
| | | Marginal | Small | Medium | Large | Total | |
| 1 | Bayer Crop Science( I) Ltd. | 0 (0.00) | 1 (0.67) | 9 (6.00) | 5 (3.33) | 15 (10.00) | II |
| 2 | De Nocil | 0 (0.00) | 0 (0.00) | 0 (0.00) | 1 (6.67) | 1 (0.67) | VII |
| 3 | Rallis India Ltd | 0 (0.00) | 0 (0.00) | 3 (2.00) | 0 (0.00) | 3 (2.00) | V |
| 4 | BASF India Ltd. | 0 (0.00) | 0 (0.00) | 5 (3.33) | 2 (1.33) | 7 (4.67) | IV |
| 5 | Syngenta Crop Protection | 0 (0.00) | 0 (0.00) | 2 (1.33) | 1 (0.67) | 3 (2.00) | V |
| 6 | Krishi Rasayan | 0 (0.00) | 0 (0.00) | 3 (2.00) | 5 (3.33) | 8 (5.33) | III |
| 7 | Indofil Chemicals Co. | 0 (0.00) | 0 (0.00) | 8 (5.33) | 15 (10.00) | 23 (15.33) | I |
| 8 | Non user | 3 2.00 | 48 (32.00) | 38 (25.30) | 2 (1.33) | 91 (60.67) | |
| Total Respondent | | 3 (2.00) | 49 (32.67) | 67 (44.67) | 31 (20.67) | 150 (100) | |

Figures in parenthesis indicate percent to total respondents (paddy growers)

**Brand Image**

Consumers vary as to which product attribute they see most relevant and the importance they attach to each attribute. They will pay most attention to attributes that deliver the sought benefits. The consumer develops a set of brand beliefs about where each product stands on each attribute. The set of beliefs about a brand make up the brand image. The consumer's brand image will vary with his experiences.

Today most buyers consider several attributes in their purchase decision. So, to arrive at the attitude formed by consumers towards the brands have used, first 5 attributes where short listed and weight attached by each farmer to these attributes was found out. Now, to find the farmers perceived value for the brand they have used, their weight was multiplied by their belief about the attributes of brands. The results are presented in Table 6. Dithane M- 45 of De Nocil topped the list which has the highest average

perceived value of 3.73. With an average perceived value at 3.63, Indofil M 45 of Indofil Chemicals Co. was at number two position.

**TABLE 6: FARMERS PERCEIVED VALUE ABOUT VARIOUS FUNGICIDE BRANDS**

| Sl.No | Brand | Company | Total score on different attributes | | | | | | Rank |
|---|---|---|---|---|---|---|---|---|---|
| | | | Price | Quality | Popularity | Packaging | Technical guidance | Total | |
| 1 | Hinosan 50 EC | Bayer Crop Science( I) Ltd. | 3.50 (0.35) | 15.50 (1.55) | 4.00 (0.40) | 6.30 (0.63) | 1.50 (0.15) | 30.8 (3.08) | VI |
| 2 | Dithane M- 45 | De Nocil | 37.90 (0.72) | 87.40 (1.65) | 33.0 (0.62) | 28.50 (0.54) | 10.80 (0.20) | 197.60 (3.73) | I |
| 3 | Blitox 50 | Rallis India Ltd | 4.70 (0.67) | 8.50 (1.21) | 5.30 (0.78) | 2.40 (0.34) | 1.10 (0.16) | 22.00 (3.14) | V |
| 4 | Fytolan | Syngenta Crop Protection | 2.30 (0.77) | 3.40 (1.13) | 1.50 (0.50) | 1.30 (0.43) | 0.30 (0.1) | 8.80 (2.93) | VIII |
| 5 | Derosal | Bayer Crop Science( I) Ltd. | 3.30 (0.66) | 5.70 (1.14) | 3.80 (0.76) | 2.00 (0.4) | 0.60 (0.12) | 15.40 (3.08) | VI |
| 6 | Trust | Krishi Rasayan | 6.00 (0.75) | 10.50 (1.31) | 2.60 (0.33) | 4.90 (0.61) | 1.50 (0.19) | 25.50 (3.19) | IV |
| 7 | Indofil M 45 | Indofil Chemicals Co. | 14.40 (0.63) | 34.50 (1.50) | 21.00 (0.91) | 10.50 (0.46) | 3.00 (0.13) | 83.40 (3.63) | II |
| 8 | Bavistin | BASF India Ltd. | 3.80 (0.54) | 9.60 (1.37) | 6.60 (0.94) | 3.10 (0.44) | 0.90 (0.13) | 24.00 (3.43) | III |

**Conclusion and Discussion**

The farmer is much more educated and aware today. The emerging trends reveal that they are becoming progressively knowledgeable and therefore ask for greater assured performance from product and companies. Moreover, the increasing competitions in the agrochemical industry have made the farmers (customers) more empowered. All these have necessitated a change in the marketing approach of the growth conscious companies.

The study has shown that there is reasonable demand for seed, fertilizer and pesticides in the Jorhat market. To supply these agri- inputs a number of retail agents came up. At present there are 22 retail agents for seed, 289 for fertilizer and 246 for pesticide in the study area. Knowing the opportunity, a number of agrochemical companies have entered the Jorhat market.

Since paddy is the principle crop of this region both in terms of area and number of families it support, the study was limited to paddy growers only. There are several brands (formulation) of pesticide for the same technical product. In terms of technical product, 16 percent of the growers opted for Mancozeb, 9.33 percent have used Cu-Oxychloride and only 6.67 percent have gone for Ediphenphos. In terms of brands, Indofil M 45 has topped the list with a user of 15.33 percent. Hinosan 50 EC with a user of

6.67 percent is second on the list. As many as 7 company's fungicides were use by respondent paddy growers during the study period. Indofil Chemicals Co. is far above its rivals with 15.33 percent paddy growers used its products. The second spot was hold by Bayer Crop Science (I) Ltd. whose products were used by 10.00 percent of paddy growers. Brand image study reveals that Dithane M- 45 of De Nocil topped the list which has the highest average perceived value of 3.73. With an average perceived value at 3.63, Indofil M 45 of Indofil Chemicals Co. was at number two position.

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# Factoring Services in India: A Comparative Study of SBI Global Factors and Canbank Factors

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**Abstract**

The main function of a factor is to purchase invoice or receivables and provide finance against the same. However, some other services are also performed by the factoring companies like collection of receivables purchased, administration of sales ledger, advisory services etc. The present attempts to study and compare the factoring products and services of SBI Global Factors and Canbank Factors. It was found that as far as products are concerned SBI Global Factors has well diversified product portfolio as compared to Canbank Factors. But on the other side the industry wise exposure of Canbank Factors is much better than of SBI Global Factors. However, the performance of all the products of SBI Global Factors has shown a diminishing trend by the end period of study but the invoice discounting of Canbank Factors has shown improved performance in the same period.

**Key Words:** *Factor, invoice, factoring, services, receivables.*

**Introduction:**

The factoring is a receivable management's tool for realizing the funds against invoice which are tied in credit to customers and solve the problem of delays and defaults in collection. It is a continuous relationship between a financial institution called Factor and a business concern which is engaged in selling goods and providing services to a trade customer on open account basis. The factor purchases the receivables of the business concern and controls and administers the receivables of the seller. The main function of a factor is to purchase invoice or receivables and provide finance against the same. However, some other services are also performed by the factoring companies like collection of receivables purchased, administration of sales ledger, advisory services etc. The factor collects the debts factored from the debtor of the seller of invoice. In this way the Factor relieve the seller from the botheration of the collection and he can concentrated on other activities of the business and can save time, effort and cost. In the other words the factor provides with better credit control management. In a factoring arrangement the factor takes the full responsibility for maintaining the sales ledger of the each client differently. The seller prepared two copies of the invoice one being sent to the customer and other is presented to the Factor after the sales transaction occurred. Transactions

entries are made in the ledger on an open ended method by the Factor which shows outstanding on a particular date. The factor updates the sales ledger time to time and sends the periodic reports of the outstanding to the clients. On the fixed date of maturity the retention amount of the invoice is paid to the client and the debtor is discharged from the debt by the Factor only. The risk of default of the customer is borne by the factor and provides protection to the clients against bad debts and relieves him from the responsibility of collection of the debts. The factor helps the client to adopt the better credit control policy by assessing the creditworthiness of the customer through the information from annual reports, bank reports, credit ratings, analysis through ratios. In case of default the entire loss is borne by the factor and customer has to face the legal action from the hands of factor. The Factor possesses experienced and trained staff which has better knowledge in the financial matters and can extend their help to assess the creditworthiness of the customer. Further, the Factor can give other advisory services like suggestions to change marketing polices in view of competitors, adopting better procedures for invoicing, delivery and sales return, help the client to raise loan from other financial institutions.

**Types of Factoring Services**

There are various types of factoring but one can hardly find any factoring firm where all types of products are provided under one roof. The factoring services vary from country to country according to the codified laws but some of the services are uniform all over the world. In advance factoring arrangement the debt against the invoice is paid in advance up to 70-90 per cent of the amount of the receivables. Rest of the amount is paid after collection from the buyer of the firm on the due date. Sometimes Bank also joined the agreement for rest of the 50 per cent amount after advance. The factor charges the discount rate and the interest which is determined according to the creditworthiness of the buyer. But in maturity factoring no advance at the time of sale has been paid and the whole amount is paid on date of maturity or after the collection of debts due to buyer. Under limited factoring the factor discounts only the selected bills and finance provide only up to the limited bills only, that why it is known as limited factoring. In Selected Buyer Based factoring the factor selects the buyer or the debtor on the basis of checking the creditworthiness of the customer. Instead of seller the buyer approaches the Factor to get the bills receivable discounted drawn in the favour of the seller from the Factor. The Factor made payment without recourse to the seller against the invoices. Under Selected Seller Based factoring the seller presents all the invoices and challans drawn on the customer after transaction take place to the Factor. The factor provides finance against the invoice to the approved sellers.

The Conventional or full factoring is known as Old Line Factoring. Under this arrangement, the factor performs almost all the services of collection of receivables, sales ledger administration, credit control, risk protection and advisory services. Along with this factor also provide services like maturity wise collection of receivables, maintenance of accounts, advances granting of limits to a limited discounting of invoices on a selective basis. This is popular in only advanced countries and India for this type of factoring is on beginning footing. In the disclosed factoring the name of the factor is mentioned in the invoice and the debtor or the customer is instructed by the seller to pay the factor on the due date. The factor will assume risk up to certain limit as a non recourse and the rest will be bear by the seller. In undisclosed factoring the name of the factor will not be mentioned in the invoice but the factor will provide all the services like maintenance of the sales ledger, provides short term finance against invoice and the entire transaction takes place in the name of the seller. Domestic factoring is same as export factoring except

one thing i.e. parties to the factoring agreement. Since in domestic factoring there are three parties viz. seller, buyer and the factor but in Export factoring there are four parties viz. the seller, the buyer, the Export factor, the Import Factor. Import factor facilitates the language barriers and provide easiness in other legal formalities. So there are two contracts under one arrangement of factoring one between the exporter and the export factor and second between the import factor and the export factor. The import Factor acts as a link between the export factor and the importer. The import factor takes the responsibility to collect the receivables, credit risk and transfer the debts collected to the export Factor. In recourse factoring the Factor does not assumes the credit risk. It means that if the debts turn to be bad debts at time of maturity the loss will be bear by the seller firm not by the Factor. The Factor charges fees for maintaining the sales ledger and for collection of the debts. But in non recourse factoring arrangement the Factors takes the full responsibility of the debts and in case of default the loss will be bear by the Factor. Hence in non recourse factoring the seller firm is not liable for the payment of debts but in recourse factoring seller suffer the loss of non payment. So, in non recourse the fees charged will be higher than the recourse factoring as the Factor is assuming the credit risk in full. These factoring types are commonly used by the Indian factoring companies in one or other form. Along with these types some other forms of factoring prevalent throughout the world are Full Factoring, Agency Factoring, Bulk Factoring, Direct Factoring System, Back to Back Factoring.

**Objectives of the paper:**

The main objectives of the paper are:

1. To study the products and services of SBI Global Factors.
2. To analyze the products and services provided by Canbank Factors.
3. To compare the factoring products of SBI Global Factors and Canbank Factors.

**Sources of Data and Methodology**

The present study is based on secondary data covering a period of six years from 2005-06 to 2010-11. The data has been taken from the annual reports and booklets of Canbank Factors and SBI Global Factors, and from the websites of selected institutions. The data collected has been tabulated and analyzed by using the annual growth rates, mean, compound growth rates, co-efficient of variation.

**SBI Global Factors Limited**

The SBI Global Factors Limited (SBIGFL) was formerly Global Trade Finance Limited (GTF) a joint venture of Export Import Bank of India, West LB, Germany and International Finance Corporation, Washington. Global Trade Finance Ltd. commenced its operations from September 2001. In March 2008, State Bank of India purchased the equity stake of Exim Bank, FIM Bank, Malta, and IFC, Washington and acquired 92.08 per cent stake in the Global Trade Finance. SBI Factors and Commercial Services Private Limited, a subsidiary of State Bank of India promoted by SBI and its associates jointly with SIDBI and Union Bank of India in February 1991 was merged with Global Trade Finance Limited as per the order passed by the High Court, Mumbai on 15/01/2010.The merged Company was renamed as SBI Global Factors Ltd. with effect from 23/03/2010. In amalgamated company SBIGFL, State Bank of India holds 85.39 per cent stake and remaining 14.61 per cent is held by SIDBI, Bank of Maharashtra and Union Bank of India. The SBIGFL is headquartered in Mumbai with six regional offices - one each in New Delhi, Bangalore, Chennai, Hyderabad, Ahmedabad and Kolkata. Most of the SBI Global Factors clients belong to Chemicals, Fertilizers Plastic, Polypropylene, Packaging, Metal

Containers, Extruded Parts, Auto Ancillaries Trade and Services. Small Scale Sector Enterprises comprises 62 per cent of total business of SBIGFL.

**Canbank Factors Limited**

Canbank Factors Limited is a subsidiary of Canara bank, a leading public sector bank. The Canbank Factors was incorporated in the year 1991, with Small Industries Development Bank of India (SIDBI) and Andhra Bank as co-promoters. As a Non-Banking Financial Company, the Company is governed by the Regulatory Norms of Reserve Bank of India. It is one of the leading factoring companies in India with a Factored Turnover of Rs.3998.38 crore in 2011. Currently market share of the company is around 18 per cent in Indian market. Initially, it was also a member of Factor Chain International but due to discontinuation of its product Export Factoring it has been removed from the FCI membership from last two years. Presently, it has 11 branches all over India. Canbank Factors has a well diversified client base and has its business exposure in 26 sectors.

**Services of SBI Global Factors**

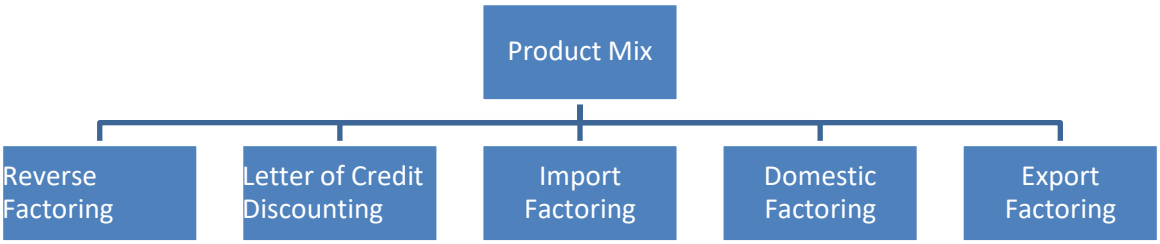
The SBIGFL provides mainly following services to its clients.

1. **Finance:** SBIGFL provides finance which is very flexible and directly linked to the client's sales. Finance is made available up to 95 per cent of the invoice value.
2. **Credit Protection**: SBIGFL provides credit protection against payment default of buyer. In the event of a claim on account of default, the payment to the seller is simple without any elaborate procedures.
3. **Collection Service**: SBIGFL assumes full responsibility for collecting the receivables under the factoring agreement. It has an effective correspondent network in more than 80 countries for following up the receivables and tracking the same on an invoice to invoice basis.
4. **Professional Sales Ledger Management and Analysis:** SBIGFL manage the complete sales ledger maintenance for its clients. It is the first Indian company to start "SBIGFL Client Access" module which provides web access to its clients for accessing their accounts online.
5. **Advisory Services**: The Factor possesses experienced and trained staff which has better knowledge in the financial matters and can extend their help to assess the creditworthiness of the customer.

**Products Mix of SBI Global Factors**

The following chart 2 shows the various products of SBIGFL. The SBIGFL provides five types of products namely: Letter of Credit Discounting, Reverse Factoring, Channel Financing, Import Factoring and Domestic Factoring.

**Chart 2: Product Mix of SBI Global Factors**




**Reverse Factoring or Purchase Bill Discounting:**

Reverse factoring is the discounting of suppliers' bills in respect of the client's regular purchases from them. SBIGFL assesses and considers only regular suppliers of the client having a relationship of minimum 6 months whom have to be pre approved by SBIGFL. The main features of the products are:

- Financing the supplier by prepaying up to 100 per cent of the invoice value/ Bill value
- Credit of up to 120 days

The table 1 shows the year wise growth of Reverse Factoring by SBIGFL.

**Table 1: Reverse Factoring by SBI Global Factors**

| **Year** | **Amount** (Rs. in Crore) | **Percentage Change** |
|---|---|---|
| 2009-10 | 397 | NA |
| 2010-11 | 237 | -40.30 |
| **MEAN** | **317** | |
| **C.V** | **35.69** | |
| **CAGR** | **-22.74** | |

The table 1 depicts that the value of Reverse Factoring remained at Rs. 317 crore during the period 2009-10 to 2010-11.The sales volume of the Reverse Factoring decreased from Rs. 397 crore in the year 2009-10 to Rs. 237 crore in the year 2010-11 registering a negative growth of 22.74 per cent during the period of 2008-09 to 2010-11 and the coefficient of variation was 35.69 per cent during the same period. It has been seen from the above data that Reverse Factoring was started lately in the year 2009-10 and showed downward trend at the end of the study.

**Letter of Credit Discounting:**

SBI Global Factors Ltd. under this facility discounts the acceptable Letter of credit of the prime banks. SBIGFL offers this facility in combination with its basic factoring facility. The main features of the products are:

- Financing the seller up to 100 per cent of LC Value
- Maintenance of accounts relating to accounts receivables (A/R)

The table 2 depicts the year wise growth of LC Discounting by SBIGFL.

**Table 2: Letter of Credit Discounting by SBI Global Factors**

| Year | **Amount** (Rs. in Crore) | Percentage Change |
|---|---|---|
| 2009-10 | 803 | NA |
| 2010-11 | 528 | -34.26 |
| **MEAN** | **665.5** | |
| **C.V** | **29.21** | |
| **CAGR** | **-18.91** | |

The table 2 shows the amount of LC discounting by SBI Global Factors. LC Discounting like reverse factoring introduced lately and stared with good chunk of sales volume. The value of LC Discounting remained at Rs. 665.5 crore during the period of 2009-10 to 2010-11. It decreased from Rs. 803 crore in the year 2009-10 to Rs.528 crore in the year 2010-11 registering a negative growth rate of 18.91 per cent during the period of 2009-10 to 2010-11 and the coefficient of variation was 29.21 per cent during the period. It has been spotted from the above that like reverse factoring LC Discounting caught good amount of sales in starting year but turned to be negative in annual growth in next year.

**Import Factoring/ International Factoring**

Import factoring is a financial service that enables to purchase goods from overseas supplier on short term credit of up to 180 days on open account terms without the need for opening a letter of credit (LC). An importer will receive credit from overseas suppliers without incurring any additional cost charged to a factor like SBIGFL. The primary obligation would be to make payment to the Factor on the due date.As Import Factoring covers imports up to 180 days, generally import of raw materials and intermediates can be covered. The main features of the products are:

- Financing the seller by prepaying up to 90 per cent of the invoice value/ Bill value
- Collection of receivables
- Maintenance of accounts relating to accounts receivables (A/R)
- LC's are not required

The table 3 depicts the year wise growth of Import Factoring by SBIGFL.

**Table 3: Import Factoring by SBI Global Factors**

| Year | **Amount** (Rs. in Crore) | Percentage Change |
|---|---|---|
| 2005-06 | 1.80 | 1.8 |
| 2006-07 | 172.4 | 9477.77 |
| 2007-08 | 425 | 146.51 |
| 2008-09 | 435 | 2.35 |
| 2009-10 | 10 | -97.70 |
| 2010-11 | 9 | -10 |
| **MEAN** | **175.53** | |
| **C.V** | **118.09** | |
| **CAGR** | **30.77** | |

The table 3 shows that the value of Import Factoring remained at Rs. 175.53 crore during the period of 2005-06 to 2010-11. The amount of Import Factoring by SBI Global Factors increased from Rs.1.80 crore in the year 2005-06 to Rs. 9 crore in the year 2010-11 registering a growth rate of 30.77 per cent during the period. The sales of Import Factoring showed a great variation( CV= 118.09) as it increased in the year 2007-08 to Rs. 425 crore and the amount was Rs. 435 crore in the year 2008-09 followed by decline in the year 2009-10 and 2010-11. Thus, the amount of Import Factoring remained fluctuating during the period of study.

**Domestic Factoring**

In domestic factoring invoices are raised on open account sale of goods which are assigned to SBIGFL for financing, collection, and sales ledger administration. The main features of the products are:

- Financing the seller by prepaying up to 90 per cent of the invoice value/ Bill value
- Protection against default in payment by the buyer by arranging for insurance cover (optional)
- Collection of receivables
- Maintenance of accounts relating to accounts receivables.

The table 4 presents the year wise growth of Domestic Factoring by SBIGFL.

**Table 4: Domestic Factoring by SBI Global Factors**

| Year | **Amount** ( Rs. in Crore) | Percentage Change |
|---|---|---|
| 2005-06 | 2287.0 | 43.67 |
| 2006-07 | 5157.8 | 125.52 |
| 2007-08 | 9201.0 | 78.39 |
| 2008-09 | 10,232 | 11.20 |
| 2009-10 | 1840 | -82.01 |
| 2010-11 | 1388 | -24.56 |
| **MEAN** | **5017.63** | |
| **C.V** | **77.14** | |
| **CAGR** | **-7.99** | |

The table 4 demonstrates that value of Domestic Factoring remained at Rs.5017.63 crore during the period of 2005-06 to 2010-11. The amount of Domestic Factoring by SBI Global Factors decreased from Rs. 2287 crore in the year 2005-06 to Rs. 1388 crore in the year 2010-11 registering a negative growth of 7.99 per cent during the period. It grew to Rs. 10,232 crore in the year 2008-09 with annual growth of 11.20 per cent against the previous year. The coefficient of variation was high (77.14 %) during the period of study.

**Export Factoring**

In Export Factoring, the export factor SBIGFL appoints an import factor who provides credit protection limits for a particular importer and upon such approval only the export factor provides financial assistance to the Indian exporter. There is no requirement of letter of credit and credit insurance under this category. The exporter signs an export agreement with the export factor and the export factor Canbank Factors enters into an agreement with the correspondent import factor in the country where the goods are to be sold. The import factor investigates the credit standing of the buyer and fixes the exposure limits. The exporter ships the goods and sends the documents to SBIGFL for factoring. The factoring company allows prepayment of 80 per cent and assigned

receivables to the import factor. On the due date rest of the amount is collected. The year wise growth of Export Factoring by the SBIGFL is shown in the table 5.

**Table 5: Export Factoring by SBI Global Factors**

| Year | **Amount** (Rs. in Crore) | Percentage Change |
|---|---|---|
| 2005-06 | 516.9 | -19.63 |
| 2006-07 | 883.7 | 71.25 |
| 2007-0 | 1498 | 69.51 |
| 2008-09 | 1637 | 9.27 |
| 2009-10 | 229 | -86.01 |
| 2010-11 | 235 | 2.62 |
| **MEAN** | **833.26** | |
| **C.V** | **74.24** | |
| **CAGR** | **-12.31** | |

The table 5 depicts that the value of Export Factoring remained at Rs. 833.26 crore during the period of 2005-06 to 2010-11. The amount of Export Factoring by SBIGFL decreased from Rs. 516.9 crore in the year 2005-06 to Rs. 235 crore in the year 2010-11 recording a negative growth of 12.31 per cent during the period. It registered annual growth 71.25 per cent in the year 2007-08 and it grew negatively (86.01 %) in the year 2009-10. The coefficient of variation was higher at 74.24 per cent during the same period. It has been revealed from the above data that the SBI Global Factors faced swings in the sales of export factoring during the study period.

**Services of Canbank Factors**

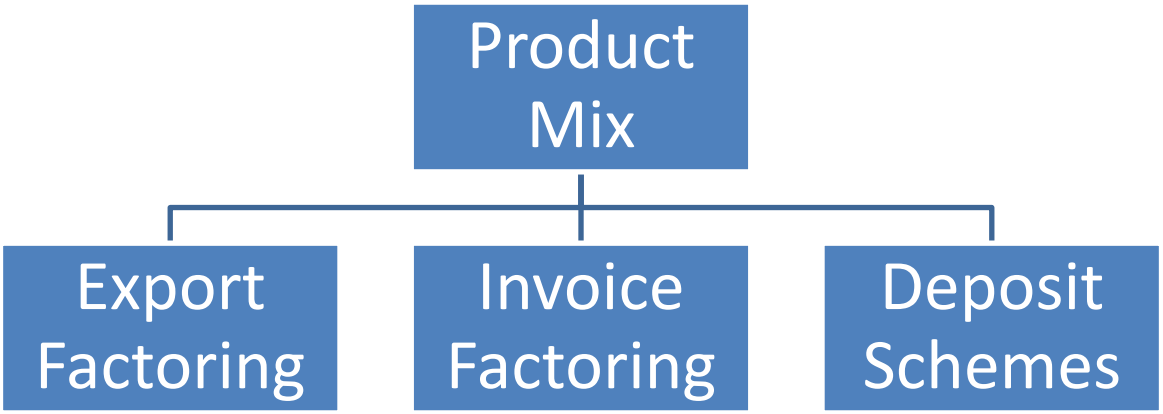
The Canbank Factors provides mainly following services to its clients.

- Management of sales-ledger through computerized system and provide the information periodically.
- Follow up with customers and collect the debts.
- Provide credit / market information relating to clients business etc.
- Provide advisory services to access the creditworthiness of customer.

**Product Mix of Canbank Factors**

The Canbank Factors provides three products in its product mix namely: Export Factoring, Invoice Factoring and Deposit Schemes. The chart 4 shows the various products of Canbank Factors.

**Chart 4 Product Mix of Canbank Factors**



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In Export Factoring, the export factor Canbank Factors appoints an import factor who provides credit protection limits for a particular importer and upon such approval only the export factor provides financial assistance to the Indian exporter. There is no requirement of letter of credit and credit insurance under this category. The exporter signs an export agreement with the export factor and the export factor Canbank Factors enters into an agreement with the correspondent import factor in the country where the goods are to be sold. The import factor investigates the credit standing of the buyer and fixes the exposure limits. The exporter ships the goods and sends the documents to Canbank Factors for factoring. Canbank Factors allow prepayment of 80 per cent and assigned receivables to the import factor. On the due date rest of the amount is collected. The chart 5 exhibits the process of Export Factoring. The year wise growth of Export Factoring by the Canbank Factors is shown in the table 7.

**Chart 5 Process of Export Factoring**

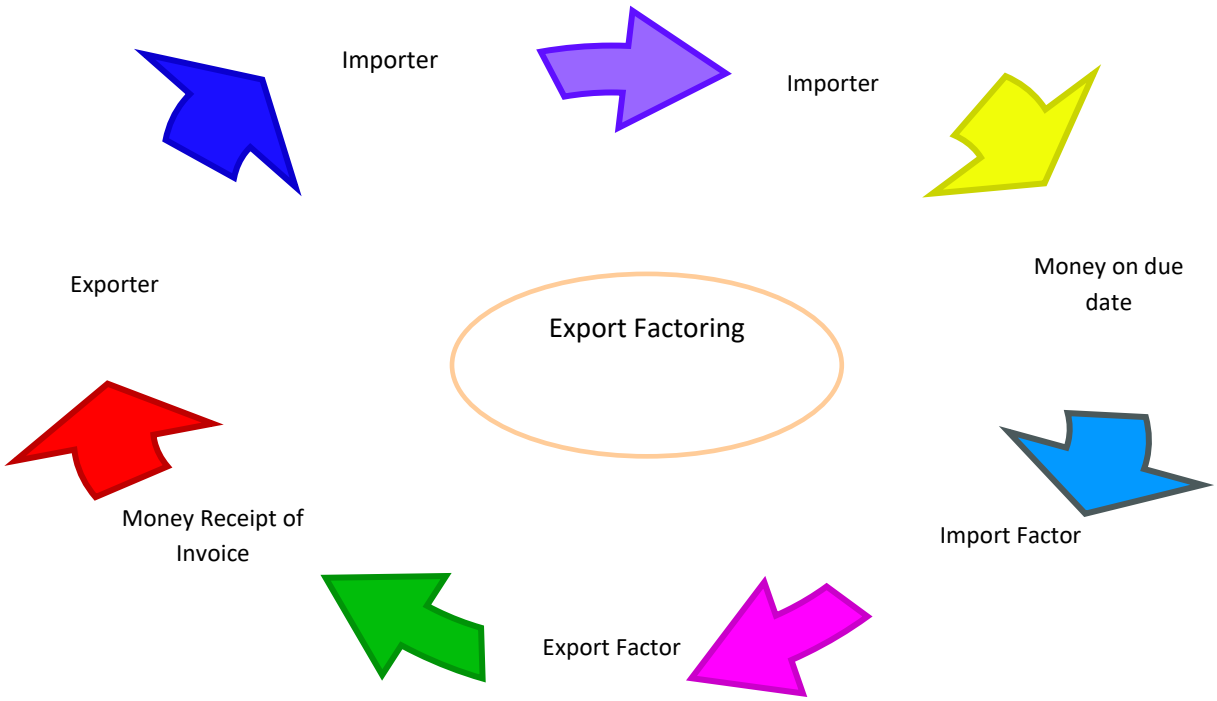


**Table 7: Export Factoring by Canbank Factors**

| Year | Amount (Rs. in Crore) | Percentage Change |
|---|---|---|
| 2005-06 | 18.90 | -57.68 |
| 2006-07 | 19.95 | 5.55 |
| 2007-08 | 30.10 | 50.87 |
| 2008-09 | 13.90 | -53.82 |
| **MEAN** | **20.71** | |
| **C.V.** | **32.78** | |
| **CAGR** | **-7.39** | |

The table 7 shows that the value of export factoring remained at Rs. 20.71 crore during the period of 2005-06 to 2008-09. The amount of export factoring in Canbank Factors decreased from Rs. 18.90 crore in the year 2005-06 to Rs. 13.90 crore in the year 2008-09

recording a negative growth rate of 7.39 per cent during the said period. It showed the highest annual growth of 50.87 per cent in the year 2007-08. The coefficient of variation was 32.7 per cent during the period. After that in 2009-10 this product was discontinued and removed from the product portfolio of Canbank Factors.

**Invoice Discounting**

The Canbank Factors has launched the product Invoice Discounting for those sellers who may not be in the position to get the finance based on their financials and for other reasons. The exposure limit under this category is fixed on the buyer who either executes undertaking cum identity or Articles of Agreement or Accepted Hundies drawn by the supplier. Discounting of invoices backed by LC is also being done under this product. The year wise growth of Invoice Discounting by Canbank Factors is presented in the table 8.

**Table 8: Invoice Discounting by Canbank Factors**

| Year | **Amount** (Rs. in Crore) | Percentage Change |
|---|---|---|
| 2005-06 | 927.83 | 44.03 |
| 2006-07 | 1228.39 | 32.39 |
| 2007-08 | 843.76 | -31.31 |
| 2008-09 | 187.63 | -77.76 |
| 2009-10 | 349.64 | 86.34 |
| 2010-11 | 613.45 | 75.45 |
| **MEAN** | **691.78** | |
| **C.V** | **55.76** | |
| **CAGR** | **-6.66** | |

The table 8 reveals that the value of Invoice Discounting remained at Rs. 691.78 crore during the period of 2005-06 to 2010-11. The amount of Invoice Discounting by Canbank Factors decreased from Rs. 927.83 crore in 2005-06 to Rs. 613.45 crore registered a negative growth rate of 6.66 per cent during the period. The growth rate was least (-77.76%) in the year 2008-09 the coefficient of variation was high (55.76%) during the period. Thus, the amount of Invoice Discounting remained fluctuating during the period of study.

**Deposit Schemes**

The Canbank Factors has fixed a cumulative deposit schemes for various tenures offering attractive interest rates. The table 9 shows the Deposit Schemes by Canbank Factors.

**Table 9: Deposit Schemes by Canbank Factors**

| Year | **Amount** (Rs. in thousand) | Percentage Change |
|---|---|---|
| 2005-06 | 19.82 | 5.98 |
| 2006-07 | 22.06 | 11.30 |
| 2007-08 | 22.40 | 1.54 |
| 2008-09 | 23.58 | 5.26 |
| 2009-10 | 23.58 | 0 |
| 2010-11 | 32.02 | 35.79 |
| **MEAN** | **23.91** | |
| **C.V** | **17.56** | |
| **CAGR** | **8.32** | |

The table 9 reveals that the value remained at Rs. 23.91 thousand during the period of 2005-06 to 2010-11. The amount of deposit schemes by Canbank Factors increased from Rs. 19.82 thousand in the year 2005-06 to Rs. 32.02 thousand recording growth rate of 8.32 per cent during the period. The annual growth rate was highest (11.30 %) in the year 2006-07 and nil in the year 2009-10. The coefficient of variation for the deposit schemes by Canbank Factors varied by 17.56 per cent during the period. Thus, it is revealed from the table that the product deposit scheme was growing throughout the period of study.

**Conclusions**

The analysis of the products and services offered by both the companies revealed that the product mix of the SBIGFL is broader as compared to that of Canbank Factors and Canbank Factors has discontinued Export Factoring where as SBIGFL provide Export Factoring, although the amount of Export Factoring has shown a declining trend during the study period. Ithas been concluded that as far as products are concerned SBI Global Factors has well diversified product portfolio as compared to Canbank Factors. But on the other side the industry wise exposure of Canbank Factors is much better than of SBI Global Factors. The Canbank Factors has fixed share capital and SBI Global Factors has flexible capital structure. Both the companies promised to launch more and more branches. However, SBI Global Factors has comparatively more branches than Canbank Factors. Product portfolio of Canbank Factors is shrinking as it discontinued import factoring and left only with invoice discounting, whereas SBI Global Factors has five well saleable products in the portfolio. However, the performance of all the products of SBI Global Factors has shown a diminishing trend by the end period of study but the invoice discounting of Canbank Factors has shown improved performance in the same period. It is suggested thatboth the institutions need to expand their branch network in various parts of the country,and also to broaden the product portfolios on the lines of factoring companies in the other countries. Further, the Canbank Factors should make effort to provide more options like Reverse factoring, LC discounting, domestic factoring to the potential and existing customers in line with SBI Global Factors and the SBIGFL need to wider its industry wise exposure to include different types of industries in its portfolio.

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