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THE EFFECTS OF THE STOCKS PERFORMANCE RELATIVE TO THE INDEX PERFORMANCE, ON TRADERS' BEHAVIOR IN NYSE

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ABSTRACT

This study investigates the correlation of the relative status of a stock in respect to the whole market, i.e. whether a stock has under or outperformed the index in a period of time. Indeed we have proposed a model which considers the relative performance of each stock as a signal to buy or sell the stock. The model parameters have been computed for components of 3 indexes: S&P100, Dow Jones Industrial Average, and PHLX gold/silver sector. Historical data ranges as far as available in our database until June 2011. We observe that, most of the time, this correlation is negative and there is a negative feedback in trading behavior of traders. Next we investigate the effect of considering volume of trading in each day on this correlation, by using volume weighted least square method. We observe that the correlation is more notable when we consider volume of trading. Also we investigate the asymmetry of traders' behavior in response to positive relative status _good news_ and negative relative status_ Bad news. The result shows that the negative feedback in traders' behavior is weaker when a stock has underperformed the whole market i.e. has a negative relative status. Also we categorize the stocks in each index into different categories according to their capital markets and other characteristics, and then we investigate the correlation and asymmetry factor for each category.

KEYWORDS

index performance, GARCH model, trader behavior.

I- INTRODUCTION

There is a large amount of research about investigating the behavior of traders in financial markets. One of the key important issues in this field is how individual traders choose strategies for trading¹. How do they decide which stock to buy or sell? Various strategies result from using different source of information to answer this question.

Two major strategies are discussed in this context, Positive feedback trading and Negative feedback trading or contrarian trading, which both look into the past performance of the stocks. The former includes those investors who sell losing stocks and buy winning stocks in the past. The later includes those who act the opposite way, i.e. buy the losing stocks and sell the winning ones. Ron Kaniel [1] reports that individuals tend to buy stocks after they fall, and sell stocks after they rise in price. He explains that contrarian investors act as liquidity providers for immediate needs of institutions. Institutions' needs to liquidity lead them to bid higher and ask lower than the actual price, which results in contrarians traders' profit. Griffin [2] investigates the relation between return and trading behavior of individual and institutions for components of NASDAQ and reports that stocks which have performed well in short past are more likely to be bought by institutional and sold by individuals. T. Odean [3] studies traders' tendency to sell winning stocks and buy losing ones. M.Barber hypothesize that many investors only consider buying stocks which attracts their attention. In other words they buy stocks which seem "hot" in the market.

Goetzmann and M.Massa [3] investigates individual accounts of index mutual funds to examine the trading behavior of individuals; specifically it's relation to stocks returns. He report that more frequent traders are negative-feedback investors and less frequent traders are positives-feedback ones. He also notes that the behavior of positive-feedback is more correlated to the changes of S&P500 than the behavior of negative feedback traders is. Barberis, Shleifer and Vishny (1998), Daniel, Hirshleifer and Subrahmanyam (1998) and Hong and Stein (1999) each proposed models of investors' behavior which may lead to both contrarian and momentum trading, and affects the asset prices. Hirshleifer, Subrahmanyam, and Titman (1994), and Grossman (1995) respectively claim information asymmetry and incomplete markets as a reason of traders' tendency to have portfolios which are conditional on the past performance of the stocks.

¹ 1-,Yan-Leung Cheunga, Yin-Wong Cheungb, , Angela W.W. Hec, and Alan T.K. Wand, (2010), Feng Wang, Keren Dong and Xiaotie Deng(2010), ,Richard D.F. Harrisa, Fatih Yilmazb(2009),Sheng-Tun Lia, b, and Shu-Ching Kuob,(2008),Anna Obizhaeva and Jiang Wang_(2006),Chris Brooks, Alistair G. Rew, Stuart Ritson(2001) ,Pen-Yang Liao; Jiah-Shing Chen(2001), Peter Lakner*(1998), John.Macconnel & Gray C sanger(1984)

Our work lays in the literature of past performance conditional strategies. But unlike most studies, we have proposed a model which considers the relative performance of each stock as a signal to buy or sell. Our approach is more close to Goetzmann in the sense that we use index performance and compare it with stocks' performance as a status indicator. We have studied the whole effects of institutional and individual traders on the asset price. So in our first phase of research_ this paper _we have not distinguished institutional traders and individual traders.

Put it in a nutshell, if an stock return with comparison to a reference time is more (less) than the corresponding value for the index, we can say that the stock has out(under)performed the index .i.e. average of the whole market. In other words we expect that the return of the stock is modified with J_{-} the relative states factor_ times relative status with respect to a reference time, i.e. $(\frac{S_t}{S_0} - \frac{I_t}{I_0})$. Details about the computation of J and the model, is presented in section II. We expect negative J, so the overall trading of the market stabilizes the price. Although there are evidence of positive J in some cases, but the average value of J for all the stocks considered is negative.

Another issue worth considering is the asymmetric response of traders to "relative status of a stock" with respect to the market. In other words we expect that people response asymmetrically to good news and bad news. Thomas C. Chiang, Cathy W.S. Chen, Mike K.P(2007) study this behavior and find that negative news have stronger (negative) effect on stock returns than good news, which have (positive) effect on returns. Harrison Hong, Terence Lim, and Jeremy C. Stein (1999) claims that analyst coverage is more pronounced for past loser stocks than past winner ones. We have considered this issue in our study by adding the term $\lambda I(\frac{S_t}{S_0} - \frac{I_t}{I_0})$ in our model, which I is the indicator function, λ is called the asymmetric response factor. The sign of the λ shows which response is more significant, when a stock has outperformed or when it has underperformed the market. The evidence shows that λ is negative which shows traders response to negative relative status with respect to market is more significant than positive relative status.

There are several important factors which affects relative status factor, J. Volume of trading is one of them. The effects of volume of trading on asset price have been studied exclusively. Jiang Wang (1994) studies the relation between trading volume and price dynamics. Andrew W. Lo and Jiang Wang (2001) try to develop an economic model of asset prices and volume. Thierry Ané¹ and Loredana Ureche-Rangau (2008) examine the relation between trading volume and returns volatility. Considering the studied effect of trading volume on asset price, we have computed J with two approaches. In first approach we compute J as regression factor of daily return on the relative status, $(\frac{S_t}{S_0} - \frac{I_t}{I_0})$, and in the second approach we use a volume weighted least square method to put more emphasize on days which have higher volume of trading. The rationale behind this is that we expect the price of the stock in such days be more reliable and informative than the other days, so we should give more weight to them.

The other parameter is the characteristics of the stock itself, such as capital market representing the size of the company. We have computed J and λ for different size of companies, the results of which are shown in section IV. The rationale for categorizing companies into small, medium and large ones according to their capital market is explained as follows. There is another phenomenon related to our study called herding behavior of investors, which is that individuals and institutions disregard their private information, and herd in buying or selling. Herding is defined as a group of investors following each other into (or out of) the same securities over the same period of time. In this case the source of information is how the other investors behave. This behavior has the potential to occur among institutions as well as individuals. We expected that herding among the investors will strengthen the effect we study, resulting in increase of J. As far as we know, so far the strongest herding observed -for individual or institutional investors- is for small companies². So we expected that small companies will have higher J. and this expectation motivated us into this categorization of assets and computing our model parameters _J and λ _ for each category. The result of this categorization is presented in section IV.

The paper structure is as follows, section II describe the model. Section III describes the methodology and data used. Section IV is dedicated to data analysis. Section V concludes the paper and suggests further research.

II- MODEL

A- **The Symmetric Model** We begin with the conventional model for the dynamics of asset price which is

$$dS_t = \mu S_t dt + \sigma S_t dB_t \tag{1}$$

Where dB_t is $N(0, \sqrt{dt})$. As mentioned before we define relative status of the stock with respect to the whole market as $(\frac{S_t}{S_0} - \frac{I_t}{I_0})$, and expect that J - the relative status factor- times relative status modify Equ (1). We impose this modification by adding the term $J(\frac{S_t}{S_0} - \frac{I_t}{I_0})$ to the drift term of Equ (1). Note than the sign of J has a key role in our analysis about which we have more to discuss in section IV. So we have

$$\frac{dS_t}{S_t} = (\mu + J(\frac{S_t}{S_0} - \frac{I_t}{I_0}))dt + \sigma dB_t \tag{2}$$

The question is how we can estimate model parameters specially J form available data. First we define $Y_t = \ln(S_t)$ and use Ito's formula to rewrite Equ (2) in the following form

$$dY_t = (\mu - \frac{1}{2}\sigma^2 + J(\frac{S_t}{S_0} - \frac{I_t}{I_0}))dt + \sigma dB_t \tag{3}$$

Now, transforming Equ (3) into discrete time results in

$$dY_t = Y_{t+1} - Y_t = (\mu - \frac{1}{2}\sigma^2 + J(\frac{S_t}{S_0} - \frac{I_t}{I_0})) + \sigma \epsilon_t \tag{4}$$

Where we have assumed $\epsilon_t = dB_t$ is $N(0, \sqrt{dt})$ and $dt = 1$.

Now we can compute J by regressing daily return, i.e. $dY_t = Y_{t+1} - Y_t = \ln(\frac{S_{t+1}}{S_t})$ on relative status, i.e. $(\frac{S_t}{S_0} - \frac{I_t}{I_0})$.

B- **The Asymmetric Model** Now we modify Equ (4) in order to capture the asymmetric feature of traders' response to positive (negative) relative status. In other words we expect that traders will respond to relative state of a stock price differently, depending on whether it has performed above the index (a hot stock) or under the index (not a hot stock).

This effect is somehow similar to asymmetric GARCH models³ in which we assume that if the real return of a stock is lower than the expected one then traders will respond to this bad news in a more sever way than when the real return of a stock is higher than the expected return (good news), which in both cases traders respond will result in higher volatility of the return in the future, based on GARCH models. Here we have a similar situation, but not exactly the same one, because in this case traders will respond to the stock relative status with respect to the whole market .i.e. the sign of relative status, $(\frac{S_t}{S_0} - \frac{I_t}{I_0})$, not to the "changes" of the stock price per se. So we can modify Equ (4) in the following form

$$dY_t = Y_{t+1} - Y_t = (\mu - \frac{1}{2}\sigma^2 + J(\frac{S_t}{S_0} - \frac{I_t}{I_0}) - \lambda I_{\frac{S_t}{S_0} - \frac{I_t}{I_0}}) + \sigma \epsilon_t \tag{5}$$

Where I_x is the indicator function whose output is 1 for negative x and zero for positive x, And λ is the asymmetry factor.

We have used Maximum-likelihood method to estimate λ . as mentioned earlier $\epsilon_t = dB_t$ is $N(0,1)$ and we make the conventional assumption that ϵ_t s are independent so we could easily write their joint PDF as

$$f(\epsilon_1, \epsilon_2, \epsilon_3, \dots, \epsilon_N) = \prod_{i=1}^N \frac{1}{\sqrt{2\pi}} e^{-\frac{1}{2}\epsilon_i^2} \tag{6}$$

² Josef Lakonishok, Andrei Shleifer, Robert W. Vishny -1991 found some evidence of institutional herding-although small evidence- in smaller stocks but no evidence in large stocks _RUSS WERMERS -1999-[], analyzing the trading activity of the mutual fund industry from 1975 through,1994 reported much higher level of herding in trades of small stocks and in trading by growth-oriented funds.

³ LAWRENCE R. GLOSTEN, RAVI JAGANNATHAN, and DAVID E. RUNKLE*-On the Relation between the Expected Value and the Volatility of the Nominal Excess Return on Stocks- THE JOURNAL OF FINANCE v VOL. XLVIII, NO. 5 v DECEMBER 1993

On the other hand, we could write Equ (5) explicitly for ϵ_t _Equ (7)_, and using available data we could estimate the value of ϵ_i for $1 \leq i \leq N$, where N is the size of the window of data which we are considering for estimating the parameters of the model.

$$\epsilon_t = \frac{-1}{\sigma} \left(\left(\mu - \frac{1}{2} \sigma^2 + J \left(\frac{S_t}{S_0} - \frac{I_t}{I_0} \right) - \lambda J \frac{I_t - I_0}{S_0 I_0} \right) - Y_{t+1} + Y_t \right) \tag{7}$$

Finally Maximum likelihood method gives us an estimation of the parameters as follows

$$(\lambda, \mu, \sigma, J) = \arg \max_{\lambda, \mu, \sigma, J} f(\epsilon_1, \epsilon_2, \epsilon_3, \dots, \epsilon_N) = \arg \max_{\lambda, \mu, \sigma, J} \prod_{i=1}^N \frac{1}{\sqrt{2\pi}} e^{-\frac{1}{2}\epsilon_i^2} \tag{8}$$

And ϵ_i are obtained using Equ (7).

III- METHODOLOGY AND DATA

We have gathered historical data of the components of 3 indexes, S&P100, Dow Jones Industrial Average, and PHLX gold/silver sector. The data has been provided by Commodity Systems, Inc. (CSI), Morningstar, Inc., and Thomson Financial Network data bases. The information about key statistics of the company was provided by Capital IQ. We have summarized these data in tables 16 to 18, in Appendix Data.

We have categorized the stocks in terms of capital size into 3 categories, Large, Medium, and Small. This categorization is relative according to the largest and smallest company of components of each index. The results are shown in appendix. Also we have categorized them in terms of industrial sectors which are also shown in appendix.

We have computed parameters of our models i.e. J and Lambda using windows of length 5 and 21 and 60 and 125 and 250 days corresponding to working days of one week, Month, Quarter, Half year and one year. We have moved these windows on the data and get a series of J parameter for each length of window and for each stock. The statistical characteristics- Average, Max, Min, and Standard Deviation of these series are presented and analyzed in section IV. We have done the same procedure for computing Volume Weighted J – which has been explained in section II- and the results are presented in section IV.

IV- DATA ANALYSIS

As mentioned earlier we have chosen 3 indexes for our study i.e. S&P100 index, Dow Jones Industrial Average Index and PHLX Gold/Silver Sector. We tried to consider 3 distinguishable collection of asset both in terms of the size of the collection and the industry. Also we expect the asset prices in PHLX Gold/Silver Sector_ which is smaller than the other two_ to have much stronger correlation with their corresponding index. Computed simple J and Volume weighted J and Lambda, using methodology described in section III, for different horizon of time and for each collection are presented in tables 1 to 9.

1. **Simple J** There are several interesting points about the analyzed data presented in tables 1 to 3. First we see that for each collection the absolute value of the average of J has negative correlation with length of time horizon. As in the tables 1 to 3, the average of absolute value of J is decreasing form around 0.7 for weekly periods to around 0.02 for annual periods. Of course this observation is consistent with our prior expectation. As mentioned in section II ,there is a reference time in our model for computing J. as we get far from the reference time, which corresponds to having a long time horizon, we expect that the value $\ln\left(\frac{S_{t+1}}{S_t}\right)$ and $\left(\frac{S_t}{S_0} - \frac{I_t}{I_0}\right)$ lose their dependence and become independent. Therefore it is reasonable to focus on shorter time horizons, weekly and monthly.

The reduction of absolute value of maximum and minimum J, second and third row of tables 1 to 3, can also be explained by the effect of time horizon. On the other hand, as we move further from the reference time the uncertainty about the independence of $\ln\left(\frac{S_{t+1}}{S_t}\right)$ and $\left(\frac{S_t}{S_0} - \frac{I_t}{I_0}\right)$ decreases, so we expect that the standard deviation of J for long horizons be less than that of short horizons. The fact which is observed in tables below.

The stock having higher average value of weekly J in each collection is also presented in tables 1 to 3. HNZ and WAG respectively have the maximum and minimum weekly J in S&P100. JNJ and T respectively have the maximum and minimum weekly J in Dow Jones Industrial Average. SSRI and GG respectively have the maximum and minimum weekly J in PHLX Gold/Silver Sector.

Table 1-Simple J for S&P100

S&P100 Index	J-Week	J-Month	J-Quarter	J-Half Year	J-Year
Average	-0.6805	-0.2242	-0.0876	-0.0498	-0.0254
M	-0.3873,17	-0.1362,48	-0.0525,50	-0.0262,24	-0.0102,24
M	-0.9424,30	-0.3278,69	-0.1464,41	-0.0874,41	-0.0599,41
Std	1.1985	0.2075	0.0802	0.0466	0.0247
Ms	0.8664,20	0.15,42	0.06,62	0.0306,34	0.0146,17
Ms	2.2304,74	0.2854,61	0.1229,27	0.0786,28	0.0611,28

Table 2-Simple J for Dow Jones

DOW_JONES	J-Week	J-Month	J-Quarter	J-Half Year	J-Year
Average	-0.6755	-0.2184	-0.0868	-0.0489	-0.0241
M	-0.39,17	-0.0143,17	-0.059,17	-0.0301,15	-0.0137,15
M	-0.8347,10	-0.3276,10	-0.1411,10	-0.0832,10	-0.0459,10
Std	1.2907	0.2188	0.0863	0.0496	0.0252
Ms	1.048,14	0.18,17	0.0597,17	0.0345,28	0.0162,4
Ms	1.7654,29	0.2897,10	0.1443,10	0.0862,10	0.0473,10

Table 3-Simple J for Gold

GOLD_INDEX	J-Week	J-Month	J-Quarter	J-Half Year	J-Year
Average	-0.7083	-0.2513	-0.1033	-0.0629	-0.0352
M	-0.3905,1	-0.1587,12	-0.067,6	-0.0311,6	-0.0159,6
M	-1.0309,15	-0.3349,4	-0.1492,11	-0.0927,11	-0.063,1
Std	1.7876	0.3042	0.1133	0.0656	0.0375
Ms	1.3895,16	0.2308,6	0.0843,9	0.0377,6	0.0184,6
Ms	2.4257,8	0.4015,4	0.1475,1	0.1084,1	0.0749,1

2. **Volume Weighted J** Now we look for the effect of considering Volume in computing J. volume weighted J values are reported in tables 4 to 6. Comparing data in tables 1 to 3 and tables below shows that when we weigh our data by the trading volume of each day, we get a higher absolute value of J, which means that the negative feedback observed by negativity of J, is more pronounced when we consider volume of trading. This of course is not surprising. Since for a behavioral phenomenon like herding, to be investigated properly it is better to look into highly traded days which have more reliable information about the phenomenon.

Table 4-Volume Weighted J for S&P100

S&p100 Index	VWJ-Week	VWJ-Month	VWJ-Quarter	VWJ-Half Year	VWJ-Year
Average	-0.6974	-0.26	-0.1144	-0.0696	-0.038
M	-0.392,17	-0.169,50	-0.0576,50	-0.0267,50	-0.0088,50
m	-0.9797,30	-0.3745,41	-0.1881,41	-0.1131,41	-0.0756,41
Std	1.2916	0.2586	0.1205	0.0745	0.0431
ms	0.9109,27	0.1962,80	0.0855,47	0.047,4	0.0206,4
Ms	2.263, 74	0.365,56	0.3696,30	0.1619,22	0.0715,28

Table 5-Volume Weighted J for Dow Jones

DOW_JONES	VWJ-Week	VWJ-Month	VWJ-Quarter	VWJ-Half Year	VWJ-Year
Average	-0.7116	-0.2558	-0.1068	-0.0627	-0.0323
M	-0.4061,17	-0.1804,17	-0.0655,15	-0.0311,15	-0.0123,15
m	-0.8557,10	-0.3482,10	-0.1513,10	-0.09,10	-0.0507,10
Std	1.4404	0.273	0.1177	0.0731	0.0392
ms	1.1201,14	0.2149,23	0.0775,23	0.0481,28	0.023,23
Ms	2.749,29	0.3815,11	0.1829,10	0.1246,29	0.0739,29

Table 6-Volume Weighted J for Gold

GOLD_INDEX	VWJ-Week	VWJ-Month	VWJ-Quarter	VWJ-Half Year	VWJ-Year
Average	-0.7241	-0.2912	-0.1412	-0.0915	-0.0558
M	-0.4008,1	-0.1427,8	-0.0861,6	-0.041,6	-0.02,3
m	-1.0624,13	-0.3873,11	-0.1936,11	-0.1332,8	-0.0911,8
Std	1.9882	0.6119	0.1573	0.0981	0.0627
ms	1.4827,14	0.2837,6	0.1119,6	0.0531,6	0.0319,4
Ms	3.2793,12	4.2458,8	0.2334,8	0.178,8	0.1264,8

3. **Lambda** The result of computing lambda for weekly, monthly, quarterly, semiannually, and annually periods, for each collection of assets is shown in tables 7 to 9. As we see the average value of lambda is negative. Using equation (5) and the fact that J is negative most of the times, negative lambda means that the return of an asset underperforming the index is modified by a negative value; $-\lambda J \frac{I_t - I_0}{I_0}$. our explanation for this result is that investors show stronger response to bad news than good news. In other word, good news have stronger effect on the trading behavior of investors than bad news therefore an outperforming asset (good news) returns to its initial status faster by negative feedback role of J_ than an underperforming assets (bad news) returns. This is consistent with Thomas C. Chiang, Cathy W.S. Chen, Mike K.P.] study which was mentioned in Introduction section, and Mark.Grinblatt, Sheridan Titman, and Russ Wermers [1995] who find that “77 percent of the mutual funds were “momentum investors,” buying stocks that were past winners; however, most did not systematically sell past losers.”

The absolute value of lambda increases by length of the time horizon for S&P100 index. But for the other two collections no specific pattern is recognized. Of course since the value of Lambda is multiplied by J (which has a value smaller than one) in modifying term $-\lambda J \frac{I_t - I_0}{I_0}$ a difference of order 0.1 is not so reliable.

Therefore the sign of the Lambda is more important to us than its value which we discussed about.

Table 7-Lambda for S&P100

S&p100 Index	Lambda-Week	Lambda-Month	Lambda-Quarter	Lambda-Half Year	Lambda-Year
Average	-2.825	-3.7467	-4.244	-4.3491	-4.3699
M	1.8414,19	0.552,63	0.2236,36	-0.2122,55	-1.3145, 41
m	-7.6116,29	-8.9043,30	-9.8142,5	-11.9308,58	-7.1851,71

Table 8-Lambda for Dow Jones

Dow Jones Index	Lambda-Week	Lambda-Month	Lambda-Quarter	Lambda-Half Year	Lambda-Year
Average	-2.6235	-3.4074	-4.0986	-3.9543	-3.8477
M	-1.3978,15	-1.5161,26	0.1025,7	-1.6215,6	-0.1354,29
m	-5.4549,14	-4.8389,3	-7.975,14	-6.6362,29	-6.3023,22

Table 9-Lambda for Gold

GOLD Index	Lambda-Week	Lambda-Month	Lambda-Quarter	Lambda-Half Year	Lambda-Year
Average	-4.2754	-5.9797	-5.6292	-4.9995	-5.5037
M	-2.725,11	-3.1645,12	-3.4778,16	-1.0867,4	-3.5709,4
m	-7.0139,16	-10.2198,16	-7.8939,11	-7.4638,14	-9.2203,14

F and XRX respectively have the maximum and minimum Weekly Lambda in S&P100. MRK and JNJ respectively have the maximum and minimum Weekly Lambda in Dow Jones Industrial Average. KGC and SSRI respectively have the maximum and minimum Weekly Lambda in PHLX Gold/Silver Sector.

4. **Simple J, Volume Weighted J and Lambda for different industries** In order to compare values for J, Volume Weighted J and Lambda for different industries we have categorized the assets of S&P100 into different industries and computed the corresponding values for them separately⁴. The result is shown in tables below.

⁴ That is because PHLX mostly consists of stocks in Basic Material industry, and Dow Jones consists of only 30 stocks which make it unreasonable to have such categorization for these indexes.

Table 10-Simple J for different industry sectors in S&P100

S&P100 INDEX					
	J-Week	J-Month	J-Quarter	J-Half Year	J-Year
Basic Materials:					
Average	-0.7084	-0.2256	-0.0914	-0.0523	-0.0263
M	-0.6249,2	-0.197,9	-0.0785,8	-0.0423,8	-0.0168,8
M	-0.7681,3	-0.2726,4	-0.114,4	-0.0686,4	-0.0407,4
Std	1.0389	0.1948	0.0774	0.047	0.0259
Consumer Goods:					
Average	-0.563	-0.1961	-0.0791	-0.046	-0.0236
M	-0.3966,9	-0.1362,9	-0.0567,8	-0.0262,3	-0.0102,3
M	-0.7885,11	-0.2756,5	-0.1173,5	-0.0672,5	-0.0321,13
Std	1.1364	0.184	0.0799	0.0467	0.0242
Financial:					
Average	-0.7757	-0.2553	-0.1037	-0.0601	-0.0329
M	-0.6228,4	-0.1965,4	-0.0787,4	-0.0463,4	-0.0225,2
M	-0.9424,5	-0.3261,7	-0.1464,7	-0.0874,7	-0.0599,7
Std	1.214	0.2271	0.0943	0.0529	0.0307
HealthCare:					
Average	-0.647	-0.2075	-0.0775	-0.0429	-0.0207
M	-0.5219,4	-0.1538,5	-0.0525,5	-0.027,5	-0.0114,5
M	-0.7078,6	-0.2408,6	-0.0893,6	-0.0517,4	-0.027,4
Std	1.1894	0.2014	0.0428	0.0428	0.0205
Industrial Goods:					
Average	-0.6242	-0.236	-0.0984	-0.0573	-0.0302
M	-0.5519,1	-0.1989,5	-0.0794,5	-0.0456,2	-0.0229,3
M	-0.7825,4	-0.2908,4	-0.1226,4	-0.0749,1	-0.0424,1
Std	1.1771	0.2097	0.05	0.05	0.0276
Services:					
Average	-0.6982	-0.2239	-0.0858	-0.0489	-0.0251
M	-0.4594,3	-0.1608,3	-0.0683,1	-0.0359,1	-0.0168,1
M	-0.7866,13	-0.2555,13	-0.1105,6	-0.0717,6	-0.0384,7
Std	1.2824	0.2115	0.0452	0.0452	0.0235
Technologies:					
Average	-0.735	-0.2297	-0.0826	-0.0447	-0.0212
M	-0.5675,1	-0.1758,3	-0.0645,1	-0.0321,11	-0.0147,1
M	-0.8339,8	-0.2814,12	-0.0986,12	-0.0560,2	-0.0298,2
Std	1.2632	0.2142	0.0428	0.0428	0.0222
Utilities:					
Average	-0.4897	-0.1771	-0.0691	-0.0391	-0.0171
M	-0.3873,1	-0.154,1	-0.055,2	-0.029,2	-0.0128,2
M	-0.566,4	-0.221,4	-0.0788,4	-0.0453,4	-0.0249,4
Std	1.0377	0.1818	0.0413	0.0413	0.0186
Conglomerates:					
Average	0.8072	-0.2627	-0.0998	-0.0557	-0.0287
M	-0.7578,1	-0.2575,3	-0.0937,2	-0.0523,2	-0.0274,1
M	-0.8739,2	-0.2659,2	-0.1054,1	-0.0589,1	-0.0294,2
Std	1.4746	0.2567	0.0495	0.0495	0.0242

Table 11-Volume Weighted J for different industry sectors in S&P100

S&P100 INDEX					
	VWJ-Week	VWJ-Month	VWJ-Quarter	VWJ-Half Year	VWJ-Year
Basic Materials:					
Average	-0.7245	-0.2571	-0.1136	-0.0687	-0.0359
M	-0.6366,2	-0.213,9	-0.0937,9	-0.0538,8	-0.0235,8
M	-0.7966,1	-0.3149,1	-0.1521,1	-0.0954,1	-0.0513,1
Std	1.1088	0.2358	0.1095	0.0724	0.0406
Consumer Goods:					
Average	-0.58	-0.2317	-0.1061	-0.0658	-0.0367
M	-0.416,9	-0.1750,9	-0.0701,8	-0.0374,3	-0.0131,3
M	-0.8005,11	-0.3149,1	-0.1521,1	-0.0954,1	-0.0513,1
Std	1.2121	0.2474	0.116	0.0685	0.042
Financial:					
Average	-0.7953	-0.294	-0.1326	-0.0844	-0.0487
M	-0.6412,4	-0.2399,4	-0.097,3	-0.0547,2	-0.0281,2
M	-0.9797,5	-0.3745,7	-0.1881,7	-0.1131,7	-0.0756,7
Std	1.3274	0.2737	0.0862	0.0862	0.0484
HealthCare:					
Average	-0.6635	-0.244	-0.1052	-0.0629	-0.0328
M	-0.539,4	-0.169,5	-0.0576,5	-0.0267,5	-0.0088,5
M	-0.7187,6	-0.3098,6	-0.1339,6	-0.0807,4	-0.0484,8
Std	1.2831	0.2514	0.0774	0.0774	0.0431
Industrial Goods:					
Average	-0.6411	-0.2722	-0.1291	-0.0817	-0.0472
M	-0.5666,1	-0.2244,5	-0.1035,5	-0.0689,5	-0.0412,3
M	-0.7903,4	-0.3315,4	-0.1623,4	-0.1037,4	-0.0564,4
Std	1.2868	0.2576	0.0823	0.0823	0.0496
Services:					
Average	-0.7166	-0.2618	-0.1152	-0.0696	-0.0378
M	-0.4861,3	-0.2023,3	-0.0731,1	-0.0376,1	-0.0175,1
M	-0.8094,13	-0.2977,17	-0.162,9	-0.0894,9	-0.0508,3
Std	1.3792	0.2736	0.0737	0.0737	0.0439
Technologies:					
Average	-0.7526	-0.2717	-0.1137	-0.0668	-0.0356
M	-0.5846,1	-0.1927,3	-0.0737,3	-0.0393,1	-0.0158,1
M	-0.8529,6	-0.3238,6	-0.1418,10	-0.0868,10	-0.0500,2
Std	1.3718	0.2607	0.0713	0.0713	0.0420
Utilities:					
Average	-0.4971	-0.2015	-0.0877	-0.0508	-0.0241
M	-0.392,1	-0.1733,1	-0.0709,2	-0.035,2	-0.016,2
M	-0.5688,4	-0.2434,4	-0.0983,3	-0.0603,3	-0.0346,4
Std	1.1127	0.2229	0.0654	0.0654	0.0333
Conglomerates:					
Average	-0.8236	-0.2908	-0.1155	-0.0668	-0.0358
M	-0.7725,1	-0.2849,3	-0.1045,2	-0.0616,2	-0.0333,3
M	-0.893,2	-0.2969,1	-0.1272,1	-0.0747,1	-0.0389,2
Std	1.5565	0.305	0.0743	0.0743	0.0371

Looking table 10, we find that stocks in Financial (-0.7757) and Technology (-0.735) sectors, have the highest value of Weekly J, and stocks in Consumer Goods (-0.4897) and Utilities (-0.563) sectors have the lowest value of Weekly J. this is also the same for Volume Weighted J. The result of Lambda for different industries is reported in table below. As we see Technology (-3.5198) and utilities (-1.8886) sectors respectively keep on to have the highest and lowest value of Weekly Lambda⁵.

⁵ As mentioned in section IV part A , for comparisons we have considered short period (week and Month) of J, VWJ, and Lambda.

Table 12- Lambda for different industry sectors in S&P100

S&P100 INDEX					
	Lambda-Week	Lambda -Month	Lambda -Quarter	Lambda -Half Year	Lambda -Year
Basic Materials:					
Average	-2.2986	-4.0439	-5.0132	-5.4744	-4.2188
M	1.8414,3	-3.0193,10	-1.8091,10	-2.7859,4	-2.8827,5
m	-4.9035,11	-6.2609,6	-9.8142,2	-8.9990,6	-5.6101,6
Consumer Goods:					
Average	-2.4544	-3.224	-3.7524	-3.7958	-4.5668
M	-1.0398,3	-2.1155,4	-2.5496,10	-0.2122,10	-1.9007,13
m	-5.0911,12	-4.3863,11	-5.2357,3	-7.7638,1	-7.0254,11
Financial:					
Average	-3.0311	-4.2615	-4.0726	-4.7716	-4.1096
M	-0.3003,14	-2.7237,4	0.2236,6	-0.7912,7	-1.3145,7
m	-5.2509,5	-8.9043,5	-6.5403,10	-11.9308,9	-6.2526,11
HealthCare:					
Average	-3.0127	-3.2974	-4.1262	-4.1694	-4.4317
M	-1.8397,10	-1.1380,4	-2.7062,4	-2.4093,8	-3.8893,8
m	-5.6620,6	-4.8031,1	-6.6043,6	-6.8718,6	-5.3912,6
Industrial Goods:					
Average	-2.215	-3.6726	-3.1952	-3.958	-4.3031
M	-1.5391,1	-2.6203,4	-2.2198,4	-2.8175,1	-2.0043,1
m	-2.7462,4	-5.0025,5	-4.2835,1	-4.5471,3	-5.5505,4
Services:					
Average	-3.1451	-3.7743	-4.3971	-4.1425	-4.414
M	-1.9527,5	0.5520,12	-2.3369,3	-1.2089,17	-3.0590,8
m	-7.3194,17	-7.7029,17	-7.2986,17	-7.8621,9	-6.4824,17
Technologies:					
Average	-3.5198	-4.3	-5.2327	-4.7713	-4.7574
M	-1.7555,9	-1.2012,1	-2.4258,1	-2.1991,1	-1.7976,7
m	-7.6116,6	-7.2222,14	-7.5550,14	-6.9120,12	-7.1851,13
Utilities:					
Average	-1.8886	-2.9361	-3.498	-4.0895	-3.9511
M	-1.5704,2	-2.6596,1	-2.6942,4	-3.9292,3	-3.2086,4
m	-2.2795,3	-3.5730,4	-3.9757,3	-4.4006,2	-4.8720,1
Conglomerates:					
Average	-2.6697	-3.0140	-2.7250	-3.4613	-4.4441
M	-2.2534,3	-2.4450,1	-1.1154,3	-2.0782,3	-4.1224,3
m	-3.1125,1	-3.5840,3	-3.6116,1	-4.2769,2	-4.6302,2

5. **Simple J, Volume Weighted J and Lambda for Small, Medium and Large Companies** As mentioned earlier one of the important characteristics of a company which affects the trading of investors is its size. So it worth to compute J, Volume Weighted J and Lambda for companies of different size. Therefore we categorized the companies in each collection into different groups of Small, Medium and Large companies⁶. These categorizations are relative, according to the largest and smallest company in each collection. Our measure for a size of company is the value of its capital market. Tables 13 to 15 show the computed J and Volume Weighted J and Lambda for these categories. Although we expected to see higher J for small companies, we do not observe any specific pattern.

Table 13- Simple J for different sizes in S&P100

S&P100 INDEX					
	J-Week	J-Month	J-Quarter	J-Half Year	J-Year
Small Companies					
Average	-0.674	-0.2264	-0.091	-0.0526	-0.0271
M	-0.3873,10	-0.1362,29	-0.055,40	-0.029,40	-0.0128,40
M	-0.9424,15	-0.3278,43	-0.1464,24	-0.0874,24	-0.0599,24
Std	1.1511	0.2026	0.0472	0.0472	0.0256
Medium Companies					
Average	-0.6918	-0.2278	-0.0872	-0.0481	-0.0239
M	-0.4548,6	-0.1608,3	-0.0608,6	-0.0262,6	-0.0102,6
M	-0.8339,11	-0.2756,7	-0.1173,7	-0.0686,8	-0.0407,8
Std	1.2122	0.2223	0.0486	0.0486	0.0257
Large Companies					
Average	-0.6932	-0.212	-0.0752	-0.0411	-0.0204
M	-0.5412,5	-0.1538,11	-0.0525,11	-0.027,11	-0.0114,11
M	-0.8739,14	-0.2702,7	-0.0937,14	-0.0523,14	-0.0294,14
Std	1.3618	0.2299	0.0424	0.0424	0.0203

⁶ This categorization has been done on the components of S&P100, because it consist of reasonable (about 100 stocks) number of stocks, and yield groups of reasonable size of about 30.

Table 14- Volume Weighted J for different sizes in S&P100

S&P100 INDEX					
	VWJ-Week	VWJ-Month	VWJ-Quarter	VWJ-Half Year	VWJ-Year
Small Companies					
Average	-0.691	-0.2644	-0.1199	-0.0743	-0.0409
M	-0.392,10	-0.1733,10	-0.0709,40	-0.035,40	-0.016,40
M	-0.9797,15	-0.3745,24	-0.1881,24	-0.1131,24	-0.0756,24
Std	1.2439	0.2527	0.0781	0.0781	0.045
Medium Companies					
Average	-0.709	-0.2624	-0.1129	-0.066	-0.0349
M	-0.4704,6	-0.2023,3	-0.0771,1	-0.0374,6	-0.0131,6
M	-0.8507,11	-0.3128,12	-0.1418,12	-0.0868,12	-0.0508,3
Std	1.3016	0.2641	0.0678	0.0678	0.0423
Large Companies					
Average	-0.7091	-0.2412	-0.0953	-0.0561	-0.0305
M	-0.5491,5	-0.169,11	-0.0576,11	-0.0267,11	-0.0088,11
M	-0.893,14	-0.3238,7	-0.1332,7	-0.0856,7	-0.0465,7
Std	1.4599	0.2748	0.0685	0.0685	0.0368

Table 15- Lambda for different sizes in S&P100

S&P100 INDEX					
	Lambda-Week	Lambda-Month	Lambda-Quarter	Lambda-Half Year	Lambda-Year
Small Companies					
Average	-2.8384	-3.8203	-4.3614	-4.5153	-4.3015
M	-0.3003,59	0.552,37	0.2236,20	-0.2122,31	-1.3145,24
m	-5.662,35	-8.9043,15	-9.8142,3	-11.9308,34	-7.1851,44
Medium Companies					
Average	-2.5891	-3.5351	-3.8596	-4.131	-4.4536
M	1.8414,4	-1.2012,1	-1.8091,14	-1.2089,16	-3.059,10
m	-7.3194,16	-7.7029,16	-7.2986,16	-6.3515,11	-6.4824,165
Large Companies					
Average	-3.0255	-3.6958	-4.2124	-3.9579	-4.5377
M	-1.7555,12	-2.1155,5	-2.9603,5	-2.1980,5	-1.7976,8
m	-7.6116,7	-7.2222,16	-7.5550,16	-5.3190,16	-7.1200,13

As mentioned earlier the rationale behind this expectation lies in the relationship of herding phenomenon and social influence phenomenon. We expected that herding among the investor will strengthen the effect of social influence, resulting in increase of J. as far as we know, so far the strongest herding observed –for individual or institutional investors- is for small companies. So we expected that this category will have higher J. the explanation for this inconsistency may be that our data includes fewer than required number of samples of stocks. If we consider S&P500 or other larger indexes, it is possible to observe higher J for smaller companies.

V- CONCLUSION AND FURTHER RESEARCH

We investigated the effect of the relative status of a stock with respect to the whole market .i.e. whether an stock has under or outperformed the index in a period of time, by regressing daily return, i.e. $dY_t = Y_{t+1} - Y_t = \ln\left(\frac{S_{t+1}}{S_t}\right)$ on relative status .i.e. $\left(\frac{S_t}{S_0} - \frac{I_t}{I_0}\right)$. We called the regression factor J. we observed that J is negative most of the time, suggesting that there is a negative feedback in trading behavior in traders. Next we investigated the effect of considering volume of trading in each day, by using volume weighted least square method. We observed that the social influence is more notable when we consider volume of trading. The absolute value of J-both simple J and VWJ-decreases as we increase the length of the time horizon, because as we move away from the reference time the dependence of daily return $\ln\left(\frac{S_{t+1}}{S_t}\right)$ and $\left(\frac{S_t}{S_0} - \frac{I_t}{I_0}\right)$ decreases.

Also we investigated the asymmetry of traders' behavior in response of positive relative status _good news_ and negative related status_ Bad news, buy adding a modifying term which contained Lambda. Investigating the sign of Lambda shows that the negative feedback in traders' behavior is weaker when a stock has underperformed the whole market i.e. has a negative relative status. This result is consisting with other studies suggesting that traders respond to bad news stronger than they response to good news.

We also computed J, VWJ and Lambda for different industries whose result was presented. Also trying to verify our expectation that, more herding results in higher absolute value of J, we categorized the stocks into different categories according to their capital markets. Our observation was inconsistent with our expectation. But this may be due to the fact that our collection has included a moderate size of samples of stocks. It would worth if in future studies the relation between herding on a stock and social effect- as defined in this paper- be considered in more exclusive way.

VI- APPENDIX

Table 16-List of Companies in Gold index

No.	Name	Industry Sector	Size
Basic Materials			
1.	ABX	Basic Materials, Gold	L
2.	AEM	Basic Materials, Gold	S
3.	AU	Basic Materials, Gold	M
4.	AUY	Basic Materials, Gold	S
5.	BVN	Basic Materials, Gold	S
6.	FCX	Basic Materials, Cooper	L
7.	GFI	Basic Materials, Gold	S
8.	GG	Basic Materials, Gold	L
9.	GOLD	Basic Materials, Gold	S
10.	HMY	Basic Materials, Gold	S
11.	KGC	Basic Materials, Gold	M
12.	NEM	Basic Materials, Gold	M
13.	PASS	NA	S
14.	RGOLD	Basic Materials, Gold	S
15.	SLW	Basic Materials, Silver	S
16.	SSRI	Basic Materials, Silver	S

Table 17-List of companies in Dow Jones index

No.	Name	Industry Sector	Size
Basic Materials			
1.	AA	Basic Materials, Aluminium	S
2.	CVX	Basic Materials, Major Integrated Oil & Gas	L
3.	XOM	Basic Materials, Major Integrated Oil & Gas	L
Conglomerates			
4.	DD	Conglomerates, Conglomerates	S
5.	GE	Conglomerates, Conglomerates	L
6.	UTX	Conglomerates, Conglomerates	S
Consumer Goods			
7.	KFT	Consumer Goods, Food - Major Diversified	S
8.	KO	Consumer Goods, Beverages - Soft Drinks	M
9.	PG	Consumer Goods, Personal Products	M
Financial			
10.	AXP	Financial, Mortgage Investment	S
11.	BAC	Financial, Regional - Mid-Atlantic Banks	M
12.	JPM	Financial, Money Center Banks	M
13.	TRV	Financial, Property & Casualty Insurance	S
Healthcare			
14.	JNJ	Healthcare, Drug Manufacturers - Major	M
15.	MRK	Healthcare, Drug Manufacturers - Major	M
16.	PFE	Healthcare, Drug Manufacturers - Major	M
Industrial Goods			
17.	BA	Industrial Goods, Aerospace/Defense Products & Services	S
18.	CAT	Industrial Goods, Farm & Construction Machinery	S
19.	MMM	Industrial Goods, Diversified Machinery	S
Services			
20.	DIS	Services, Entertainment - Diversified	S
21.	HD	Services, Home Improvement Stores	S
22.	MCD	Services, Restaurants	S
23.	WMT	Services, Discount, Variety Stores	M
Technology			
24.	CSCO	Technology, Networking & Communication Devices	S
25.	HPQ	Technology, Diversified Computer Systems	S
26.	IBM	Technology, Diversified Computer Systems	L
27.	INTC	Technology, Semiconductor - Broad Line	M
28.	MSFT	Technology, Application Software	L
29.	T	Technology, Telecom Services - Domestic	M
30.	VZ	Technology, Telecom Services - Domestic	M

Table 18-List of companies in S&P100 index

No	Name	Industry Sector	Size
Basic Materials			
1.	BHI	Basic Materials,Oil & Gas Equipment & Services	S
2.	COP	Basic Materials,Major Integrated Oil & Gas	M
3.	CVX	Basic Materials,Major Integrated Oil & Gas	L
4.	DOW	Basic Materials,Chemicals - Major Diversified	S
5.	FCX	Basic Materials,Copper	S
6.	HAL	Basic Materials,Oil & Gas Equipment & Services	S
7.	MON	Basic Materials,Agricultural Chemicals	S
8.	NOV	Basic Materials,Oil & Gas Equipment & Services	S
9.	OXY	Basic Materials,Independent Oil & Gas	M
10.	SLB	Basic Materials,Oil & Gas Equipment & Services	M
11.	WMB	Basic Materials,Oil & Gas Pipelines	S
12.	XOM	Basic Materials,Major Integrated Oil & Gas	L
Conglomerates			
13.	DD	Conglomerates,Conglomerates	S
14.	GE	Conglomerates,Conglomerates	L
15.	UTX	Conglomerates,Conglomerates	M
Consumer			
16.	AVP	Consumer Goods,Personal Products	S
17.	CL	Consumer Goods,Personal Products	S
18.	CPB	Consumer Goods,Processed & Packaged Goods	S
19.	F	Consumer Goods,Auto Manufacturers - Major	S
20.	HNZ	Consumer Goods,Food - Major Diversified	S
21.	KFT	Consumer Goods,Food - Major Diversified	S
22.	KO	Consumer Goods,Beverages - Soft Drinks	L
23.	MO	Consumer Goods,Cigarettes	S
24.	NKE	Consumer Goods,Textile - Apparel Footwear & Accessories	S
25.	PEP	Consumer Goods,Beverages - Soft Drinks	M
26.	PG	Consumer Goods,Personal Products	L
27.	PM	Consumer Goods,Cigarettes	M
28.	SLE	Consumer Goods,Processed & Packaged Goods	S
29.	XRX	Consumer Goods,Business Equipment	S
Financial			
30.	ALL	Financial,Property & Casualty Insurance	S
31.	AXP	Financial,Mortgage Investment	S
32.	BK	Financial,Asset Management	S
33.	C	Financial,Money Center Banks	M
34.	COF	Financial,Credit Services	S
35.	GS	Financial,Diversified Investments	S
36.	JPM	Financial,Money Center Banks	L
37.	MET	Financial,Life Insurance	S
38.	MS	Financial,Investment Brokerage - National	S
39.	NYX	Financial,Diversified Investments	S
40.	RF	Financial,Regional - Southeast Banks	S
41.	USB	Financial,Regional - Midwest Banks	S
42.	WFC	Financial,Money Center Banks	L
43.	WY	Financial,REIT - Industrial	S
Healthcare			
44.	ABT	Healthcare,Drug Manufacturers - Major	M
45.	AMGN	Healthcare,Biotechnology	S
46.	BAX	Healthcare,Medical Instruments & Supplies	S
47.	BMY	Healthcare,Drug Manufacturers - Major	S
48.	GILD	Healthcare,Biotechnology	S
49.	JNJ	Healthcare,Drug Manufacturers - Major	L
50.	MDT	Healthcare,Medical Appliances & Equipment	S
51.	MRK	Healthcare,Drug Manufacturers - Major	M
52.	PFE	Healthcare,Drug Manufacturers - Major	L
53.	UHN	Healthcare,Health Care Plans	S
Industrial Goods			
54.	GD	Industrial Goods,Aerospace/Defense Products & Services	S
55.	HON	Industrial Goods,Aerospace/Defense Products & Services	S
56.	LMT	Industrial Goods,Aerospace/Defense Products & Services	S
57.	MMM	Industrial Goods,Diversified Machinery	S
58.	RTN	Industrial Goods,Aerospace/Defense - Major Diversified	S
Services			
59.	AMZN	Services,Catalog & Mail Order Houses	M
60.	CMCSA	Services,CATV Systems	S
61.	COST	Services,Discount, Variety Stores	S
62.	CVS	Services,Drug Stores	S
63.	DIS	Services,Entertainment - Diversified	M
64.	FDX	Services,Air Delivery & Freight Services	S
65.	HD	Services,Home Improvement Stores	S
66.	LOW	Services,Home Improvement Stores	S
67.	MA	Services,Business Services	S
68.	MCD	Services,Restaurants	M
69.	NSC	Services,Railroads	S
70.	NYWX	Services,Entertainment - Diversified	S
71.	TGT	Services,Discount, Variety Stores	S

72.	TWX	Services,Entertainment - Diversified	S
73.	UPS	Services,Air Delivery & Freight Services	M
74.	WAG	Services,Drug Stores	S
75.	WMT	Services,Discount, Variety Stores	L
Technology			
76.	AAPL	Technology,Personal Computers	L
77.	DELL	Technology,Personal Computers	S
78.	EMC	Technology,Data Storage Devices	S
79.	GOOG	Technology,Internet Information Providers	L
80.	HPQ	Technology,Diversified Computer Systems	M
81.	IBM	Technology,Diversified Computer Systems	L
82.	INTC	Technology,Semiconductor - Broad Line	M
83.	MSFT	Technology,Application Software	L
84.	ORCL	Technology,Application Software	L
85.	QCOM	Technology,Communication Equipment	M
86.	S	Technology,Wireless Communications	S
87.	T	Technology,Telecom Services - Domestic	L
88.	TXN	Technology,Semiconductor - Broad Line	S
89.	VZ	Technology,Telecom Services - Domestic	M
Utilities			
90.	AEP	Utilities,Electric Utilities	S
91.	ETR	Utilities,Electric Utilities	S
92.	EXC	Utilities,Diversified Utilities	S
93.	SO	Utilities,Electric Utilities	S

VII- REFERENCES

- Chris Brooks, Alistair G. Rew, Stuart Ritson, "A trading strategy based on the lead-lag relationship between the spot index and futures contract for the FTSE 100" _ International Journal of Forecasting 17 (2001) 31-44
- Anna Obizhaeva and Jiang Wang , Optimal Trading Strategy And Supply/Demand Dynamics,
- Sheng-Tun Li a,b,* , Shu-Ching Kuo b,c," Knowledge discovery in financial investment for forecasting and trading strategy through wavelet-based SOM networks" , Expert Systems with Applications 34 (2008) 935-951
- Barberis N., A. Shleifer and R.Visny, 1998, " A model of Investor Sentiment," Working Paper, Harvard Economics Department, 1998.
- Daniel K., D. Hirshleifer and A. Subrahmanyam, 1998, "A theory of Over-confidence, self-Attribution and Security Market Over and Under reactions," working paper, UCLA
- Hong H. and J. Stein, 1999, "A Unified Theory of Underreaction, Momentum Trading and Overreaction in Asset Markets," Forthcoming, Journal of Finance
- Hirshleifer D., A. Subrahmanyam, S. Titman, 1994, "Security Analysis and Trading Patterns when Some Investors Receive Information Before Others," Journal of Finance, Vol. 49, No. 5. (Dec), pp.1665-1698.
- Grossman S., 1995, "Dynamic asset allocation and the informational efficiency of the markets", Journal of Finance, 50, 773-787.
- William N. Goetzmann ,Massimo Massa , DAILY MOMENTUM AND CONTRARIAN BEHAVIOR OF INDEX FUND INVESTORS, working paper,February 2000
- Thomas C. Chiang, Cathy W.S. Chen, Mike K.P. So," Asymmetric Return and Volatility Responses to Composite News from Stock Markets" _ Multinational Finance Journal, 2007, vol. 11, no. 3/4, pp. 179-210
- Harrison Hong, Terence Lim, and Jeremy C. Stein," Bad News Travels Slowly:
- Size, Analyst Coverage, and the Profitability of Momentum Strategies",working paper
- Jiang Wang, "A Model of Competitive stock trading volume", Journal of Political Economy Vol. 102, No. 1, Feb., 1994
- Andrew W. Lo and Jiang Wang," Stock Market Trading Volume", 2001
- Thierry Ané and Loredana Ureche-Rangau," Does Trading Volume Really Explain Stock Returns Volatility?", Journal of International Financial Markets, Institutions and Money, Volume 18, Issue 3, July 2008, Pages 216-235
- Josef Lakonishok, Andrei Shleifer, Robert W. Vishny," DO INSTITUTIONAL INVESTORS DESTABILIZE STOCK PRICES? EVIDENCE ON HERDING AND FEEDBACK TRADING" , Working Paper 1991
- RUSS WERMERS, "Mutual Fund Herding and the Impact on Stock Prices" , THE JOURNAL OF FINANCE • VOL. LIV, NO. 2 • APRIL 1999
- LAWRENCE R. GLOSTEN, RAVI JAGANNATHAN, and DAVID E. RUNKLE*-On the Relation between the Expected Value and the Volatility of the Nominal Excess Return on Stocks- THE JOURNAL OF FINANCE v VOL. XLVIII, NO. 5 v DECEMBER 1993
- MARK GRINBLATT, SHERIDAN TITMAN, AND Russ WERMERS, "Momentum Investment Strategies, Portfolio Performance, and Herding: A Study of Mutual Fund Behavior", The American Economic Review, Vol. 85, No. 5 (Dec., 1995), pp. 1088-1105Published.
- Richard D.F. HARRISA, Fatih Yilmazb_A momentum trading strategy based on the low frequency component of the exchange rate_Journal of Banking & Finance Volume 33, Issue 9, September 2009, Pages 1575-1585
- Yan-Leung Cheunga, Author, Yin-Wong Cheungb, , Angela W.W. Hec, and Alan T.K. Wand, _A trading strategy based on Callable Bull/Bear Contracts _Pacific-Basin Finance Journal Volume 18, Issue 2, April 2010, Pages 186-198
- Feng Wang, Keren Dong and Xiaotie Deng_Algorithmic Trading Strategy Optimization Based on Mutual Information Entropy Based Clustering _Advances in Computation and Intelligence Lecture Notes in Computer Science, 2010, Volume 6382/2010, 252-260, DOI: 10.1007/978-3-642-16493-4_26
- Pen-Yang Liao; Jiah-Shing Chen; _Dynamic trading strategy learning model using learning classifier systems_Evolutionary Computation, 2001. Proceedings of the 2001 Congress on -
- Peter Lakner*_ Optimal trading strategy for an investor: the case of partial information_Stochastic Processes and their Applications Volume 76, Issue 1, 1 August 1998, Pages 77-97
- A trading Strategy for new listings on the NYSE- John.Macconnel & Gray C sanger_# Financial Analysts Journal> # Vol. 40, No. 1, Jan. - Feb., 1... Journal, 1984

MEASURING PRICE INSTABILITY OF PULSES IN BANGLADESH

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ABSTRACT

This study assessed price instability of pulses in Bangladesh by using time series data. For measuring the instability, it argues the “norm-price level” then the deviations from that level will be the instability but this norm-level cannot be unique because it depends on person’s view. Average model, random walk model, linear trend model, exponential trend model and ARIMA (Autoregressive Integrated Moving Average) model were applied to determine the long run price instability of pulses. Average viewers had a feeling of more price instability than others. ARIMA type models showed the lowest price instability for all kinds of pulses because of the more flexibility in the ARIMA application procedure in historical simulation. Trend viewers felt less price instability than naive viewers for the five kinds of pulses.

KEYWORDS

agriculture, instability, price, pulse.

INTRODUCTION

Productions and prices are not stable in agriculture over the time, they fluctuate yearly, monthly, weekly even day to day, and the extent of fluctuation varies from commodity to commodity depends on the characteristics (physical and also the capacity of tolerance with an adverse natural situation in the life cycle) of the commodity. Policy makers try to help the producers and consumers to reduce the impact of unstable prices through implementing some price policies and structural policies. Instability in prices is the big issues to the policy makers for the most developing countries. They have to set a certain policy for the certain crops on the basis of the extent of instability. According to Gangwar and George (1971, p.71), instability is one of the important decision parameter in development dynamics and more so in the context of agricultural production. Because price and yield instability affects area allocation of farmers to crop production enterprise. Such knowledge of instability will also be of help to the farmers in making suitable production and investment decisions, and to the financing institutions in judging the repayment capacity and risk to the farmers. Ahmed and Bernard (1989, p. 11), stabilization of prices, particularly of major food grains, is a serious concern of most developing countries.

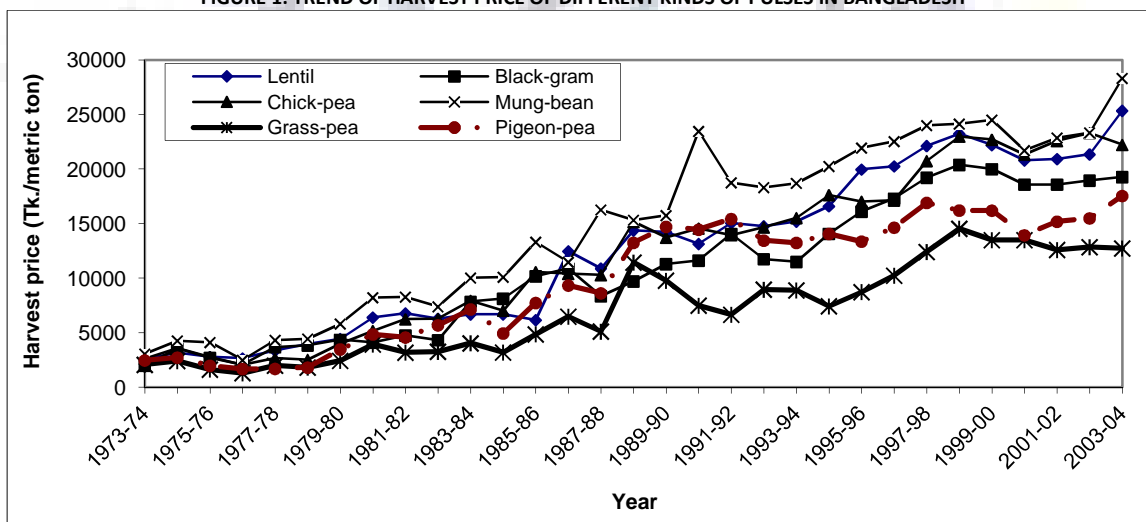
Price instability creates an uncertainty, both for producers and consumers. Farmers are handicapped in making future plans when prices are highly variable. Price uncertainty can lead to unwillingness on the part of producers to make investments. Consumers, processors, and retailers also would prefer to have more stable supplies and prices of farm commodities. Government intervention through price-support loans and guaranteed prices of producers also may serve to dampen price instability or to provide better guides for planning future production (Tomek and Robinson, 1990, p. 174). An analysis of fluctuations in price and crop output apart from growth is important for understanding the nature of crop security and income stability. Wide fluctuation in price not only affect crop output and bring about sharp fluctuations in them but also result in wide variations in disposable income of the farmers. The magnitude of fluctuations depends on the nature of crop production technology, its sensitivity to weather, economic environment, availability of material inputs and many other factors (Kaushik, 1993.p. 337). For that reason, it is an important task to measure the extent of instability in agricultural prices, so that the government can take appropriate plans to solve the high instability into a considerable range. And finally that will be helpful for the macro economic development of the country. So, the main target of this study is to apply the statistical and econometric models for measuring the instability in prices of pulses in Bangladesh.

TREND OF PRICES OF DIFFERENT KINDS OF PULSES

The tendency of prices to move up or down over a longer period of time (not concerned with one year to another) is termed as trend (Acharya and Agarwal, 1994, p. 72). Trends in agricultural prices are associated with general inflation and deflation in the economy and with factors specific to agricultural products, including changes in the tastes and preferences of consumers, increases in population and income, and technological changes in production (Tomek and Robinson, 1990, p. 165).

For instance, if we see the harvest (and wholesale) price series of different types of pulses in Bangladesh over the last 30 years, there are clearly upward drift curves with the time pass (Figure 1). Agricultural production is influenced by the so many factors in the long run such as increase in demand (or decrease), development of new technology (or constant), change of comparative advantages among the products, government policy, disease resistant of the crops etc. And these have an impact on the prices of that product.

FIGURE 1: TREND OF HARVEST PRICE OF DIFFERENT KINDS OF PULSES IN BANGLADESH



Source: Own figure, data from BBS of different yearbooks.

REVIEW OF LITERATURE

If prices remain unstable or show a high degree of instability, most activities and decisions are affected adversely and economic efficiency is reduced (Acharya and Agarwal, 1994, p. 158). For that reason, commodity market stabilization has received a great deal of attention in the literature since the first theoretical analysis of market stabilization developed by Waugh (1944), he showed that in a certain sense at least, consumers are harmed by price stability, and that they benefit from the instability of prices. Some authors criticized this conclusion also. Alam et al, 1996 estimated the nature and degree of instability in yield, production and price of agricultural crops by using the coefficient of variation. Other research works have been done on pulses by many authors, these are growth and supply response of pulses (Deshpande et al, 1982), identification of constraints to pulse production (Elias et al, 1986), growth trends in area, production and productivity of pulses (Sodhiya-Hc, 1989, Dhakal, 1993, Khan, 1998), economic analysis of growth and instability in pulses production (Jain et al, 1991, Sabur, 1996), marketing problems of pulses in Bangladesh (Rahman and Kashem, 1993).

Maritim (1988) conducted a study on instability of marketed output of maize in Kenya; the author used the model, which is proposed by Cuddy and Della Valle (1978) for determining the marketed output instability of maize. This method is a popular and widely used in many cases (e.g., yield, production, price, area cultivation etc.) for measuring the instability. Morgan et al (1994), they have measured the price variability by different way, they used the mean (or median) of the absolute value of the growth rate as a good indicator of volatility/ instability. Sarris (2000) has done a depth study on instability of world cereal (rice, wheat and maize) market. The author measured the instability in annual cereal prices and also the intra-year price variability. The author suggested constructing a model of the underlying trend price. Then instability can be defined as the deviation of the observed price from the trend.

Herrmann and Kirschke (1987), they analyzed the uncertainty on world coffee market by different ways on the basis of different views of the participants. Because, they thought that single model cannot be the representative measure of the price uncertainty. Price uncertainty/ instability is a relative thing; different people think it in different ways, so that, it is better to apply the methods that can be able to give ideas for the different viewers. I think this study has given broader aspects to the measurement of instability. They used average model, random walk model, linear trend model, exponential trend model, linear econometric model, log-linear econometric model and ARIMA model to analyze the price uncertainty (/instability) of coffee in the world market. They used root mean square error (RMSE) and the mean absolute percentage error (MAPE), which are the standard indicators to identify how a chosen model actually fits to the data. They found that the random walk model simulated the coffee prices more accurate than the average model that means the viewers of random walk model will feel less degree of uncertainty in the past than a person having an average model view. The trend model was slightly superior to the random walk model. Hence, a trend thinker will feel less degree of uncertainty in the past than a naïve viewer. Econometric model was superior to the previous four models considering the goodness of fit. Finally, they found that the ARIMA model had been fitted the data very well. It does not mean that the previous modes are not correct, all models are correct but the matter is, how a person wants to view the uncertainty in the past. The market participants who base their expectations on ARIMA models will have exposed to a relatively small degree of uncertainty in the past.

So, my observation from this review of literature section, instability is not an absolute something or it is not only involved in unique measure because as already we observed some measurements in the literature review. So, we should look it from the different points of view. For that reason, it is better to apply the different models in a same study to capture the different perceptions of the different people involved in this sector. Then we can give a comparative instability situation of different views.

OBJECTIVE OF THE STUDY

The main target of this study is to apply the statistical and econometric models for measuring the instability in prices of pulses in Bangladesh.

RESEARCH METHODOLOGY

SELECTION OF PRICES

Monthly wholesale prices of pulses were taken for the study. Policy regarding on these prices will help to the farmers directly. After that, which price will be used nominal price or real price (deflated price)? Some authors (Blandford, 1983; Ahmed and Bernard, 1989; Acharya and Agarwal, 1994; Singh and Mathur, 1994; Das, 1999; Hossain, 2005) have used nominal price and some authors (Goodwin, 1994; Alam, 1997; Sarris, 2000; Barua, 2001) have used real price in their analysis for measuring the instability. And some authors (Wahid, 1995; Begum, 2006), they have used both prices at a time. According to Tomek and Robinson (1990, p. 311), they argue that there are two reasons of deflating the nominal price; one is related to economic theory and other to statistical problems. As an economic theory, demand analysis suggests that it is appropriate to deflate if, when all prices and income increase or decrease by the same percentage, but demand remains unchanged. Deflating is not appropriate, when demand for the product changes in response to nominal prices even though real prices have not changed.

In this study, nominal price had been used for measuring the price instability. Because, this study is not like demand theory analysis, moreover, participants (i.e., farmers, traders, policymakers, and so on) who are involved in this sector, they are more concerned about the nominal price to realize the price instability, and of course, the participants, farmers they always think about the nominal price not the real price.

MEASURING THE PRICE INSTABILITY OF PULSES OVER A LONG PERIOD OF TIME

There is no any unique/definite technique as such that can only be used in measuring the instability. Because it's not an absolute something, it's a relative matter. It depends on different thinking of different participants. One can assume that the mean value of the past observations will be the base of the deviation for making the instability or fluctuation, another one can take previous year value, someone can assume the base will be the trend line (and also trend lines are different types) and so on. So, there are different types of perceptions of different persons. Coppock (1977, p. 4) stated, "Instability should not be understood to mean any deviation from a fixed level. It means excessive departure from some normal level. However, there is no way of determining a priori the meaning of excessive and normal."

AVERAGE MODEL

In this model, people expect that the future value (price) will be the average of the past values. This is the simple expectation of the persons about the future. If it does not happen then it will be said that there are some levels of fluctuation in the price in this case. This can be written as equation as follows (Herrmann and Kirschke, 1987, p. 31):

$$E [P_{n+1}] = \frac{1}{n} \sum_{t=1}^n P_t \dots\dots\dots(1)$$

where, t= 1, 2, 3,, n time series,

P = price of pulse.

Goodness of fit is calculated to the actual price data. And the calculations are done on the basis of simulation error (e), which is expressed as

$$e_t = \hat{P}_t - P_t \dots\dots\dots(2)$$

where, \hat{P}_t = predicted price

For assessing the goodness of fit, root mean square error (RMSE) and the mean absolute percentage error (MAPE)⁷ are applied for all the five models. And these indicators are widely used in the econometric analysis. The RMS error is a measure of the deviation of the simulated variable from its time path (Pindyck and

⁷ These are the important statistics for forecast evaluations. See, Makridakis, Wheelwright and McGee (pp. 43 and so on).

Rubinfeld, 1998, p. 210). Finally, the simulated error of a particular model is compared to that one of the random walk model by considering the U^8 . The model is considered superior to such naive forecasting if $U' < 1$ (Herrmann and Kirschke, 1987, p. 32). Average model and random walk model considered as naive views.

RANDOM WALK MODEL

Another group of people, they can think that the current price will be the expected price of future period. This can be defined as follows

$$E [P_{n+1}] = P_n \dots\dots\dots(3)$$

LINEAR TREND MODEL

Trend model (linear and exponential) is the group of those persons who want to deviate the actual value from the fitted trend line (they assumed this trend line is the norm-level) for considering the fluctuation of price. The linear trend model explains that the price will increase (or decrease) in the constant absolute amounts in each period of time. This model is defined as follows

$$P_t = a + bt \dots\dots\dots(4)$$

EXPONENTIAL TREND MODEL

The exponential trend model explains that the price will increase (or decrease) in the constant percentage amounts in each period of time rather than constant absolute amounts (Pindyck and Rubinfeld, 1998, p. 469). This model is expressed as follows:

$$P_t = ae^{bt} \dots\dots\dots(5)$$

This equation can be written as (by taking natural logarithm in both sides)

$$\ln P_t = \alpha + bt \dots\dots\dots(6)$$

Where, $\alpha = \ln a$ and $\ln =$ natural logarithm, coefficient of 't' i.e., 'b' indicates the constant percentage change if it is multiplied by 100.

AUTOREGRESSIVE INTEGRATED MOVING AVERAGE (ARIMA) MODEL

Most economic time series data are non-stationary in the nature i.e., they have a tendency of upward or downward drift during the time period. In other words, non-stationary time series will have a time varying mean or a time varying variance or both. This non-stationary gives the spurious results in regressing analysis. So, it is very important to take care of this behavior in regression analysis particularly where this analysis is run for the forecasting purpose. According to Gujarati (2003, p. 798), if a time series is non-stationary, we can study behavior only for the time period under consideration. Each set of time series data will therefore be for a particular episode. As a consequence, it is not possible to generalize it to other time periods. Therefore, for the purpose of forecasting, non-stationary time series may be of little practical value.

So, we need to check the stationary of time series data before proceeding analysis. Graphical method (by plotting the original time series data), correlogram, and unit root test have been applied to identify the stationarity in the original data series of pulses. Previous data series of stationary level have been used for the analysis.

The process of ARIMA models are given below:

u-th order autoregressive [AR (u)] model-

$$p_t = \delta + \phi_1 p_{t-1} + \phi_2 p_{t-2} + \dots\dots\dots + \phi_u p_{t-u} + \epsilon_t \dots\dots\dots(7)$$

v-th order moving average [MA (v)] model-

$$p_t = \mu + \theta_1 \epsilon_{t-1} + \theta_2 \epsilon_{t-2} + \dots\dots\dots + \theta_v \epsilon_{t-v} + \epsilon_t \dots\dots\dots(8)$$

Mixed autoregressive and moving average (ARMA) process-

Because many stationary random processes cannot be modeled as purely moving average or as purely autoregressive, since they have the qualities of both types of process (Pindyck and Rubinfeld, 1998, p. 535). The ARMA process of order (u, v) will be -

$$p_t = \phi_1 p_{t-1} + \dots\dots + \phi_u p_{t-u} + \delta + \epsilon_t + \theta_1 \epsilon_{t-1} + \dots\dots\dots + \theta_v \epsilon_{t-v} \dots\dots\dots(9)$$

RESULTS AND DISCUSSIONS

LONG RUN PRICE INSTABILITY OF LENTIL

Monthly wholesale price was converted into average annual wholesale price for the non-ARIMA models. And for the ARIMA model, monthly wholesale price was used for determining the fitted ARIMA model, after that by using the fitted model, estimated monthly wholesale prices were determined then the series were converted into estimated average annual wholesale price series, and finally the root mean square error (RMSE), mean absolute percentage error (MAPE), and U' (advantage compared with the random walk model) were calculated on the basis of estimated average annual wholesale price; these estimates indicate the goodness of fit of the model and also the level of instability (or risk). And this same procedure has been followed for all kinds of pulses.

The fitted linear trend model:

$$\hat{P}_t = 1157.55 + 100.44t \dots\dots\dots(4.1)$$

$t = (9.84) \quad (10.23)$

$(\bar{R}^2 = 0.845, F = 104.58 \text{ and } DW = 1.394)$

$$RMSE = \sqrt{\frac{1}{n} \sum_{t=1}^n e_t^2} \text{ and } MAPE = \frac{1}{n} \sum_{t=1}^n \frac{|e_t|}{p_t}$$

$$^8 U' = \sqrt{\frac{\sum_{t=1}^n e_t^2}{\sum_{t=1}^n (p_{t-1} - p_t)^2}}$$

Where, P_t is the average annual wholesale price of lentil, $t = 1, 2, 3, \dots, n$, \bar{R}^2 = adjusted coefficient of determination (measures the goodness of fit of the regression equation generally), F = F-value (measures the overall significance of the estimated regression) and DW = Durbin-Watson coefficient (measures the presence of autocorrelation in the time series).

The fitted exponential trend model:

$$\ln \hat{P}_t = 1323.36 + 0.0453t \dots\dots\dots(4.2)$$

t-value: (169.45) (12.79)

$$(\bar{R}^2 = 0.895, F = 163.54 \text{ and } DW = 1.714)$$

Both models have fitted the data well. On the basis of above equations, other estimates are depicted in the Table 4.1. The estimates of average model, random walk model and ARIMA model are also given in the same Table.

For applying the ARIMA model, at first the data were checked whether it is stationary or non stationary. There was an upward tendency of the monthly wholesale price of lentil, the mean and variance do not seem to be time-invariant, and hence there is an indication of non-stationary. Autocorrelations were significantly different from zero, and they were gradually decreasing, that means the process is non-stationary. Partial autocorrelation function indicated that, the first difference data might have stationary because the partial autocorrelation for the first lag was highly significant then it had been dramatically dropped. After that, Dickey-Fuller (DF) test was used to test the unit root of the series. The results are given below:

Without trend model: $\Delta \hat{P}_t = 73.91 - 0.0275P_{t-1} \dots\dots\dots(4.3)$

t-value: (1.53) (-1.31)

With trend model: $\Delta \hat{P}_t = 185.35 - 0.161P_{t-1} + 1.51t \dots\dots\dots(4.4)$

t-value: (3.40) (-4.095) (3.967)

Augmented Dickey-Fuller test: $\Delta P_t = 159.37 - 0.14P_{t-1} + 1.36t - 0.09\Delta P_{t-1} \dots\dots\dots(4.5)$

t-value: (2.75) (-3.310) (3.387) (-1.333)

[Critical tau (τ) values are -3.46 and -2.88 for the 1% & 5% level of significance respectively for the constant model; -3.99 and -3.43 for the 1% & 5% level of significance level for the constant with trend model]. Calculated value (in absolute term) of t for the coefficient of P_{t-1} (in equation 4.3) is less than the critical tau (τ) value, so there is a unit root, which means the data series is non-stationary. In equation (4.4), the t-value of the coefficient P_{t-1} is little bit larger than the critical tau (τ) value, so the result is different from the equation 4.3, but the augmented D-F test showed that there was a unit root, the autocorrelation function and partial autocorrelation function also indicated the idea of non-stationary. So, it can be concluded that the original data series was non-stationary. Then, it has to check that the first difference series is stationary or not.

$$\Delta(\Delta \hat{P}_{t-1}) = 15.71 - 1.17\Delta P_{t-1} \dots\dots\dots(4.6)$$

t-value: (1.127) (-18.23)

Here, the calculated value (in absolute term) of t for the coefficient of ΔP_{t-1} (in equation 4.6) is much higher than the critical tau (τ) value, so the first difference of the data series was stationary. D-F test has proved that original series was not stationary but the first difference series was stationary. So, the ARIMA model had been applied for the first differenced series. Then autocorrelation function and partial autocorrelation function of the first differenced series of monthly wholesale price (because it is stationary) were used to specify the number of moving average and the number of autoregressive in the ARIMA model. And finally the diagnostic was checked for the specified model whether the residuals obtained by the used ARIMA are white noise or not⁹, if it is white noise then the particular ARIMA specification is correct.

The best ARIMA specification was ARIMA (7,1,0) and only the $\Delta P_{t-1}, \Delta P_{t-6}$ and ΔP_{t-7} lag terms (not $\Delta P_{t-2}, \Delta P_{t-3}, \Delta P_{t-4}$ and so on) were included in the model¹⁰, because autocorrelations and partial autocorrelations were significantly different from zero for this lags, and regressed them on ΔP_t , the obtained estimates were given below:

ARIMA (7, 1, 0):

$$\Delta \hat{P}_t = 20.285 - 0.211\Delta P_{t-1} - 0.208\Delta P_{t-6} - 0.178\Delta P_{t-7} \dots\dots\dots(4.7)$$

t-value: (1.46) (-3.28) (-3.20) (-2.71)

$$(\bar{R}^2 = 0.076, F = 7.37, DW = 2.06)$$

The other estimates were calculated on the basis of the obtained predicted value, and the estimates were depicted in Table 1.

TABLE 1: DIFFERENT VIEWS & DIFFERENT LEVEL OF PRICE INSTABILITY OF LENTIL DURING THE PERIOD 1987 TO 2006 IN BANGLADESH

Model	RMSE (taka*/quintal)	MAPE (%)	U'
Average model	666.06	20.43	2.10
Random walk model	316.71	10.14	1.00
Linear trend model	240.28	7.97	0.78
Exponential trend model	218.80	7.20	0.71
ARIMA (7,1,0) model	58.62	1.80	0.19

*US\$1= taka 67.0800 (Annual Report 2005-06, Bangladesh Bank, p. 177)

Source: Own calculation by using the data from BBS of different years.

⁹ See Pindyck and Rubinfeld (1998, p.555)

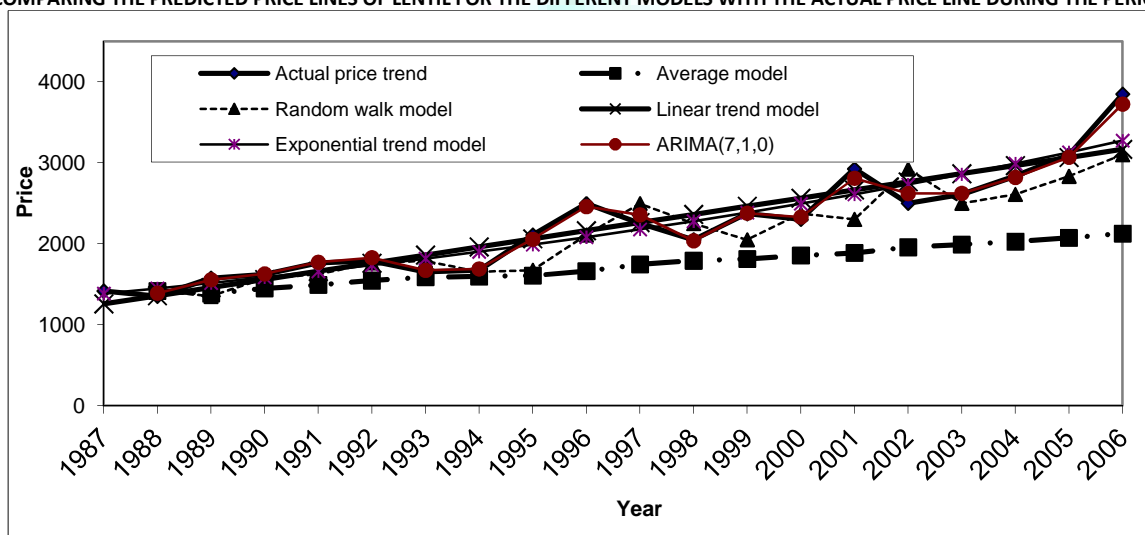
¹⁰ See Gujarati, D.N. (1998, p. 742)

It is clear from the Table 1 that the people who think the instability from the average line, they felt more instability than other viewers for this particular data series because all of the estimates are larger for the average model than other models. Exponential model and linear trend model have shown the less instability than simple random walk model because the values of U' are less than the value of U' from the random walk model. And also the same situation was observed for the case of RMSE and MAPE. And finally, the ARIMA model had shown the lowest price instability, all estimates were found lower than other models. But it can not be justified to conclude that the average model or random walk model is not a good (or correct) model to determine the instability, because it's a perception of people's thinking from the norm-price level and that norm-price level differ from one person to another. So, all models are correct.

The average price line (Figure 1) was little bit more far than another model from the actual price line. Average viewers assumed the price fluctuations from that line which they think it as norm-price level. Linear trend line and exponential trend line was little bit more closer to actual price line than random walk model (though it is difficult to examine from the figure, but we have a numerical proof from the Table 1), for that reason they have made less instability to the trend viewers. ARIMA trend line is closest to the actual price line than another four-trend price lines. For that reason the estimates of RMSE, MAPE and U' were smallest.

The indicators of the historical simulation of price series of lentil for the ARIMA (7,1,0) model had been shown the less instability results than any other models. This model can simulate the time series more closely to the actual series. Because, analyst has more alternative choices for the selection of order for the autoregressive and moving averages to make appropriate ARIMA model, that means there are much flexibility in ARIMA selection.

FIGURE 2: COMPARING THE PREDICTED PRICE LINES OF LENTIL FOR THE DIFFERENT MODELS WITH THE ACTUAL PRICE LINE DURING THE PERIOD 1987-2006



Source: Own calculation by using the data from BBS of different years.

LONG RUN PRICE INSTABILITY OF CHICKPEA

Linear trend model:

$$\hat{P}_t = 1054.21 + 116.69t \tag{4.8}$$

t-value= (7.12) (9.45)
 \bar{R}^2 (R² = 0.823, F = 89.23 and DW = 1.385)

Exponential trend model:

$$\ln \hat{P}_t = 1248.66 + 0.0525t \tag{4.9}$$

t-value= (143.45) (12.66)
 \bar{R}^2 (R² = 0.893, F = 160.20 and DW = 1.216)

Identification of the series whether it is stationary or non-stationary:

Without trend model: $\Delta \hat{P}_t = -35.17 + 0.0232P_{t-1} \tag{4.10}$

t-value: (-1.15) (1.82)

With trend model: $\Delta \hat{P}_t = -17.09 - 0.00057P_{t-1} + 0.296t \tag{4.11}$

t-value: (-0.49) (-0.02) (1.03)

Augmented Dickey-Fuller test: $\Delta P_t = -3.96 - 0.111P_{t-1} + 0.366t + 0.067\Delta P_{t-1} \tag{4.12}$

t-value: (-0.105) (-0.365) (1.209) (0.940)

Here, sign of the coefficient of P_{t-1} (equation 4.10) is positive, so this coefficient cannot be considered for the D-F test¹¹. The coefficient of P_{t-1} (equation 4.11 and 4.12) had been considered for the D-F test. Both of them proved that the series was non-stationary.

Identification of the first differenced series stationary or not:

$$\Delta(\Delta \hat{P}_t) = 16.59 - 0.927\Delta P_{t-1} \tag{4.13}$$

t-value: (1.71) (-14.28)

In this case, the t-value of the coefficient ΔP_{t-1} proved the first differenced series stationary. In this way, it was found that the first differenced data of other pulses was stationary.

¹¹ see Gujarati, D.N. (2003, p.816)

ARIMA (5,1,5) model:

$$\hat{\Delta P}_t = 17.59 + 0.388\Delta P_{t-1} + 0.254\Delta P_{t-2} - 0.167\Delta P_{t-3} + 0.081\Delta P_{t-4} - 0.661\Delta P_{t-5} + 0.375\epsilon_{t-1} + 0.273\epsilon_{t-2} - 0.131\epsilon_{t-3} + 0.013\epsilon_{t-4} - 0.622\epsilon_{t-5} \dots(4.14)$$

t-value: (1.914) (2.633) (1.505) (-2.678) (36.42) (-12.416)
 (0.962) (1.405) (-0.658) (0.061) (-2.962)

The comparing estimates for the instability from the different models were computed and depicted on the Table 2. For the chickpea, it was found the same pattern of instability like lentil, if it is ranked on the basis of U' value then it would become average model>random walk model>linear trend model>exponential trend model>ARIMA model. Trend viewers could have less instability than the random walk and average viewers in the historical simulation.

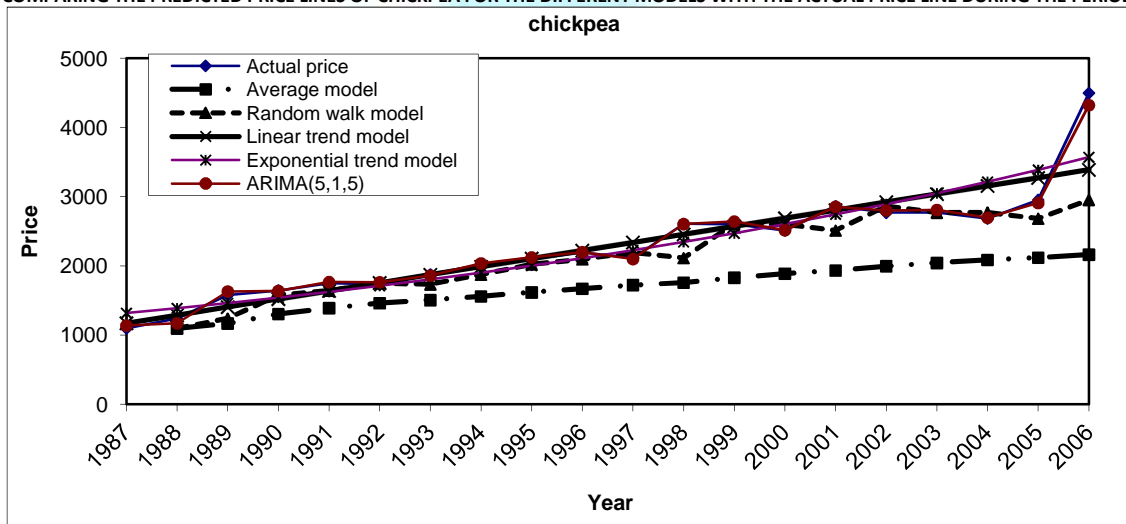
TABLE 2: DIFFERENT VIEWS & DIFFERENT LEVEL OF PRICE INSTABILITY OF CHICKPEA DURING THE PERIOD 1987 TO 2006 IN BANGLADESH

Model	RMSE (taka*/quintal)	MAPE(%)	U'
Average model	785.25	25.18	1.96
Random walk model	401.60	8.19	1.00
Linear trend model	302.20	6.75	0.77
Exponential trend model	290.69	8.49	0.74
ARIMA (5,1,5) model	49.10	1.49	0.13

*\$1= taka 67.0800 (Annual Report 2005-06, Bangladesh Bank, p. 177)

Source: Own calculation by using the data from BBS of different years.

FIGURE 3: COMPARING THE PREDICTED PRICE LINES OF CHICKPEA FOR THE DIFFERENT MODELS WITH THE ACTUAL PRICE LINE DURING THE PERIOD 1987-2006



Source: Own calculation by using the data from BBS of different years.

LONG RUN PRICE INSTABILITY OF BLACK GRAM

Linear trend model:

$$\hat{P}_t = 917.60 + 88.54t \dots(4.15)$$

t-value: (5.03) (5.81)

$\bar{R}^2 = 0.652$, F = 33.73 and DW = 1.015)

Exponential trend model:

$$\ln \hat{P}_t = 1073.93 + 0.0469t \dots(4.16)$$

t-value: (93.52) (7.53)

$\bar{R}^2 = 0.745$, F = 56.64 and DW = 1.216)

ARIMA (0,1,11) model:

$$\hat{\Delta P}_t = 16.15 + 0.11\epsilon_{t-1} + 0.049\epsilon_{t-2} + 0.055\epsilon_{t-3} + 0.070\epsilon_{t-4} + 0.058\epsilon_{t-5} + 0.129\epsilon_{t-6} - 0.056\epsilon_{t-7} + 0.030\epsilon_{t-8} - 0.086\epsilon_{t-9} - 0.091\epsilon_{t-10} - 0.275\epsilon_{t-11} \dots(4.17)$$

t-value: (1.58) (1.70) (0.75) (0.85) (1.04) (0.84) (1.89)
 (-0.82) (0.44) (-1.25) (-1.32) (-3.94)

Calculated different estimates on the basis of the five models are depicted in Table 3. It is observed that the average viewers had more feelings of price instability than others. If it is ranked on the basis of RMSE or MAPE or U', it would be the same ranking in accordance with the models stated in this Table. Trend viewers would feel less instability than naïve viewers. Again the level of instability for the ARIMA participants was very low because of the special statistical features of this model. The fitted line is much closer to the actual price line (Figure 4).

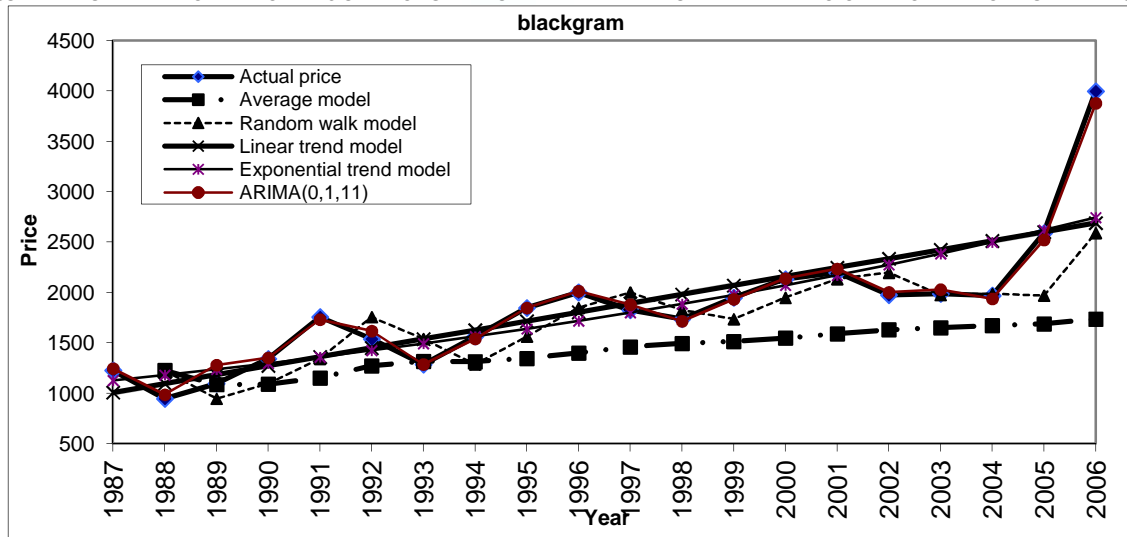
TABLE 3: DIFFERENT VIEWS OF THE PRICE INSTABILITY OF BLACK-GRAM DURING THE PERIOD 1987 TO 2006 IN BANGLADESH

Model	RMSE (taka*/quintal)	MAPE (%)	U'
Average model	673.01	22.60	1.65
Random walk model	408.09	14.17	1.00
Linear trend model	372.95	12.22	0.94
Exponential trend model	357.43	11.55	0.90
ARIMA (0,1,11) model	59.47	2.49	0.15

*\$1= taka 67.0800 (Annual Report 2005-06, Bangladesh Bank, p. 177)

Source: Own calculation by using the data from BBS of different years.

FIGURE 4: COMPARING THE PREDICTED PRICE LINES OF BLACK-GRAM FOR THE DIFFERENT MODEL WITH THE ACTUAL PRICE LINE DURING THE PERIOD 1987-2006



Source: Own calculation by using the data from BBS of different years.

LONG RUN PRICE INSTABILITY OF MUNG-BEAN

Linear and exponential, both trend models had fitted the data well considering the \bar{R}^{-2} & F value and also it can be observed from the Figure 5 because the fitted lines are closer to the actual price line. The results of the all models that made a comparison of instability among the models were given in Table 4.

Linear trend model:

$$\hat{P}_t = 1349.81 + 105.05t \tag{4.18}$$

t-value: (8.148) (7.60)

($\bar{R}^{-2} = 0.749$, F = 57.70 and DW = 1.184)

Exponential trend model:

$$\ln \hat{P}_t = 1504.38 + 0.0430t \tag{4.19}$$

t-value: (142.28) (10.03)

($\bar{R}^{-2} = 0.840$, F = 100.59 and DW = 1.10)

ARIMA (1, 1, 0):

$$\Delta \hat{P}_t = 19.224 - 0.352 \Delta P_{t-1} \tag{4.20}$$

t-value: (1.64) (-5.69)

($\bar{R}^{-2} = 0.117$, F = 32.40, DW = 1.99)

To determine the predicted value for the series, the equation (4.20) can be written as-

$$\hat{P}_t = 19.224 + P_{t-1} - 0.352(P_{t-1} - P_{t-2}) \tag{4.21}$$

Here also the trend viewers had a less feeling of price instability of mung bean than naïve viewers because the value of U' was smaller for the trend model (Table 4). The participants of average model thinking suffered more instability than other model thinkers in the period 1987 to 2006. And there was a same sequence of the results whether it was RMSE or MAPE or U'. ARIMA model showed the lowest instability as well as for the previous pulses also.

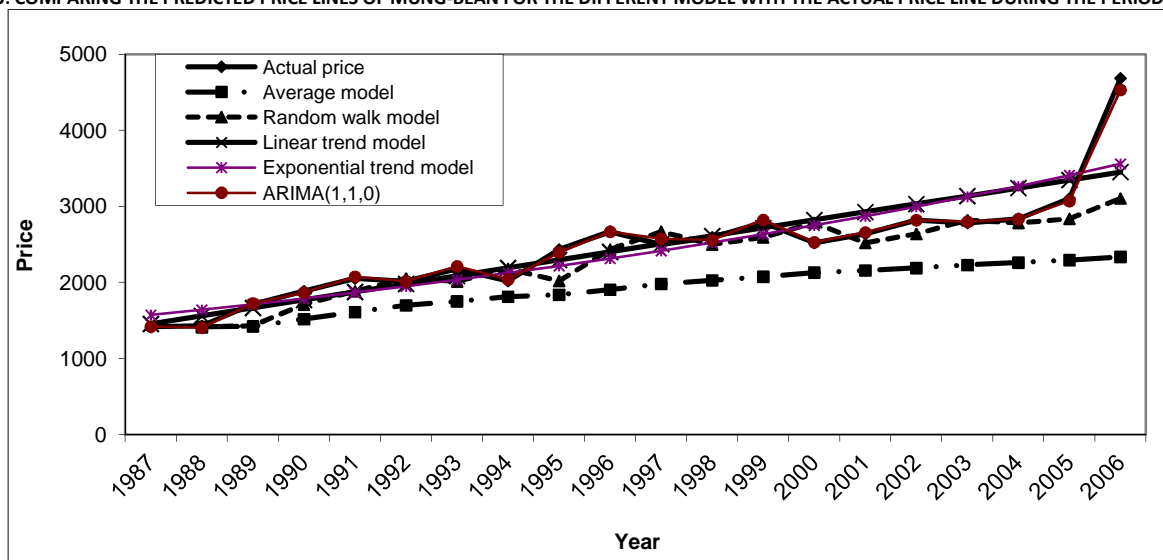
TABLE 4: DIFFERENT VIEWS OF THE PRICE INSTABILITY OF MUNG-BEAN DURING THE PERIOD 1987 TO 2006 IN BANGLADESH

Model	RMSE (taka*/quintal)	MAPE (%)	U'
Average model	738.48	20.95	1.80
Random walk model	409.54	8.57	1.00
Linear trend model	338.32	7.72	0.85
Exponential trend model	328.54	8.73	0.82
ARIMA (1,1,0) model	43.75	1.04	0.11

*\$1= taka 67.0800 (Annual Report 2005-06, Bangladesh Bank, p. 177)

Source: Own calculation by using the data from BBS of different years.

FIGURE 5: COMPARING THE PREDICTED PRICE LINES OF MUNG-BEAN FOR THE DIFFERENT MODEL WITH THE ACTUAL PRICE LINE DURING THE PERIOD 1987-2006



Source: Own calculation by using the data from BBS of different years.

LONG RUN PRICE INSTABILITY OF GRASS PEA

Linear trend model:

$$\hat{P}_t = 766.73 + 35.53t \dots\dots\dots(4.22)$$

t-value: (7.66) (4.26)
 $\bar{R}^2 = 0.474, F = 18.11$ and $DW = 1.729$

Exponential trend model:

$$\ln \hat{P}_t = 796.24 + 0.0312t \dots\dots\dots(4.23)$$

t-value: (81.24) (4.55)
 $\bar{R}^2 = 0.509, F = 20.72$ and $DW = 2.0$

ARIMA (7,1,7):

$$\begin{aligned} \Delta \hat{P}_t = & 4.815 + 0.614\Delta P_{t-1} - 0.224\Delta P_{t-2} - 0.028\Delta P_{t-3} - 0.239\Delta P_{t-4} - 0.048\Delta P_{t-5} \\ & t\text{-value: } (0.74) \quad (7.40) \quad (-1.53) \quad (-0.44) \quad (-1.68) \quad (-0.71) \\ & + 0.762\Delta P_{t-6} - 0.639\Delta P_{t-7} + 0.647\varepsilon_{t-1} - 0.274\varepsilon_{t-2} + 0.046\varepsilon_{t-3} - 0.327\varepsilon_{t-4} \\ & (5.50) \quad (-17.26) \quad (0.25) \quad (-0.07) \quad (0.02) \quad (-0.57) \\ & + 0.056\varepsilon_{t-5} + 0.728\varepsilon_{t-6} - 0.537\varepsilon_{t-7} \dots\dots\dots(4.24) \\ & (0.02) \quad (0.33) \quad (-0.20) \end{aligned}$$

Here also the same results of sequences were observed in Table (5) as previously observed for other pulses. On the basis of U' or MAPE or RMSE, average model viewers had more feelings of instability than others. ARIMA model showed the lowest level of instability. And the linear trend viewers had an advantageous position than naïve viewers. Here one thing is noticeable that the level of instability of grass pea (whether on the basis of MAPE or U') for the average model was lowest than other pulses previously analyzed. It can be observed from the pattern of average line in Figure 6, the line was closer to actual price line than previous Figures.

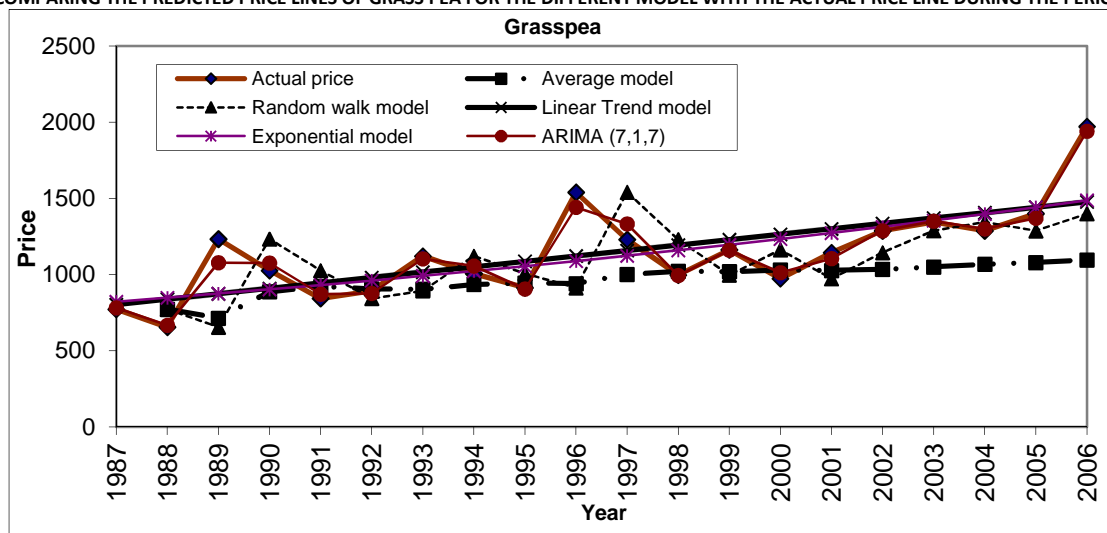
TABLE 5: DIFFERENT VIEWS OF THE PRICE INSTABILITY OF GRASS PEA DURING THE PERIOD 1987 TO 2006 IN BANGLADESH

Model	RMSE (taka*/quintal)	MAPE (%)	U'
Average model	314.84	17.30	1.12
Random walk model	281.39	18.37	1.00
Linear trend model	204.26	13.61	0.74
Exponential trend model	201.19	12.89	0.73
ARIMA (7,1,7) model	52.96	3.05	0.19

*\$1= taka 67.0800 (Annual Report 2005-06, Bangladesh Bank, p. 177)

Source: Own calculation by using the data from BBS of different years.

FIGURE 6: COMPARING THE PREDICTED PRICE LINES OF GRASS PEA FOR THE DIFFERENT MODEL WITH THE ACTUAL PRICE LINE DURING THE PERIOD 1987-2006



Source: Own calculation by using the data from BBS of different years.

LONG RUN PRICE INSTABILITY OF PIGEON-PEA

Linear trend model:

$$\hat{P}_t = 1452.78 + 27.25t \dots\dots\dots(4.25)$$

t-value: (12.31) (2.63)

($\bar{R}^2 = 0.248$, F = 6.94 and DW = 0.732)

Exponential trend model:

$$\ln \hat{P}_t = 1434.71 + 0.017t \dots\dots\dots(4.26)$$

t-value: (98.10) (2.62)

($\bar{R}^2 = 0.246$, F = 6.87 and DW = 0.784)

ARIMA (0, 1, 1):

$$\Delta \hat{P}_t = 6.965 + 0.466\epsilon_{t-1} \dots\dots\dots(4.27)$$

t-value: (1.364) (7.870)

The value of U' is less for the random walk model than the average and trend models (Table 6). Random walk viewers had less feeling of price instability of pigeon pea than the average & trend viewers. Linear trend and exponential trend both of them had more or less the same degree of instability. And the ARIMA model showed the lowest instability as like as previous pulses.

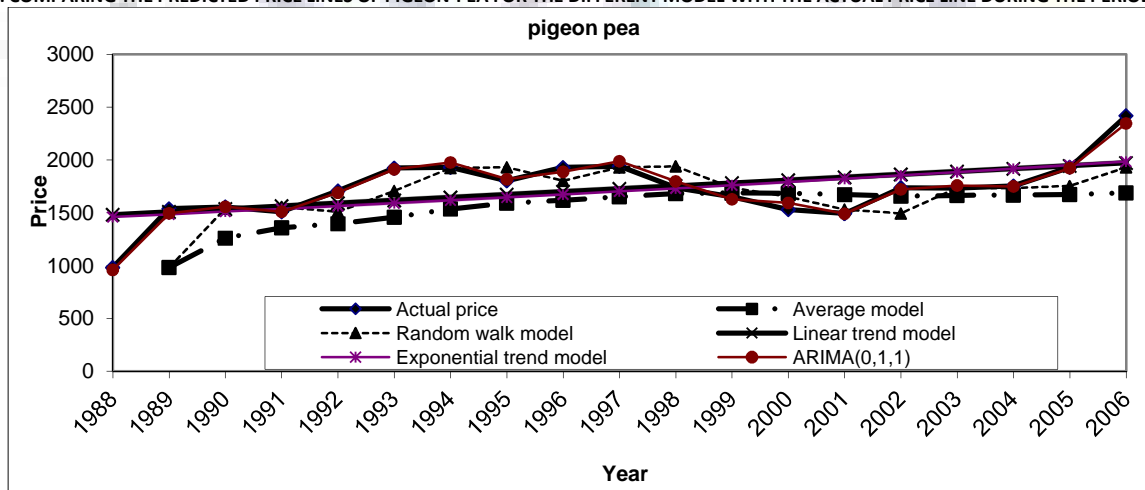
TABLE 6: DIFFERENT VIEWS OF THE PRICE INSTABILITY OF PIGEON-PEA DURING THE PERIOD 1988 TO 2006 IN BANGLADESH

Model	RMSE (taka*/quintal)	MAPE (%)	U'
Average model	315.38	13.42	1.47
Random walk model	214.08	8.31	1.00
Linear trend model	233.69	11.60	1.12
Exponential trend model	235.46	11.74	1.13
ARIMA (0,1,1) model	35.20	1.56	0.17

*\$1= taka 67.0800 (Annual Report 2005-06, Bangladesh Bank, p. 177)

Source: Own calculation by using the data from BBS of different years.

FIGURE 7: COMPARING THE PREDICTED PRICE LINES OF PIGEON-PEA FOR THE DIFFERENT MODEL WITH THE ACTUAL PRICE LINE DURING THE PERIOD 1988-2006



Source: Own calculation by using the data from BBS of different years.

RANKING OF PULSES ON THE BASIS OF PRICE INSTABILITY

It was important to know that which pulse was more instable in price than others. For identifying this, at first the pulses were ranked for the each model on the basis of MAPE (MAPE higher means more instable), then the ranked was made for the overall basis. For instance, grass pea was first ranking for the four models (/viewers) and chickpea was also in the first ranking but only for one model, so grass pea was assumed in the first ranking, and so on. That means, the price instability of grass pea was highest in that period.

TABLE 7: RANKING OF PULSES ACCORDING TO THE LEVEL OF INSTABILITY MEASURED BY THE MAPE FOR THE DIFFERENT MODELS (/VIEWERS)

Ranking	Average model	Random walk model	Linear trend model	Exponential trend model	ARIMA model	Overall
1	Chickpea	Grass pea	Grass pea	Grass pea	Grass pea	Grass pea
2	Black gram	Black gram	Black gram	Pigeon pea	Black gram	Black gram
3	Mung-bean	Lentil	Pigeon pea	Black gram	Lentil	Lentil
4	Lentil	Mung-bean	Lentil	Mung-bean	Pigeon pea	Mung-bean
5	Grass pea	Pigeon pea	Mung-bean	Chickpea	Chickpea	Chickpea
6	Pigeon pea	Chickpea	Chickpea	Lentil	Mung-bean	Pigeon pea

N.B.: low value of the ranking indicates higher instability

Source: Own identification from the analysis

Grass pea has neurotoxin substance that is harmful for the health, if it is consumed for long term (3-4 months continuous) then it becomes the cause of lathyrism, that makes the people unable to walk (but till now it is debating also), scientist are trying to develop such varieties that contains low level of that toxin, and already they have developed some varieties. So that it cannot be a problem any more. Also they are suggesting that after soaking over night, then if it is cooked and consumed, the low possibility of getting that disease (Malek et al, 1995, p. 7). So some times, people think that consumption of grass pea is not good, then demand for grass pea decreases as a consequence price decreases, and also sometimes publicity makes them awareness in favor of grass pea consumption then the demand for grass pea increases as a result price increases. For that reason demand is fluctuating more for grass pea.

CONCLUSION

This study had been tried to give a details of instability in prices of major pulses in Bangladesh over the last two decades on the basis of different types of instability viewing. The study analyzed the data in different ways to capture the different views of instability for the different participants in this sector. Hence, the better policy alternatives can be realized to solve the particular problems from the different instability views.

Different models had been applied to assess the price instability of pulses for the different viewers. Among all the models, ARIMA type model showed the lowest price instability for all kinds of pulses because of the flexibility to application and also I would like to say, it's more about trial and error process to find out the specification that yields the better fit to the data. Trend model showed lower price instability than the naïve models most of the cases.

On the basis of overall instability, grass pea was in the first ranking that means it revealed highest price instability in the pulse sector. All kinds of viewers had a feeling of more price instability for the grass pea in the last two decades. Because of more volatility in the demand side, due to some problems of consuming grass pea on the human health. So, needs more publicity regarding the better way of consuming grass pea that can not be harmful any more and also need to develop minimum toxin contains grass pea. Lentil, grass pea, black gram, chickpea these are the important pulses on the basis of consumer preference and production as well but these were having more instability, so, the emphasis (price policy and structural policy) should be given more on these four kinds of pulses for the development of this sector.

This research was based on secondary data only, so the farm and market level primary information (regarding production problems, returns compared to other crops, marketing problems, farmers opinions, factors influencing demand and supply, etc.) were not included in this paper; so for further study regarding this subject, it will be more fruitful to include both types of data.

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REFERENCES

1. Acharya, S. S. and N. L. Agarwal.1994. *Agricultural Prices- Analysis and Policy*. Oxford & IBH Publishing Co. Pvt. Ltd., New Delhi, Bombay and Calcutta.
2. Ahmed, R. and A. Bernard 1989. "Rice Price Fluctuation and an Approach to Price Stabilization in Bangladesh". Research Report72, International Food Policy Research Institute, Washington, USA.
3. Alam, M. J. 1997. "A Study on Price Behavior of Rice in Bangladesh-A Time Series Analysis". Master Thesis, Department of Cooperation & Marketing, Bangladesh Agricultural University, Mymensingh.
4. Bangladesh Bureau of Statistics 1979,81,91,99,04a. "Statistical Yearbook of Bangladesh", Ministry of Planning, Government of the People's Republic of Bangladesh, Dhaka.
5. Bangladesh Bureau of Statistics. 1979-80,86,92,94,99,04b. "Yearbook of Agricultural Statistics of Bangladesh", Ministry of Planning, Government of the People's Republic of Bangladesh, Dhaka.
6. Bangladesh Bureau of Statistics. 2005, 06c. "Bangladesh Economic Review". Ministry of Planning, Government of the People's Republic of Bangladesh, Dhaka.
7. Barua, P. 2001. "Inter-Temporal price Behavior and Price-Supply Relationship of Selected Crops in Bangladesh". Master Thesis, Department of Cooperation & Marketing, Bangladesh Agricultural University, Mymensingh.
8. Begum, R. 2006. "A Study on Traders' Temporal Margin and Market Integration of Leading Crops". Master Thesis, Department of Cooperation & Marketing, Bangladesh Agricultural University, Mymensingh.
9. Blandford, D. 1983. "Instability in World Grain Markets". *Journal of Agricultural Economics* 43(3), pp. 379-95.
10. Coppock, J. D. 1977. "International Trade Instability". West mead: Farnborough, Hants.
11. Cuddy, J.D. A. and P. A. D. Valle (1978): Measuring the Instability of Time Series Data. *Oxford Bulletin of Economics and Statistics* 40, pp. 79-84.
12. Das, P. K. 1999. "A Study on Lentil and Gram Marketing in Selected Areas of Bangladesh". Masters Thesis, submitted to the Department of Cooperation & Marketing, Bangladesh Agricultural University, Mymensingh.
13. Department of Agricultural Marketing.1987, 1988, 1989, 2005 and 2006. "District Wise Wholesale Prices of Different Types of Pulses in Bangladesh", Ministry of Agriculture, Government of the People's Republic of Bangladesh.
14. Dhakal, B. P. (1993): A Study on Growth and Acreage Response of Some Selected Crops of Bangladesh. Master Thesis, Department of Cooperation & Marketing, Bangladesh Agricultural University, Mymensingh.
15. Elias, S.M., F.S. Sikder and J. Ahmed (1986): Marketing and Storage of Pulses in Bangladesh. Research Highlight 1983-84 Bangladesh Agricultural Research Institute, Jodebpur, Gazipur, Bangladesh.
16. Gangwar, A. C. and M.V. George. 1971. "Income, Price and Yield Variability for Principal Crops and Cropping Pattern in Haryana State". *Agricultural Situation in India* 24 (2), p. 71.

17. Goodwin, J. W. 1994. *Agricultural Price Analysis and Forecasting*. John Wiley & Sons, Inc., New York, Chichester, Brisbane, Toronto and Singapore.
18. Gujarati, D. N. 1998. *Basic Econometrics*. 3rd edition, McGraw-Hill, Inc. New York.
19. Gujarati, D. N. 2003. *Basic Econometrics*. 4th edition, McGraw-Hill, Inc. New York.
20. Hermann, R. and D. Kirschke. 1987. "The Analysis of Price Uncertainty: Theoretical Issues and Empirical Measurement on the World Coffee Market". *Asian Economies Issue* 62, pp. 24-44.
21. Hossain, M. 2005. "Marketing and Price Behavior of Onion in Selected Areas of Rajbari District". Master Thesis, Department of Cooperation & Marketing, Bangladesh Agricultural University, Mymensingh.
22. Jain, K.K. and A.J. Singh (1991): An Economic Analysis of Growth and Instability in Pulses Production in Punjab. Agricultural Situation in India.
23. Kaushik, k. k. 1993. Growth and Instability of Oilseeds Production. *Indian Journal of Agricultural Economics* 48 (3).
24. Khan, L.P. (1998): A Quantitative Estimation of Area and Production Growth of Major Pulse Crops in Bangladesh: A Disaggregated Analysis. Master Thesis, Department of Agricultural Economics, Bangladesh Agricultural University, Mymensingh.
25. Malek, M.A., C.D.M. Sarwar, A. Sarker and M. S. Hassan. 1995. Status of Grass pea Research and Future Strategy in Bangladesh. Proceedings of a Regional Workshop, Lathyrus Genetic Resources in Asia, Organized by International Plant Genetic Resources Institute, Indian Council of Agricultural Research and Indira Gandhi Agricultural University, held at Raipur, India, 27-29 December. <http://www.bioversityinternational.org/Publications/Pdf/656.pdf>
26. Maritim, H. K. (1988): Instability of Marketed Output of Maize in Kenya. *Eastern Africa Economic Review* 4 (2), pp. 9-12.
27. Morgan, C. W., A. J. Rayner and C. T. Ennew (1994): Price Instability and Commodity Futures Markets. *World Development* 22 (11), pp. 1729-1736.
28. Pindyck, R. S. and D. L. Rubinfeld. 1998. *Econometric Models and Econometric Forecasts*. 4th ed. McGraw-Hill, Boston, Massachusetts Burr Ridge, Illinois Dubuque, Iowa Madison, Wisconsin New York, New York San Francisco, California St. Louis, Missouri.
29. Rahman, H. and Kashem (1993): Growth and Marketing Problems of Pulse Crops in Bangladesh. *Economic Affairs* 38.
30. Sabur, S. A. and M.A.M. Miah (1996): Growth Instability and Profitability of Crops under CDP in Bangladesh. *Journal of Business Administration* 22 (1&2).
31. Sarris, A. H. 2000. "Has world cereal market instability increased?" *Food Policy* 25(3), pp. 337-50.
32. Singh, C. and V. C. Mathur. 1994. "Growth and Instability in the Production and Price of Potato in India". Division of Agricultural Economics, Indian Agricultural Research Institute, New Delhi.
33. Sodhiya, H. C. (1989): Growth Trends in Area, Production and Productivity of Cereals, Pulses and Oil Seeds in Sagar Division. Regional Agricultural Research Station, Madhya Pradesh, India.
34. Tomek, W. G. and K. L. Robinson. 1990. *Agricultural Product Prices*. 3rd edition, Cornell University Press, Ithaca and London.
35. Wahid, D. A. 1995. "An Analysis of Price Fluctuation and Growth of Some Major Rabi Crops in Bangladesh". Master Thesis, Department of Cooperation & Marketing, Bangladesh Agricultural University, Mymensingh.
36. Waugh, F. G. 1944. "Does the Consumer Benefit from the Price Instability?" *Quarterly Journal of Economics* 58, pp. 602-14.

A COMPARATIVE ECONOMIC STUDY OF BRRI DHAN51 AND BR11 RICE PRODUCTION IN A SELECTED AREA OF RANGPUR DISTRICT IN BANGLADESH

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ABSTRACT

This study is designed to determine relative profitability of an early variety BRRI Dhan51 and BR11 in greater Rangpur region. In total 60 farmers were selected purposively from one village of Sadar Upazila of Rangpur District; out of which 30 farmers are producing BRRI Dhan51 and 30 farmers producing BR11. Tabular and statistical analyses were done to achieve the objectives of the study. It was revealed that the cultivation of both BRRI Dhan51 and BR11 were profitable from the view point of farmers. Per hectare gross cost of production of BRRI Dhan51 and BR11 were Tk. 55105.21 and Tk. 56185.79 respectively and the corresponding gross returns were Tk. 143488.27 and Tk. 63648.676. The per hectare net returns of producing of BRRI Dhan51 and BR11 were Tk. 88383.06 and Tk. 7462.89 respectively. The results indicated that BRRI Dhan51 was much more profitable than that of BR11. It was observed that most of the variables included in Cobb-Douglas production function had significant impact on BRRI Dhan51 and BR11 rice production. All the five variables included in the model had positive impact on returns from both BRRI Dhan51 and BR11 rice production. The study also identified some problems faced by the producers in producing BRRI Dhan51 and BR11 rice.

KEYWORDS

Comparative study, profitability, adoption, BRRI Dhan51, BR11.

INTRODUCTION

Bangladesh is predominantly an agricultural country. Agriculture is the prominent sector in the economy of Bangladesh and a vital determinant of economic growth and livelihood improvement of the rural farmers. The agricultural sector comprises crops, forests, fisheries and livestock. This sector contributes 19.95 percent to the Gross Domestic Product (GDP) of which crop sector alone contributes 11.15 percent (BBS, 2009). Economic development largely depends on the agricultural development which is possible only through distribution and utilization of modern technology, such as, hybrid seeds, power tiller, chemical fertilizers, pesticides, irrigation, etc. A comprehensive study incorporating impact of technological change on farmer's income and poverty alleviation is important. A rapid and substantial increase in agricultural productivity is essential to meet the growing demand for food grain emerging from high population growth. About three-fourth of the total cropped area is allocated to rice sector and hence, rice has exclusively led the growth of crop agriculture. Rice is the most important food crop in the developing countries. About 90% of the population in Bangladesh depends on rice as a major food. By the year 2020; Bangladesh will require 35.5 million tons of rice to meet the food demand of its population which is expected to increase to 173 million (IRRI, 2006). To attain this production target, average yield will have to increase up to 3.4 ton/ha (BRRI, 1997). In this context, flood tolerant rice technology seems to open a window of opportunity for increasing rice production.

In Bangladesh, 20 percent of the rice land is flood prone and the country typically suffers several major floods each year. As water inundates rice field, BRRI Dhan51 helps rice plant remain metabolically inert for up to two to three weeks. BRRI Dhan51 can survive up to 10 days to complete submergence at vegetative stage. It matures within 130-134 days and grows as high as 75-85cm. It requires less fertilizer than other varieties, has bigger stem heavier when threshed and contains good quality in terms of taste. The experiment will be conducted to use the flood prone rice land as well as to increase the yield of rice production. The conventional varieties of rice in Bangladesh are comparatively lower-yielding and it seems impossible to change this yield with reachable resources under the prevailing situation. At this stage, hybrid varieties of rice may be a breakthrough, which could overcome perpetual yield stagnancy. To feed ever increasing hungry millions of Bangladesh, flood tolerant variety like BRRI Dhan51 will be one of the best options.

The rates of expansion of BRRI Dhan51 and BR11 varieties of aman rice acreage and production depend on the profitability of their production. The researchers reviewed Chowdhury, 1999; Dey et al., 2001; Jabbar et al., 1993; Khan et al., 1999 and Mustafi et al., 2005; but no one conducted the comparison of BRRI Dhan51 and BR11. In this regard, the structures of costs and returns of BRRI Dhan51 and BR11 rice cultivation are important for investigation. Accordingly, the overall objective of the present study was to assess the relative profitability of growing BRRI Dhan51 and BR11 rice. The present study had the following specific objectives:

1. To assess the socio-economic characteristics of the BRRI Dhan51 and BR11 producers;
2. To compare relative profitability of producing BRRI Dhan51 and BR11;
3. To explore the factors affecting adoption of BRRI Dhan51;
4. To formulate suggestions for future guidelines.

METHODOLOGY

Due to limitation of time and resources, a small area with uniform topographical and ecological characteristics was considered. Keeping in view the objectives, the present study was conducted in one village, Dhorsana in Rangpur sadar upazila under Rangpur district. Survey method was applied to collect primary data for the study. For sampling, at first, a list of 60 respondents who produced BRRI Dhan51 and BR11 rice were prepared. Then from the list, 30 farmers of BRRI Dhan51 and 30 farmers of BR11 were selected randomly. The data were collected by the researcher himself during August to November, 2011. After that, data were analyzed by using tabular and econometric techniques. Farm business analytical techniques, such as enterprise costing and gross margin analysis were used for analysis of profitability; and finally, Cobb-Douglas production function (Gujarati, 1995) was used to examine the effects of the explanatory variables on the dependent variables, in the production of BRRI Dhan51 and BR11 rice.

RESULTS AND DISCUSSION

It is evident from Table 1 that 23 per cent of BRR1 Dhan51 farmers are illiterate, 20 per cent has primary education, 15 per cent has up to secondary education and only 2 per cent has above secondary level education. On the other hand, these percentages for BR11 growing farmers are 18, 32, 45 and 5 respectively. It was found that the percentage of illiterate farmers in the case of BRR1 Dhan51 growers was higher than that of BR11 growers.

TABLE 1: EDUCATIONAL STATUS OF THE RESPONDENTS

Categories	BRR1 Dhan51 farmers		BR11 farmers		All farmers	
	No.	%	No.	%	No.	%
Illiterate	7	23	4	13	11	18
Primary level	6	20	13	43	19	32
Secondary level	15	15	12	40	27	45
Above secondary level	2	2	1	4	3	5
Total	30	30	30	100	60	100

Source: Field Survey, 2010

Table 2 shows that, in the case of BRR1 Dhan51 growers, 84 per cent farmers are engaged in agriculture, 3 per cent in business and 13 per cent in service as their main occupation. In the case of BR11 growers, 67 per cent farmers are engaged in agriculture, 23 per cent in business and 10 percent engaged in service as their main occupation. The percentage of agriculture in the case of BR11 growers is less than that of BRR1 Dhan51 growers. It is observed that there is no major difference in occupational status of BRR1 Dhan51 growers and BR 11 growers.

TABLE 2: OCCUPATIONAL STATUS OF SAMPLE FARMERS

Occupation	BRR1 Dhan51 farmers		BR11 farmers		All farmers	
	Main	Subsidiary	Main	Subsidiary	Main	Subsidiary
Agriculture	25	5	20	7	45	12
Business	1	6	7	4	7	10
Service	4	2	3	2	7	4
Total	30	13	30	13	59	26

Source: Field Survey, 2010

The analysis of cost and return revealed that human labor was an important element for producing both types of rice production. On an average, per hectare human labor requirement was 145.04 man-days for BRR1 Dhan51 rice and in the case of BR11 rice cultivation, it was 143.67 man-days.

Total cost of labor was Tk. 37003.52 and Tk. 32201.24 for BRR1 Dhan51 and BR11 rice respectively. Power tiller was used for tillage operation and most farmers in the study area used this mechanical method and the costs were Tk. 6036.87 and Tk. 5742.29 for BRR1 Dhan51 and BR11 rice cultivation respectively. Per hectare total material input costs in producing BRR1 Dhan51 and BR11 rice were Tk. 51860.05 and Tk. 53741.64 respectively. The material inputs included costs of human labor, tillage operation, seeds/seedling, fertilizers and irrigation.

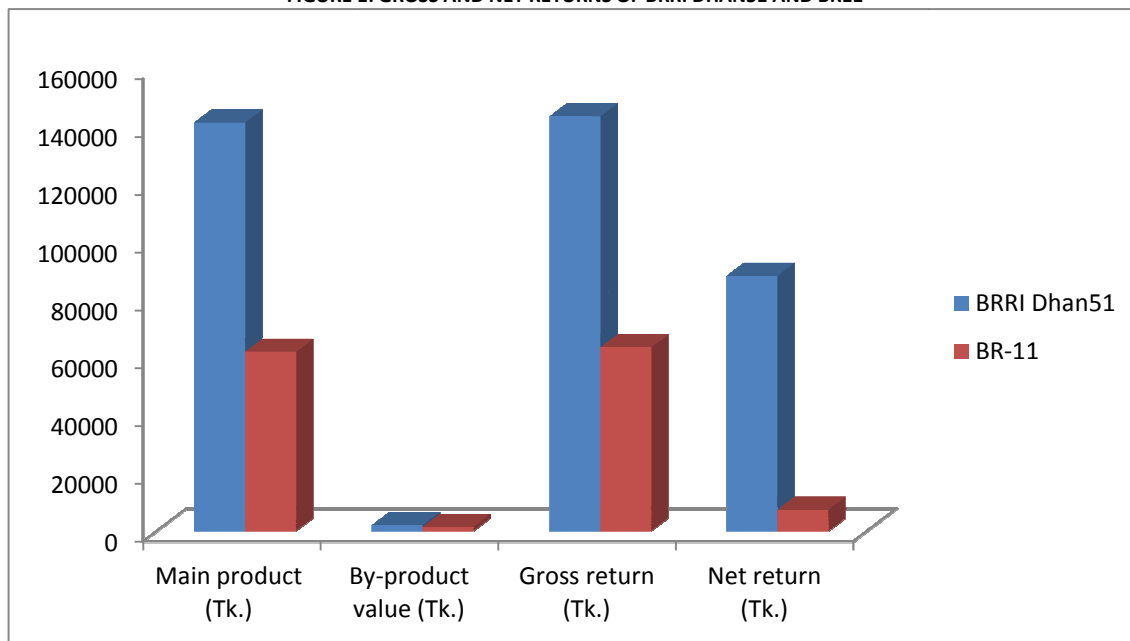
TABLE 3: PER HECTARE PRODUCTION COSTS AND RETURNS OF BRR1 DHAN51 AND BR11

Items	Value (Tk.) for BRR1 Dhan51	Value (Tk.) for BR11
A. Gross Return	143488.27	63648.676
B. Variable cost		
Human labor	37003.52	32201.24
Power tiller	6036.87	5742.29
Irrigation	4814.01	4105.23
Seed	653.49	2084.3
Urea	2502.16	3298.21
TSP	-	4208.82
MP	-	1475.95
Miscellaneous cost	850.00	625.00
Total variable cost	51860.05	53741.64
C. Fixed cost		
Interest on operating capital	1152.16	915.15
Land rental cost	2093.00	1529.00
Total Fixed cost	3245.16	2444.15
D. Gross cost (B+C)	55105.21	56185.79
E. Gross margin (A-B)	91628.22	9907.036
F. Net Return (A-D)	88383.06	7462.89
G. Benefit Cost Ratio (A/D) (undiscounted)	2.60	1.13

Source: Field survey, 2010

Per hectare irrigation cost in the study area were Tk. 4814.01 and Tk. 4105.23 for BRR1 Dhan51 and BR11 rice respectively. The findings of the study showed that the average yields of BRR1 Dhan51 and BR11 rice amounted to 5004.44 kg and 3235.53 kg per hectare respectively. In monetary terms, the respective values were Tk. 141425.47 and Tk. 62122.176. Thus the yield as well as the value of output per hectare for BRR1 Dhan51 was found substantially higher than that of BR11 rice. The gross return (including by-product) from BRR1 Dhan51 and BR11 rice was estimated at Tk. 143488.27 and Tk. 63648.676 respectively. The average net returns per hectare were found to be Tk. 88383.05 and Tk. 7462.89.

FIGURE 1: GROSS AND NET RETURNS OF BRRI DHAN51 AND BR11



In this study, the Cobb-Douglas production function model was used to determine the effects of some important inputs on value of output for BRRI Dhan51 and BR11 rice. The chosen explanatory variables were human labor, power tiller, seed, fertilizer, and irrigation. Findings from the log-log specification are measured in Table 4.

TABLE 4: COEFFICIENT AND RELATED STATISTICS OF C-D PRODUCTION FUNCTION OF BRRI DHAN51

Explanatory variable	BRRI Dhan51			BR11		
	Estimated co- efficient	Standard errors	T- value	Estimated co- efficient	Standard errors	T- value
Constant	3.285	0.621	5.282	1.480	0.724	2.044
Human labor cost (X ₁)	0.110**	0.052**	2.11	0.107**	0.043**	2.494
Seed cost (X ₂)	0.350**	0.150**	2.341	0.220**	0.086**	2.572
Fertilizer cost (X ₃)	0.202**	0.080**	2.541	0.103**	0.047**	2.173
Irrigation cost (X ₄)	0.040**	0.012**	3.152	0.028**	0.013**	2.052
Hiring of power tiller (X ₅)	0.215**	0.098**	2.207	0.173**	0.080**	2.14
R ²	0.75			0.65		
Adjusted R ²	0.65			0.50		
F-value	6.961			4.472		
Return to scale	0.92			0.63		

Source: Field Survey, 2010

Note: * Significant at 1 percent level, ** Significant at 5 percent level and *** Significant at 10 percent level

The estimated Cobb-Douglas production function for BRRI Dhan51 was:

$$\ln Y_1 = 3.285 + 0.110 \ln X_1 + 0.350 \ln X_2 + 0.202 \ln X_3 + 0.043 \ln X_4 + 0.215 \ln X_5$$

Again the estimated production function for BR11 was:

$$\ln Y_2 = 1.480 + 0.107 \ln X_1 + 0.220 \ln X_2 + 0.103 \ln X_3 + 0.028 \ln X_4 + 0.173 \ln X_5$$

Estimated values of the relevant co-efficient revealed that among the included variables costs of human labor, seed, fertilizer and irrigation had significant impact on the output of both BRRI Dhan51 and BR11 rice production. The summation of the estimated coefficients was 0.92 and 0.63 respectively for BRRI Dhan51 and BR11, which implies diminishing returns to scale. The study also identified the problems and constraints in BRRI Dhan51 and BR11 rice production. Some major problems faced by the farmers were impure seed, seed collection, low germination rate, high price of seed, high price of fertilizer and insecticides, attack by insect, lack of marketing facilities and market information and dominance of intermediaries.

FACTORS AFFECTING ADOPTION OF BRRI DHAN51

There are many factors whose are adopted in the cultivation of aman rice in the month of September to December. Those factors that influencing the adoption BRRI Dhan51 are discussed below:

SUBMERGENCE-RESISTANT VARIETY

It is the tremendous invention of BRRI for the people of Bangladesh because about 20 percent of the rice land is flood prone and the country typically suffers several major floods each year. As water inundates rice field, BRRI Dhan51 helps rice plant remain metabolically inert for up to two to three weeks. BRRI Dhan51 can survive up to 10 days to complete submergence at vegetative stage. It matures within 130-134 days and grows as high as 75-85cm. To ensure food security amid threats of climate change, the submergence-tolerant varieties are a breakthrough.

EARLY VARIETY

Early variety is another factor for adopting BRRI Dhan51. As if the production of this variety is not hampered by the flood water and this is why, farmers preferred this variety. Before it's invention, farmers used to plant different aman varieties of rice at the end of the month of September- October. Now the situation is completely changed, because farmers were planting this early aman variety in the beginning of September and October.

HIGHER YIELD

It is a new variety. Its annual yield is much higher than that of any variety of aman seasons. For this reason farmers showed interest especially in the middle and eastern region of Bangladesh. It's per hectare yield is 4.5 to 5 ton per year.

LESS FERTILIZER AND INSECTICIDES

To cultivate this type of variety, the costs of fertilizer and insecticides are less than any other aman rice varieties.

UTILIZATION OF LAND

Before the release of flood tolerant variety BRRI Dhan51, most of the flood affected land of that area was become fallow. For this reason, it was quite difficult to cultivate more than two crops in a year. But after the coming of this variety, it is possible to cultivate three crops in the same land in different times. By using this rice variety it can be ensured proper utilization of land.

WEED RESISTANCE

The consequence of weed in this variety is comparatively less than that of any aman varieties and the consequence is lower cost of production and higher output.

VARIETALS TRACKING

To examine the varieties tracking system of BRRI Dhan51 and BR11 growing farmers, the varieties tracking system of the sample farmers was divided in to four categories. These are (i) (0 - 1) km (ii) (1.5- 2.5) km (iii) (3- 4.5) km and 5 km and above.

TABLE 5: VARIETALS TRACKING OF BRRI DHAN51 AND BR11

Distance	BRRI Dhan51 farmers		BR11 farmers		All farmers	
	No.	%	No.	%	No.	%
(0 - 1) km	2	6.67	5	16.67	7	11.67
(1.5- 2.5) km	5	16.67	7	23.33	12	20
(3- 4.5) km	7	23.33	15	50	22	36.67
5 km and above	16	53.33	3	10	19	31.67
Total	30	100	30	100	60	100

Source: Field survey, 2010

Table 5 shows that in the study area, 53.33 percent BRRI Dhan51 rice producers got their seed from that place for whom distance was 5 km and above from their house. About Twenty three percent farmers got seed from distance of (3- 4.5) km, 16.67 percent got seed from distances of (1.5- 2.5) km, and 6.67 percent from distances of (0 - 1) km. On the other hand these percentages for BR11 growing farmers are 11.67, 20, 36.67 and 31.67 respectively. Farmers are very much interested to receive this BRRI Dhan51 seed to grow in their land. They collected seed from long distance and with very high price. So it is clear that BRRI Dhan51 is rapidly spreading in the study region.

CONCLUSION AND RECOMMENDATIONS

From the results of the present study, it could be concluded that during flood time in the study area, farmers did not get expected returns as well as profit from the cultivation cost. Farmers usually used to produce BR11 as commonly named MUKTA rice which production was good but did not have flood tolerance. On the other hand, BRRI Dhan51 has brought a new era to the rice producers in the study area which had the capability to survive from flood water. After submerging even 10-15 days, its production did not fluctuate. Farmers got their expected results, could utilize their land property and the risk is comparatively lower than any other *aman* varieties. In the study area, BRRI Dhan51 rice variety is much popular and it should spread all over the country which will increase our national production in *aman* season as well as ensure our food security. Bangladesh is a small country with a large population, so to feed the huge population and to ensure proper utilization of land, producing BRRI Dhan51 rice could be the best option in *aman* season.

It could be noticed from the result that BRRI Dhan51 was found more profitable than BR11 variety with respect to yield, net return, gross return and time factor. The following recommendations are made on the basis of the present study:

- (i) Government and non-government research institutions should strengthen their human resources for BRRI Dhan51 rice research and seed production.
- (ii) In the production of BRRI Dhan51, seed costs should be decreased and the supply of seeds should be increased. So that farmers will be capable to produce BRRI Dhan51 rice.
- (iii) The price of fertilizer and pesticides should be regulated strictly by the government.
- (iv) Government may provide short term training programme on production system of BRRI Dhan51.

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REFERENCES

1. BBS (2009). Statistical Year Book of Bangladesh, Bangladesh Bureau of Statistics, Ministry in Planning, Government of the Peoples Republic of Bangladesh, Dhaka.
2. BRRI (1997). Bangladesh Rice Research Institute Serving The Nation, Publication No.119, Bangladesh Rice Research Institute, Joydebpur, Gazipur, Bangladesh.
3. Chowdhury, M. R. I. (1997). Agronomic Parameters of some selected Rice varieties/mutants as Affected by method of Transplanting in Boro season. An M.S. Thesis submitted to the Department of Agronomy, Bangladesh Agricultural University, Mymensingh.
4. Dey, P. K and Mustafi, B. A. A (2001). Economic returns to investment on BR 11 variety of rice in T.Aman season, Agricultural Economics Division, Bangladesh Rice Research Institute, Gazipur, Bangladesh.
5. Dey, P. K and Mustafi, B. A. A (2001). Economic returns to investment on BR11 variety of rice in T.Aman season. Agricultural Economics Division, Bangladesh Rice Research Institute, Gazipur, Bangladesh.
6. Gujarati, D.N. (1995) Basic Econometrics, 3rd edn. McGraw Hill Inc, New York.
7. IRRI Rice Almanac. (2006). Published by International Rice Research Institute, Manila. Philippine.
8. Jabbar, M. A. and Alam, M. S. (1993). Adoption of modern Rice varieties in Bangladesh. Bangladesh Journal of Agril. Econ. 16(2), p. 77-95
9. Khan, K.; Islam, M. N. and Rahman, M. M. (1999). Study on yield performance of some newly released Boro rice varieties under farmers condition at FSRD site, Palima of Tangail districts. BRRI, Joydebpur, Gazipur.
10. Mustafi, B. A. A. and Jabber A. M (2005). Scenario of Modern Rice Cultivation in Bangladesh. Agricultural Economics Division, Bangladesh Rice Research Institute, Gazipur, Bangladesh.

THE IMPACT OF CORPORATE GOVERNANCE MECHANISMS ON EARNINGS MANAGEMENT: EVIDENCE FROM BANKS IN ETHIOPIA

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ABSTRACT

This research examined the impact of corporate governance mechanisms on earnings management through discretionary loan loss provision, using panel data of 10 banks for the period 2006 to 2010. The study is crucial given the fact that there is no research on bank earnings management in Ethiopia. Based on discretionary loan loss provision model and random effect GLS regression, the study finds that education, experience and objectivity of internal auditor are negatively and significantly associated with earnings management. The study also finds a negative and significant relation between audit committee meeting frequency, active general board of directors and earnings management. The study contributes to the understanding of the relationship between internal audit quality, audit committee, board characteristics and earnings management in banks, which has been less explored in prior studies. The findings of this study have implications for banks, bank regulators and bank owners in that the study finds internal audit quality, audit committee meeting and active general board of directors as important mechanisms of banks' corporate governance.

KEYWORDS

Banks, Corporate governance, Discretionary loan loss provision, Earnings management, Ethiopia.

INTRODUCTION

According to Agency theory, managers and shareholders should have an identical objective that is to maximize the firm's value. An agent is required to run the firm on behalf of the owners and makes decisions in favor of them. However, sometimes managers of the firm might perform in best of their interest at the cost of shareholders (Jensen & Meckling, 1976). One of the potential approaches that managers exercise such personal benefit is via earnings management, because it is carried out purposefully and knowingly to mislead stakeholders or influence earnings based compensation.

Earnings based compensation is a contract regarding bonus paid to managers and directly tied to a target net income. This benefit therefore, induces managers involve in earnings management by manipulating accounting standards or structuring business transactions to reach the target net income (Healy and Wahlen, 1999). In a bad period, where earnings are expected to be less than the target, managers reduce or delay recognition of expenses (e.g., provisions for loan losses) to increase earnings. Conversely, in good period managers defer the recognition of revenue or increase expenses to reduce earnings and use them in a bad period. In addition, managers may also manage earnings to avoid loss, violation of debt covenant (if debt agreements rely on the reported earnings), to reduce earnings variance and to meet capital adequacy ratio requirement. However, the intention is unobservable; no one can be certain whether it is performed to attain personal benefit or firms' benefit (Yaping, 2005). In short, this highlights how the problem emerges.

Earnings management has similar traits both in non-financial and financial firms; the only difference is a technique in which managers practice it. In case of financial firms particularly in banks, earnings management arises through estimation of loan loss provisions. Bank managers determine the level of provision for loan loss to capture the expected loss on loan portfolios. Since the amount of the provision is subject to managers' estimation and judgment, it may include bias, which is called discretionary loan loss provision (unfair portion of provision for loan loss). With this regard, National Bank of Ethiopia requires all banks to estimate adequate provisions for loan loss. This is to mean that the provisions should not be less or exceed the expected loss on loans. However, it is difficult to determine whether the loan loss provision is adequate or not. It might be individuals' benefit based estimated rather than appropriately estimated (Wall and Koch, 2000).

Despite managers' intention, discretionary loan loss provisions have enormous effect on banks operations. First, it leads to inappropriate valuation of assets and misallocation of resources. An increase in loan loss provision reduces net income and retained earnings. A decrease in loan loss provision increases net income and retained earnings. Accordingly, it distorts efficient economic activities of banks. Second, loan loss provisions may be used as a tool to reduce earnings volatility or earnings variance, which in turn improve perception of bank risk among investors and enhance stock price stability (Biurrun, 2010). Finally, discretionary loan loss provision may in part contribute to financial distress because it leads to agency problem that arises from deviation in interest between management and shareholders.

Banking industry is more regulated than other industries in Ethiopia. Nevertheless, the earnings reported by banks are not examined from earnings management viewpoint. Therefore, this study aims at assessing the relation between internal audit quality, audit committee, board characteristics and earnings management by banks in Ethiopia.

LITERATURE REVIEW

As feasible solutions to earnings management, prior researchers argue several mechanisms to reduce earnings management. For example, Yu (2004) finds that earnings management tends to be lower in companies followed by more financial analysts. Biurrun (2010) reports the role of regulation and supervision in mitigating bank earnings management. Effective audit committee and external audit quality are also suggested in literature as monitoring devices of opportunistic behavior practice (e.g., Chen et al, 2005; Lin et al., 2010). A growing number of studies explore the relation between audit committee, board characteristics, external auditor, financial analysts and earnings management in non-financial firms. However, the role of internal audit quality in reducing earnings management have been less explored both in non-financial and financial firms. Current studies using GAIN database by Prawitt et al. (2009), Lin et al. (2010) and Pizzini et al (2010) confirm that internal audit quality reduces earnings management in non-financial firms. Zhou and Chen (2004) argue audit committee and board characteristics as corporate governance mechanisms used to curb earnings management by commercial banks. However, they did not include internal audit quality in their model, which is a vital entity's corporate governance.

A variety of studies shed light on the relationship between audit committee and earnings management. However, the results are mixed. For instance, Carcello and Neal (2000), Zhou and Chen (2004), Klein (2002), and Ebrahim (2007) find a positive relation between effective audit committee (meeting frequency and

independence) and earnings management. Bedard et al. (2004) find that firms with 100 percent independent audit committee and with at least one financial expert in the audit committee are negatively associated with aggressive earnings management. They found insignificant association between the number of audit committee meeting and the level of earnings management. Effective audit committee is expected to be independent, financial experts, frequently meet and high members. In other words, audit committee might not meaningfully discharge its responsibility unless it is independent, active as well as possess financial expertise. The presence of independent and accounting or finance experts in the audit committee are particularly important for effectiveness of audit committee (Nan and Nan, 2004). The Blue Ribbon Committee (1999), and Krishnan (2005) also address the importance of the financial expertise of audit committee members and argue that financial expertise of audit committee members is important to meaningfully deal with the complexity of financial reports and reduces the occurrence of financial misstatement.

DeZoort and Salterio (2001) argue that audit committee members with financial reporting and auditing background is more likely to understand auditor judgments and to support the auditor in auditor-management disagreements. In addition, Piot and Janin (2007) suggests the presence of audit committee appear to be an effective device to protect discretion behavior.

Board of directors represents the shareholders and make decisions that are in the best of the interest of shareholders. Sanjaya (2011) shows the higher agency problem within a company leads to higher earnings management. In this condition, the role of board of director is to align the interest of shareholders and managers (Jensen and Meckling 1976). Specifically, board of directors is commonly responsible for hiring, evaluating, firing top management, assigning duties, providing expert advice to management, keeping shareholders' interest and providing reports about the company's performance to them, reviewing compensation for managers and directors, corporate strategies, budget and financial statement, changes to capital structure and ensuring effective communication with shareholders and stakeholders (Nan and Nan, 2004). Board of directors is also responsible to assure the adequacy of loan loss provisions (Directive No. SBB/43/ 2008, National bank of Ethiopia).

There are controversial notions on how a board of directors would be structured. According to agency theory, a board needs to comprise high proportion of outside directors. It suggests that due to their presumed independence from management, they are more effective in decision and leads to better firm performance (Jensen and Meckling, 1976). In contrast, stewardship theory notes high proportion of inside directors in the board. It also suggests inside directors are favored for their depth of knowledge, access to current operating information, technical expertise and commitment to their firm (Donaldson and Davis, 1991). Agency theory also believes that high board of directors is more efficient in making decisions and more control managers of the firm. On the other hand, there is an idea that large board size may not be productive in decision because of ineffective communication among directors (Nan and Nan, 2004).

Empirical studies also provide evidences that are consistent to the theories. Iqbal and Strong (2010), Cornett et al. (2009), Ebrahim (2007), and Xie et al. (2003), find that a larger board and a percentage of independent directors in a board are associated with lower levels of discretionary accruals, indicating a larger board and high proportion of independent directors is more effective in monitoring such accruals. They also suggest larger boards with more directors having diverse educational and technical backgrounds and skills have multiple perspectives to improve the quality of a firm's decision-making and are more likely to protect shareholders' interests. Conversely, Zhou and Chen (2004) find insignificant association between independence of directors and earnings management. Ali shah et al. (2009), and Epps and Ismail (2009) report a positive relationship between discretionary accrual and board size, suggesting the larger the board, the more ineffective in its monitoring function. As a practical matter, how much time and effort directors devote to board meetings may also be an indicator of board effectiveness, for instance, the frequency and length of board meetings, and the directors' attendance rate (Nan and Nan, 2004).

Previous studies (Chen et al., 2005; Prawitt et al., 2009; Lin et al., 2010) have found several variables in addition to internal audit function (IAF), audit committee (AC) and board characteristics (BC) that are likely to affect earnings management. However, data unavailability constrains the number of control variables that can be included in the model to only two variables: earnings before tax and loan loss provisions (EBTP) and financial leverage.

Bank managers also use EBTP to manage earnings. In consistency to this view, Zhou and Chen (2004) and Fonseca and Gonzalez (2008) find a positive and significant relationship between EBTP and discretionary loan loss provision. While EBTP is high, managers increase discretionary loan loss provision to decrease earnings. Conversely, they decrease discretionary loan loss provision when EBTP is low to increase earnings.

The empirical evidences on the relation between leverage and earnings management is mixed. Piot and Janin (2007) reports a negative relation between leverage and discretionary accrual, suggesting debt holder may represent a safeguard device in income decreasing earnings management. According to this finding, income manipulation is less or not the matter in high leveraged firms like banks. However, Abdelghany (2005) finds that high leverage firms manage earnings in order to avoid debt covenant violation. In a condition that a debt agreement between firms and lenders rely on the earnings reported, managers of the firm may engage in earnings manipulation to make the agreement effective and avoid violation.

OBJECTIVES OF THE STUDY

This study intends to investigate the impact of corporate governance mechanisms on earnings management by banks as measured by discretionary loan loss provision. More specifically the study aims at achieving the following objectives:

- ❖ To critically examine the potential role of internal audit quality in mitigating earnings management
- ❖ To investigate the extent to which effective audit committee plays a role in constraining earnings management
- ❖ To examine the role that effective board of directors plays in reducing earnings management

RESEARCH HYPOTHESES

After reviewing and weighting empirical studies on how internal audit function quality, effective audit committee and board of directors associate to earnings management, three directional hypotheses are developed as follows:

H1: *An Internal Audit Function Quality is significantly associated with low level of Earnings Management*

H2: *An Effective Audit Committee is significantly related to low level of Earnings Management*

H3: *An Effective Board of Directors is significantly associated with low level of Earnings Management*

SIGNIFICANCE OF THE STUDY

This study provides important contributions to the literature of the relationship between internal audit quality, audit committee, board characteristics and earnings management by banks. The findings of the study may have direct contributions to banks, regulators and other stakeholders in that it finds internal audit quality (education level, professional experience and independence of internal auditors), audit committee meeting frequency and active general board of directors as important indicators of effective corporate governance. Therefore, banks can pay careful attention to their internal audit practice as it plays potential role in enhancing the integrity and reliability of financial reports. Banks may also consider audit committee meeting along with active board of directors as important control devices for the managers.

The results may serve bank regulators to consider internal audit functions as a vigor element of bank's corporate governance that previously did not get substantial attention. The regulator may also need the results to identify the key mechanisms for banks effective corporate governance that would highly increase the soundness of banks performance.

The results provide hint to the general shareholders on how to establish effective corporate governance that could highly reduce interest conflict. Previously, shareholders have relied on the general board of directors and external auditor reports to hear about their bank operations. In addition, these results provide important governance areas that shareholders need to give consideration to make bank managers effectively serve their interest.

RESEARCH METHODOLOGY**SAMPLE AND SAMPLING TECHNIQUES**

The population from which the sample is drawn for this study includes all banks (15 banks as of 2010) operating in the country. We exclude other financial firms like insurance and microfinance because their operating system and reporting procedure is different from banks. Indeed, the way in which managers manipulate earnings differs from firm to firm, for example at banks, estimating loan loss provision is subject to earnings management, which is not a case at other firms. For this reason, study on earnings management requires to emphasis on a single industry rather than comprehensive industries. Firms in a single industry are expected to have identical operational system and use similar techniques to manage earnings. As the banks with the required data are limited in number, we selected banks which have six years financial data, and excluded banks with less than six years operating life. Specifically, ten banks (three public and seven private banks) were selected based on judgmental sampling. This sampling technique is used because banks were selected in terms of financial data availability for six years. As a result, the study has 50 observations. The time period covered is from 2006 to 2010.

METHOD OF DATA COLLECTION

This study used two sources of data: primary data and secondary data. Primary data was gathered through questionnaire. Secondary data include financial reports i.e., balance sheet, income statement and notes to financial reports (2005 to 2010) and directly collected from banks. The data on inflation rate was collected from National Bank of Ethiopia. The financial data for 2005 was collected only to compute the ratio of variables scaled by lagged total assets and outstanding loans.

MODEL SPECIFICATION AND MEASURING VARIABLES**MEASURING EARNINGS MANAGEMENT**

Following Beatty et al. (2002) and Nichols et al. (2008) to detect earnings management, we break down loan loss provision into two parts: discretionary and nondiscretionary, of which the first is the proxy for earnings management. As they cannot be observed directly from financial statements, they are estimated indirectly. In a first step, a model is used to predict the level of loan loss provisions. In a second step, discretionary loan loss provisions are calculated as the reported loan loss provisions minus the predicted loan loss provision.

To estimate loan loss provisions, we run the following panel regression model:

$$LLP_{i,t} / TL_{i,t-1} = \beta_0 + \beta_1 (\Delta LOAN_{i,t} / TL_{i,t-1}) + \beta_2 (LLA_{i,t-1} / TL_{i,t-1}) + \beta_3 (GROWTH_{i,t} / TA_{i,t-1}) + \beta_4 \ln TA_{i,t} + \beta_5 INFL_{i,t} + \beta_6 (OUTLOAN_{i,t} / TA_{i,t-1}) + \varepsilon_{i,t} \quad (1)$$

Where:

i	=	bank index
t	=	year index
$LLP_{i,t}$	=	loan loss provision
$TL_{i,t-1}$	=	total loan
$TA_{i,t-1}$	=	total assets
$\Delta LOAN_{i,t}$	=	change in total loans
$LLA_{i,t-1}$	=	total allowance for loan losses
$GROWTH_{i,t}$	=	change in total revenue
$\ln TA_{i,t}$	=	natural logarithm of total assets
$INFL_{i,t}$	=	general inflation rate
$OUTLOAN_{i,t}$	=	outstanding loans
$\varepsilon_{i,t}$	=	residual term = $\hat{\eta}_i + \alpha_{i,t}$

We then estimate nondiscretionary LLP using the estimated $\hat{\beta}_0, \hat{\beta}_1, \hat{\beta}_2, \hat{\beta}_3, \hat{\beta}_4, \hat{\beta}_5$ and $\hat{\beta}_6$

$$NLLP_{i,t} / TL_{i,t-1} = \hat{\beta}_0 + \hat{\beta}_1 (\Delta LOAN_{i,t} / TL_{i,t-1}) + \hat{\beta}_2 (LLA_{i,t-1} / TL_{i,t-1}) + \hat{\beta}_3 (GROWTH_{i,t} / TA_{i,t-1}) + \hat{\beta}_4 \ln TA_{i,t} + \hat{\beta}_5 INFL_{i,t} + \hat{\beta}_6 (OUTLOAN_{i,t} / TA_{i,t-1}) \quad (2)$$

Where:

$NLLP_{i,t}$ = non discretionary LLP

Discretionary LLP can be estimated by deducting equation (2) from equation (1) as follows:

$$DLLP_{i,t} = LLP_{i,t} - NLLP_{i,t} \quad (3)$$

Where:

$DLLP_{i,t}$ = Discretionary LLP

Furthermore, managers may manage earnings up or down ward. However, in this study, the absolute value of DLLP is considered.

MEASURING INDEPENDENT VARIABLES**I. INTERNAL AUDIT QUALITY**

Professional internal audit standards and prior studies (SAS No. 9, 2007; Christopher et al., 2008; Prawitt et al., 2009; Lin et al., 2010; Pizzini et al., 2010) suggest internal audit function (IAF) quality characteristics entail competence, objectivity, fieldwork quality and size. In measuring competence, we used two variables as advised by Prawitt et al., (2009), namely *Education* and *Experience*. As internal auditor is more competent, he /she can effectively does internal audit practice and reduce the probability of income manipulation by managers. In this study, *education* is defined as a percentage of auditing staff members who have accounting background (i.e., diploma, 1st degree, 2nd degree or professional certificate in accounting and auditing). *Experience* is defined as the average experience of auditing staff members as auditor. *Objectivity* is related to the reporting line of the internal auditor within the entity (SAS 9, 2007, paragraph, 10). Following this standard, we make objectivity as indicator variable that takes one, if the internal auditor reports to an officer of sufficient status to ensure the internal audit quality (Audit Committee or Board of Director) and zero if not. One can expect that internal auditor is independent if he/she directly communicates to and reports to the board/ audit committee. The literature also suggests that internal audit size as an important factor of internal audit function. Internal audit size is the number of auditing staff. Generally, this study defines internal audit quality by education level, experience, objectivity and size.

II. AUDIT COMMITTEE

Following Blue Ribbon Committee (1999) and Zhou and Chen (2004), the study employed three variables as indicators of effectiveness of audit committee; namely *independence*, *meeting frequency* and *financial expertise*. *Independent audit committee* is defined as a percentage of outside directors (who are not employees or are non- management of the bank) in the audit committee. *Audit committee meeting* is defined by the number of times audit committee meeting held per annum. For the purpose of this study, *financial expertise* is defined as a percentage of audit committee members with accounting, auditing and finance expertise (who have diploma, 1st degree, 2nd degree or professional certificate in accounting, auditing and finance).

III. BOARD CHARACTERISTICS

The existing literature suggests various variables that have important contributions for board of directors' effectiveness, for example, independence, size, meeting, attendance rate on meeting, hours spent per meeting, managerial ownership, activeness of outside directors and the general board of directors (Nan and Nan, 2004;). However, due to data unavailability, we considered only four variables, which are expected to be the major factors for an effective board. These are *board size*, *independent directors*, *activeness of independent directors*, and *activeness of the general board of directors*. *Board size* is defined as the number of directors who serve on a board. *Independence of directors* is defined as a percentage of outside directors in the board and who are not employees of the bank. *Active independent directors* is defined as the extent that the independent directors actively participate in board discussion, altering or adding and disapproving board meeting agenda set by chief executive officer when appropriate. Following Nan and Nan (2004), the study measured this variable using three questions formed with continuous scale and coded as 0- Never, 1- Rarely, 2- Sometimes and 3- Regularly. To make a single value for this variable first, the response for each question is added together, and then, divided by its maximum value (9). Lin et al. (2010) and Pizzini et al. (2010) also used this measurement device. *Activeness of the general board of directors* is defined in terms of the degree to which board of director actively discharge their functions and

responsibilities in corporate governance. Specifically, reviewing and making final decision on appointments of senior management, compensation for senior management, corporate strategies, oversees potential conflict of interest, ensures the integrity of the bank's financial reporting and actively communicates with shareholders and stakeholders (Nan and Nan, (2004). This variable is measured using six questions formed with continuous scales and coded as 1 – strongly disagree, 2- disagree, 3- somewhat agree, 4- agree and 5- strongly agree. To construct a single variable, the response for each question is sum up together and divided by its maximum value (30).

The study included two control variables in the model: *Earnings before tax and loan loss provision (EBTP)* and financial Leverage. *Earnings before tax and loan Loss provision* is measured as dividing EBTP by lagged total assets. Leverage is measured as total debt divide by total assets. Inclusion of these control variables results in the following panel regression model

$$DLLP_{i,t} = \alpha + \beta_1 EDUIA_{i,t} + \beta_2 IAID_{i,t} + \beta_3 AVEXP_{i,t} + \beta_4 IASIZE_{i,t} + \beta_5 ACFEX_{i,t} + \beta_6 ACID_{i,t} + \beta_7 ACM_{i,t} + \beta_8 BSIZE_{i,t} + \beta_9 OSD_{i,t} + \beta_{10} ACOSD_{i,t} + \beta_{11} ACBD_{i,t} + \beta_{12} EBTP_{i,t} + \beta_{13} LEV_{i,t} + \epsilon_{i,t} \tag{4}$$

Where:

- DLLP* = discretionary loan loss provision
- EDUIA* = percentage of internal audit member with accounting background
- IAID* = independence of internal auditor
- AVEXP* = the average years of experience of internal audit staff members as auditor
- IASIZE* = number of internal audit department staff
- ACFEX* = the percentage of audit committee members with accounting, auditing and finance expertise
- ACID* = the percentage of outside directors in the audit committee
- ACM* = the number of times audit committee meeting held per annum.
- BSIZE* = the numbers of directors serve on a board
- OSD* = the percentage of outside directors in the board
- ACOSD* = activeness of outside directors
- ACBD* = activeness of the general board of directors
- EBTP* = earnings before tax and provision scaled by lagged total assets
- LEV* = total debt divided by total assets
- $\epsilon_{i,t}$ = error terms = $\eta_j + \alpha_{i,t}$

ESTIMATION METHOD

The selection of estimation methods whether fixed effect or random effect model is based on the use of the Hausman test. The Hausman test was run and the output demonstrate p- values 0.8687 for model 1 and 0.1448 for model 2 favoring random effect model in both cases. The Breusch - Pagan Lagrangian multiplier test was also used to fix on whether a random effect regression or ordinary least square (OLS) regression is appropriate. The results from the test reveal significant p- values 0.0468 and 0.0486 for mode 1 and 2, respectively again the random effect regression is appropriate. Accordingly, the estimations are made using the random effect Generalized Least Square (GLS) regression, with cluster robust standard errors. The cluster robust controls both heteroskedasticity and autocorrelation in the models.

RESULTS AND DISCUSSION

**TESTING OLS ASSUMPTIONS
MULTICOLLINEARITY**

The degree of multicollinearity among variables is measured based on variance inflation factors (VIF) suggested in the rule-of - thumb. As per this usual threshold, if the variance inflation factor on each variable is less than ten and 1 / VIF exceed 0.1, multicollinearity is not a serious problem.

TABLE 4 (a): VIF FOR MODEL 1 VARIABLES

Variable	VIF	1/VIF
LnTA	2.32	0.431452
ΔLOAN	2.00	0.499650
OUTLOAN	1.72	0.582913
GROWTH	1.45	0.687589
LLA	1.45	0.688096
INFL	1.09	0.914868
Mean VIF	1.67	

Here, the variance inflation factor (VIF) for all variables is significantly less than 10 and the 1/VIF significantly exceeds 0.1. Therefore, we concluded that multicollinearity is not a serious concern in this model.

TABLE 4 (b): VIF FOR MODEL 2 VARIABLES

VARIABLE	VIF	1/VIF
ACM	8.20	0.121961
ACFEX	4.88	0.205107
IDAC	4.30	0.232420
IASIZE	3.47	0.287895
ACOSD	3.24	0.308322
IAID	3.17	0.315203
ACBD	2.84	0.351647
AVEXP	2.40	0.416585
EBTP	2.08	0.480428
BSIZE	2.00	0.500689
LEV	1.90	0.527076
EDUIA	1.72	0.582209
OSD	1.72	0.582362
Mean VIF	3.22	

The variance inflation factor (VIF) for all variables is less than the threshold that is ten. Similarly, the 1/VIF significantly exceeds 0.1. Therefore, we concluded that multicollinearity is not a serious problem in this model.

NORMAL DISTRIBUTION OF RESIDUALS

This assumption is assessed using the Shapiro-Wilk test for normality. The p- values for the two models are insignificant and We fail to reject the null hypothesis. We conclude then the residual has normal distribution pattern.

Shapiro-Wilk W test for normal data **(Model 1)**

Variable	Obs	W	V	z	Prob>z
Residual	50	0.97829	1.021	0.044	0.48245

Shapiro-Wilk W test for normal data **(Model 2)**

Variable	Obs	W	V	z	Prob>z
Residual	50	0.97665	1.098	0.200	0.42080

REGRESSION RESULTS

Table 1 reports the Random- Effect Generalized Least Squares (GLS) results of model 1 obtained by regressing loan loss provision (LLP) on six independent variables. The model is significant at *Wald chi2 = 59.92, df = 6, p- value <0.01*. This model aimed at predicting loan loss provisions reported on the income statement.

As can be observed in Table 1, the coefficient ($\beta = .056, z = 2.54, p < 0.05$) of change in outstanding loan ($\Delta LOAN$) is positive and statistically significant. It implies an increase in outstanding loans by one percent influences loan loss provisions in positive direction by 0.056 percent. A growth of outstanding loans might be due to an increase in demand for loan or implemented liberal credit policy with low credit standard requirement. Such events therefore, may result in high loan default, which substantially increase loan loss provision.

A significant positive coefficient ($\beta = .203, z = 2.45$) on loan loss allowance (LLA) ($p < 0.05$), indicates banks use previous provisions to set the current level of provision. Zhou and Chen (2004) find a positive relation between loan loss allowance (LLA) and loan loss provisions (LLP), suggesting banks with high allowances persist to provide higher amounts for loan losses.

TABLE 1: REGRESSION RESULTS OF MODEL 1

<i>Dependent variable: Loan Loss Provision (LLP)</i>					
Variables	Expected sign	β	Robust Std. Err	z-value	p - value
Constant		-9.368	3.078	-3.04	0.002***
$\Delta LOAN$	+	.056	.022	2.54	0.011**
LLA	+	.203	.083	2.45	0.014**
GROWTH	-	-.194	.133	-1.46	0.145
LnTA	+	.658	.251	2.62	0.009***
INFL	+	.022	.014	1.52	0.128
OUTLOAN	+	3.626	1.026	3.53	0.000 ***
R- sq: = 0.5080					
Wald chi2(6) = 59.92					
Prob > chi2 = 0.0000					
N= 50					
Banks = 10 Obs. Year 2006 – 2010					
Note: ***, **, represent significance level at the 1% and 5% respectively					
LLP = $\Delta LOAN + LLA + GROWTH + LnTA + INFL + OUTLOAN$ * significant at $p < 0.01$					

The study finds that bank size (*LnTA*) influences loan loss provision positively and significantly ($\beta = .658, z = 2.62, p < 0.01$). In fact, a larger bank relatively engages in various loan transactions that may result in high loans default. Liu and Ryan (1995) argue that larger banks may have higher levels of business and hence, they are expected to have higher loan loss provision (LLP) to take account of increased activity and risk. Accordingly, this result suggests that larger banks tend to have more loan loss provision. The result in Table 1 also shows a positive and significant ($\beta = 3.626, z = 3.53, p < 0.01$) relation between outstanding loans to total asset ratio and loan loss provision. This indicates a bank with high proportion of total loan portfolios to its total asset is more likely to have higher loan loss provision.

HYPOTHESES TEST

To perform this, we follow Beatty et al.(2002); Chang et al. (2008); Zhou and Chen (2004); and Fonseca and Gonzalez (2008) using discretionary loan loss provision (DLLP) as a dependent variable to test the three hypotheses developed in this study. The study employed Random-effect Generalized least squares (GLS), with cluster robust standard error. The model is significant at *Wald chi2 (13) = 61.53, p – value < 0.01* and explains 63.09 percent (R-sq) variance in discretionary loan loss provision (DLLP). In testing hypotheses, we initially restate them in null form. Accordingly, we begin with the null hypothesis pertaining to internal audit quality that is:

Ho : *Internal Audit Quality is not significantly associated with Earnings Management*

To test this hypothesis, we used four variables as attributes of internal audit quality (IAQ), namely: *education (EDUIA), experience (AEXP), objectivity (IAID) and size (IASIZE)*. The results are summarized in Table 2. Table 2 shows a significant negative coefficient ($\beta = -.021, z = -3.05, p\text{-value} < 0.01$) on education (*EDUIA*). The result shows internal auditors' education (accounting background) is related to low earnings management. The result also argues that higher education level of internal auditors is more likely to mitigate earnings management. In deed, education level is the most important major traits of internal auditors because it determines their skills and knowledge to understand the complexity of financial process, the likelihood of income manipulation, income manipulation techniques used by managers, and even to deal with accounting standards and its application in accounting estimates, accruals, and valuation of transaction. A current study, on non-financial firms by Lin et al. (2010) support this notion that material weakness disclosure is relatively high in a firm with quality internal auditor measured by education level.

As expected, the experience of internal auditor negatively and significantly influences discretionary loan loss provision ($\beta = -.362, z = -3.26, p\text{-value} < 0.01$), demonstrating that the more experienced the auditor, the more he/she curbs earnings management. An auditor with adequate experience in auditing would carry out internal audit with high diligence.

Table 2 shows that objectivity of internal auditor is significantly and negatively (in the expected sign) related to discretionary loan loss provision ($\beta = -1.011, z = -2.53, p\text{-value} < 0.05$). It implies an internal auditor who independently performs internal audit is more likely to detect management discretion. In line with the result, Christopher et al. (2008) confirm that internal auditors are independent when they functionally report to audit committee or boards.

A significant unexpected positive coefficient on internal audit size (*IASIZE*) ($\beta = .014, z = 3.32, p < 0.01$), implies that larger internal audit staff is associated with high level of earnings management. This unexpected positive relation support the notion that internal audit size can be a proxy for the overall demand the bank has for auditing (Prawitt et al., 2009). Because a greater bank's demand for auditing may reflect its difficulty to monitor managers and thus, managers might exercise managing earnings largely. This view may hold true in the short run but it may not in the long run.

Ho : *An Effective Audit Committee is not significantly associated with Earnings Management*

As shown in Table 2, audit committee meeting (*ACM*) shows a significant negative influence on DLLP ($\beta = -.034, z = -3.76, p < 0.01$). The result implies that audit committee meeting frequency reduces the level of discretionary loan loss provision. The result argues that audit committee that meets more frequently is more likely to manage the bank's financial reports and mitigates income manipulation. In consistency to this notion, Zhou and Chen (2004) report that the number of times audit committee meeting held is negatively related to discretionary loan loss provision at commercial banks.

The coefficient on percentage of outside directors (ACID) in the audit committee is significant and unexpected positive ($\beta = .0096, z = 2.59, p < 0.01$). Existence of high outside directors in the audit committee is unproductive unless they regularly attend audit committee meeting. In such events, therefore, an increase in outside directors in the audit committee results in high discretionary loan loss provisions.

Ho : An Effective Boards of directors is not significantly associated with Earnings Management

As expected, active board of directors (ACBD) is significantly and negatively related to discretionary loan loss provision ($\beta = -.035, z = -2.33, p < 0.05$). This indicates the extent that board of directors actively carries out their responsibilities particularly: formulating long- term strategy, selecting, monitoring, and replacing chief executive officer (CEO), reviewing directors' remuneration, overseeing potential interest conflict, ensuring the integrity of financial reporting, maintaining proper disclosure and active communication with shareholders and stakeholders is associated with reduced level of discretionary loan loss provision. The coefficient on board size (BSIZE) reveals unexpected positive and significant ($\beta = .259, z = 5.35, p < 0.01$) association with DLLP. It suggests that the larger board size is related to high level of discretionary loan loss provision or earnings management. This unexpected sign may arise due to the reason that small board is more efficient with decision-making and better monitor earnings management than large board (Epps and Ismail, 2009). This result is also consistent to the notion that small board size mitigates earnings management (Ali shah et al., 2009). The percentage of outside directors (OSD) in the board shows the expected negative coefficient but highly insignificant ($\beta = -.015, p > 0.1$), while the coefficient on active outside directors (ACOSD) is unexpected positive and significant ($\beta = .030, z = 2.89, p < 0.01$). It implies that a bank with higher percentage of outside directors would relate to less income manipulation.

TABLE 2: REGRESSION RESULTS OF MODEL 2

Dependent variable : Discretionary Loan Loss Provision(DLLP)					
Variables	Expected sign	β	Robust Std. Err	z-value	p- value
Constant		3.817	2.277	1.68	0.094*
EDUIA	-	-.021	.0069	-3.05	0.002***
IAID	-	-1.011	.400	-2.53	0.012**
AVEXP	-	-.362	.111	-3.26	0.001***
IASIZE	-	.014	.003	3.32	0.001***
ACFEX	-	.0098	.008	1.29	0.198
ACID	-	.0096	.004	2.59	0.009***
ACM	-	-.034	.0091	-3.76	0.000***
BSIZE	-	.259	.048	5.35	0.000***
OSD	-	-.015	.018	-0.79	0.428
ACOSD	-	.030	.0105	2.89	0.004***
ACBD	-	-.035	.015	-2.33	0.020**
EBTP	+	.118	.095	1.24	0.215
LEV	+	-.6009	.516	-1.17	0.244

R-sq: = 0.6309
Wald chi2 (13) = 61.53
Prob > chi2 = 0.0000
N= 50
Note: ***, **, *, represent significance level at the 1%, 5% and 10% respectively
DLLP = EDUIA +IAID +AVEXP + IASIZE +ACFEX +ACID + ACM + BSIZE +OSD + ACOSD + ABD + EBTP + LEV* significant at $p < 0.01$

CONCLUSIONS

This study examined the impact corporate governance mechanisms, i.e., internal audit quality, effective audit committee and effective boards of directors have on earnings management, using five years data of ten Ethiopian banks through the period 2006 to 2010. The study revealed that education (accounting background), experience, and objectivity of internal auditor are significantly and negatively associated to earnings management. It suggests a bank with competent and independent internal auditors would substantially mitigate management discretion and provides quality financial information to shareholders and stakeholders. The study finds that audit committee meeting frequency is inversely and significantly related to earnings management. It implies that the more audit committee meets frequently, the more it evaluates, analyzes and ensures the financial reporting process and reduces management bias or opportunistic behavior. The study also finds a significant negative relation between activeness of the general board of directors and earnings management. This result argues that active boards of directors who effectively carry out their functions could reduce management discretion. The overall results show that internal audit indicators are more significantly and negatively related to earnings management than indicators of effective audit committee and board of directors. Thus, the study suggests that internal audit quality plays an important role than audit committee and board of directors in reducing earnings management.

REFERENCES

1. Abdelghany, K.E.(2005), "Measuring the quality of earnings", Managerial auditing Journal, Vol.20 No.9, pp.1001-1015.
2. Ali Shah, S.Z., Butt, S.A. and Hasan, A.(2009), "Corporate Governance and Earnings Management: An Empirical Evidence Form Pakistani Listed Companies", European Journal of Scientific Research, Vo.26 NO.4, pp.624-638.
3. Archambeault, D.S., DeZoort, F.T. and Holt, T.P.(2008), "The need for an internal Auditor report to external stakeholders to improve governance transparency", Accounting Horizons, Vo.22No.4, pp.375-88.
4. Asare, S.K. Davidson, R.A. and Gramling, A.A.(2008), "Internal Auditors' evaluation of fraud factors in planning an audit: the importance of audit committee quality and Management incentives", International Journal of Auditing, Vol.12 NO.3, pp.181-203.
5. Beatty, A.L., Ke, Bin: and Petroni, K.R(2002), "Earnings Management to avoid earnings declines across publicly and privately held banks", The Accounting Review, Vol.No.3, pp.547-570.
6. Bedard, J., S.M. Chtourou, and Courtean, L. (2004), "The effect of audit committee expertise, independence, and activity on aggressive earnings Management "Auditing: A Journal of practice and Theory, No.23, pp.13-35.
7. Biurrun, V.(2010), "Mitigating Bank Earnings Management. The Role of Regulation and Supervision", working paper: WHU-Otto Beisheim school of Management.
8. Blue Ribbon Committee (BRC). (1999) Report of the Blue ribbon Committee on Improving the Effectiveness of Corporate Audit Committees. NYSE and NASD.
9. Carcello, J., and Neal, T.(2000) "Audit Committee composition and auditor reporting ", The Accounting Review, Vol.75 No. .4, pp.453-467.
10. Chang, D.R., Shen, H.W. and Fnag, J.C.(2008), "Discretionary Loan Loss Provisions And Earnings Management For The Banking Industry" International Business & Economics research Journal, Vol. 7 No.3.
11. Chen, K.Y., Kuen-Lin, L. & Zhou, J.(2005), "Audit quality and earnings management from Taiwan IPO firms", Managerial Auditing Journal, Vol.20 No.1, pp.86-104.
12. Christopher, J., Sarens, G. & Leung, P. (2008), "A critical analysis of the independence of the internal audit function: evidence from Australia", Accounting, Auditing & Accountability Journal Vo.22, No.2, pp 200-220.

13. Cornett, M.M., McNutt, J.J. and Tehranian, H. (2009), "Corporate governance and earnings Management at large U.S. bank holding companies" *Journal of corporate Finance*, Vol.2, pp.412-430.
14. DeZoort, F., and Salterio, S. (2001), "The effects of corporate governance experience and financial reporting and Audit knowledge on audit committee members' judgments", *Auditing: A Journal of practice and Theory*, Vol.20, pp.31-47.
15. Donaldson, L. and Davis, J. (1991) "Stewardship theory or Agency Theory, CEO Governance and Shareholder Returns", *Australian Journal of Management*, Vol.16 No 1, pp.49-64.
16. Ebrahim, A. (2007), "Earnings Management and board activity: additional evidence", *Review of Accounting and Finance*, Vol. 6 No. 1, pp.42-58.
17. Epps, W.R. and Ismail, H.T. (2009), "Board of directors' governance challenges and earnings management", *Journal of Accounting & Organizational change*, Vol. 5 No. 3, pp. 390-416.
18. Fama, E. and Jensen, M. (1983), "Separation of ownership and control", *Journal of Law And Economics*, Vo. 26, pp.301-326
19. Fonseca, A.R. and Gonzalez, F. (2008), "Cross-country determinants of bank income smoothing by managing loan-loss provisions", *Journal of Banking and Finance*, Vol.32 No.2, pp.217-228.
20. Gujarati, D. (2004). *Basic Econometrics*, 3rd edition, McGraw—Hill, New York, Ny.
21. Healy, P.M. and Wahlen, J.M. (1999), "A Review of the Earnings Management Literature and its implications for Standard Setting", *Accounting Horizons*, pp.365-383.
22. Iqbal, A. and Strong, N. (2010), "The effect of corporate governance on earnings Management around UK rights issues", *International Journal of Managerial Finance*, Vol.6 No.3, pp.168-189.
23. Jensen, M. and Meckling, W. (1976), "Theory of the firm: Managerial behavior, agency costs and ownership structure", *Journal of Financial Economics*, Vol.3, pp.305-360.
24. Klein, A. (2002), "Audit committee, board of director characteristics, and earnings Management", *Journal of Accounting and Economics*, Vol.33, 375-400.
25. Krishan, J. (2005) "Audit committee quality and internal control: An empirical analysis Forthcoming". *The Accounting Review*.
26. Lin, S.M., Pizzini, M., Vargus, M. and Bardhan, I. (2010), "The role of the internal audit function in the detection and disclosure of material weaknesses", *The Accounting Review Forthcoming*.
27. Liu, C-ryan, S (1995). The effect of bank loan portfolio composition on the market reaction to and anticipation of loan loss provisions. *Journal of Accounting Research*, Vol.33, pp.77-94.
28. Nan, S. and Nan, C.I. (2004), "Corporate Governance in Asia. Recent Evidence from Indonesia, Republic of Korea, Malaysia, and Thailand", *Asian Development Bank Institute*, available at: <http://econ.tu.ac.th/archan/rangsun/20GovernancAsia.pdf>, accessed in October 2011.
29. Nichols, D.C., J., wahlen, M and Wieland, M.M. (2008), "Publicly traded versus privately held: implications for conditional conservatism in bank accounting" *Review of Accounting studies*, Vol.14, pp.88-122.
30. Piot, C. and Janin, R (2007), "External auditors, audit committees and earnings Management in France," *European Accounting Review*, Vol.16 No.1, pp. 429-54.
31. Pizzini M., Lin S., Vargus M. and Zienfuss D. (2010). "The impact of Internal Audit Function quality and Contribution on Audit Delays" available at: <http://ssrn.com/abstract=1673490>, accessed in June 2011.
32. Prawitt, D.F., Smith, J.L. and Wood, D.A. (2009), "Internal Audit Function Quality and Earning Management", *The Accounting Review*, Vol.84 No.4, pp.1255-1280.
33. Sanjaya, IPS (2011), "The influence of ultimate ownership on earnings Management: evidence from Indonesia", *Global Journal of Business Research*, Vol.5, No.5, pp.61-69.
34. Stock, H.J. and Watson, W.M. (2003), "Introduction to econometrics", 2nd ed., Boston: Pearson Addison Wesley.
35. Wall, L.D. and Koch, W.T. (2000), "Bank Loan-Loss Accounting: A review of Theoretical and Empirical evidence" *Federal Reserve Bank of Atlanta, Economic Review*, Vol. 85, pp.1-19.
36. Xie, B., Davidson, W.N. and DaDalt, P.J. (2003), "Earnings Management and corporate, governance: The role of the board and the audit committee", *Journal of corporate Finance*, Vol.9 No. 3, pp.295-316.
37. Yaping, N. (2005), "The Theoretical Framework of Earnings Management", *Canadian Social Science* Vol.1 No. 3,
38. Yu, F. (2004), "Analyst coverage and earnings Management. Working paper", Available at SSRN: <http://ssrn.com/abstract=828484>. Accessed in June 2011.
39. Zhou, J. and Chen, Y.K. (2004) "Audit committee, Board Characteristics and Earnings Management by commercial Banks", available at: <http://aaahg.org/audit/midyear/05midyear/papers/ZHOU CG EM DEC16A.pdf>, accessed in October 2011.

EDUCATION EXPENDITURE AND ECONOMIC GROWTH IN NIGERIA: CO-INTEGRATION AND ERROR CORRECTION TECHNIQUE

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ABSTRACT

This study uses co-integration and error correction technique to examine the impact of education expenditure on economic growth in Nigeria with the objective of finding the component of the expenditure that better enhances growth. The long run empirical results revealed that both capital and recurrent expenditures promote economic growth in Nigeria. In the short run analysis, capital expenditure on education significantly enhances economic growth while recurrent expenditure retards growth. School enrolment and population growth both promote economic growth in Nigeria. The ECM result also indicated a strong speed of adjustment to correct any deviation of GDP from the equilibrium position. It is recommended that government budgetary allocation to educational sector should be increased and measures to curb corruption and mismanagement of funds should be taken.

KEYWORDS

Education, Economic Growth, Expenditure, Productivity.

INTRODUCTION

The impact of education on economic growth has been stressed in many literatures. Education contributes to economic growth by improving health, political stability and producing a literate, disciplined, flexible labor force with the result that improved technology is adopted thereby leading to increased productivity and outputs. Thus, countries today strive to improve the quality of education of their citizens through increased funding to the sector.

The Nigerian government realized the importance of education in the development process hence embarked on policies that encouraged people to attend schools. This is in recognition of the fact that growth and development can only occur when the citizens are empowered through qualitative education which would inculcate good moral behaviors, increase potentials for employment, improve productivity and income and reduce poverty. Budgetary allocations have been the main approach through which government finances education in Nigeria but the allocation to the sector as a percentage of total budget has been consistently low and this poor financing has been the major obstacle to the development of education (CBN, 2000). For example, education allocation as a percentage of total budgets ranged from 9.88% in 1986 to 3.3% in 1999 and public spending on education was only 0.9% of GNP in 2002 (World Bank, 2004). Furthermore, while university enrolment was growing, investment spending on education has not been encouraging. Also, the proportion of capital expenditure has been consistently lower than the proportion of recurrent expenditure. For example, capital expenditure as a percentage of total capital budgets ranged from as low as 1.71% in 1999 to 6.0% in 2007 and this has, according to Moja (2000), retarded progress in building new facilities with the result that congestion in classroom has been the phenomenon in all levels of education. Therefore, it is in line with this that this study empirically examined the impact of education expenditures on economic growth and the component of education expenditure that promotes growth in Nigeria.

THEORETICAL FRAMEWORK

The theoretical basis of education on economic growth is rooted in the endogenous growth theory. Endogenous growth economists believe that improvements in productivity can be linked to a faster pace of innovation and extra investment in human capital. Endogenous growth theorists argued the need for government and private sector institutions and markets which nurture innovation, and provide incentives for individuals to be inventive. There is also a central role for knowledge as a determinant of economic growth. Endogenous growth theory predicts positive externalities and spillover effects from development of a high valued-added knowledge economy which is able to develop and maintain a competitive advantage in growth industries in the global economy.

The endogenous growth theory is an advancement over the conventional "neoclassical" growth theory as modeled by Robert Solow (1956) which holds the view that economic growth is a result of the accumulation of physical capital and an expansion of the labor force, in conjunction with an "exogenous" factor, technological progress, that makes physical capital and labor more productive. But according to the endogenous growth theorists, what increases the productivity is not an exogenous factor, but an "endogenous" one, which is assumed to be related to the knowledge and behavior of the people responsible for the accumulation of physical capital. Thus, human capital becomes an endogenous part of the growth process.

REVIEW OF EMPIRICAL LITERETURES

There are a number of empirical studies on the impact of education on economic growth around the globe. For example, Ajetomobi and Ayanwale (2007) examining education expenditure trend, higher education student enrolment and linkage with economic growth using a regression analysis find that the coefficients of the explanatory variables except that of recurrent expenditure on education are positive but both expenditures have low influence of growth. He concluded that government funding is unstable and unpredictable, capital and recurrent funding since 1970 are only a small fraction of the nation's budget hence recommend more funding of educational sector.

Ishola and Felix (2006) analysing the approach for Optimizing National Growth through Human Resource Investment in Nigeria with the aim of finding out the relationship between human capital investment and national growth uses government spending on education and human capital relevant infrastructure, by the use of regression analysis incorporating human capital in the growth process. A negative relationship was discovered between human capital investment and growth of per capita income. The influence of income on human capital seems to be stronger than the influence of human capital on income. He therefore recommended that national government should spend more on education and development on human capital so as to optimize national growth.

Nijforti and Ohwofasa (2008) investigate the role of public sector in education and other community service and economic growth in Nigeria with the aim of determining the component of expenditure that enhance growth and those that do not. Regressions were carried along three phases: 1970-1985; 1986-2006 and 1970- 2006 and the results showed that expenditure on education, health and housing were mixed. In all phases, the impact on growth of government expenditure on social sector was more from health than educational subsector. On the contrary, the relationship between recurrent expenditure on education, housing and economic growth were negative and recommended that government should inject adequate funds to the social sector.

Aigbokhan (1996) investigate the role of public sector in economic growth in Nigeria between 1960-93, using regression of production function model developed by Ram (1986) and granger causality technique for the direct assessment of the relationship. He found that over eighty percent of the variation in the growth of GDP is explained by the growth in gross capital formation, labor, and government spending. The coefficient of both variables is properly signed but that of labor is not all that significant.

Psacharopoulos (1973), using the 1966 pretax survey data of the former Western Nigeria, estimated the private returns to be 30, 14 and 34 per cent for the primary, secondary and tertiary educational levels, respectively. The corresponding social rates of return are 23, 12.8 and 17 percent.

Psacharopoulos (1985) also computed the average social rate of return for Nigeria to be 23, 13.8, and 17 percent for primary, secondary and tertiary levels, accordingly. Both studies point to the fact that investment in education facilitates the growth process.

Similarly, using 1974/75 data from the former Mid-Western Nigeria, Akangbou (1973) calculated the crude private average rates of investment return on education (for secondary and postsecondary levels). The estimated crude private rates of returns were 13.4 percent for lower secondary school level, 11.9, 11.2 and 17.2 per cent for secondary technical, upper secondary and university level, respectively. When adjustment was made for wastages and ability, the values marginally declined. He also computed the crude social average returns to be 12.3, 11.0, 10.4 and 12.7 per cent for lower secondary school, secondary technical, upper secondary school and university levels, respectively. Separate returns were also computed for the adjusted wastages and ability. The general conclusion of his findings is that no matter the magnitude of monetary resources expended on education, the private and social returns are always profitable and justifiable. Thus, investment on education positively affects the economy.

Okedara (1978) study used a three-year experimental adult literacy programme of the University of Ibadan to generate the private and social benefits associated with formal and informal (adult literacy programme) primary education. He calculated the private rates of return on formal primary education. These values were obtained after accounting for economic growth. By implication, both formal and informal primary education does not only increase productivity through earnings, but also through increased capacity for future earning possibilities, which invariably translate into growth.

Mbanefor (1980) also carried out the cost-benefit analysis of university education in Nigeria. His conclusion was that investment in university education is always profitable when any discount rate between one and ten is used. If the net present value of a university education is adjusted profitable even when 10% discount rate is used, then university education boosts productivity.

Anyanwu (1997) using cross-sectional data from six Nigerian states: Anambra, Borno, Cross River, Ogun, Plateau and Sokoto; observed that good health status and educational attainment of Nigeria women positively influenced their income. The coefficients of primary, secondary and technical school attainment were statistically significant at 5 percent level while that of excellent health conditions was significant at 1 percent.

Investigating the manpower development strategies and educational planning in Nigeria, Adamu (2002) argues that human capital formation transcends mere acquisition of intellectual ability through formal education system. It has to do with the transformation of the total man to enhance his productivity. He found that human capital investment is an indispensable component of the development process which serves as a force that can help tackle the inequities and poverty in any nation.

Bello (1995) analysing the components of government expenditure and growth in Nigeria using econometric model to evaluate both the aggregate and disaggregate functions of government expenditure at recurrent, capital and total expenditure in Nigeria between 1960-1985, with the objective of finding the expenditure that enhances growth, found that there is poor performance by the various government expenditure towards economic growth in the country for the period under review and conclude that this is a result of poor planning, allocation, mismanagement of resources and corruption in addition to the poor tax structures and political instability.

Ibrahim (2000) studying the federal government expenditure on education in Nigeria between 1962-1995 with the use of regression method argued that while recurrent expenditure dominates capital expenditure its coefficient showed a negative relationship with growth and recommend a boost in capital expenditure on education in the country.

In his study of public expenditure and economic growth in Nigeria, Ekpo (1996) found that government expenditure in infrastructure complemented and stimulate private initiatives. The result from regression shows that public sector investment in transport, communication and agriculture have positive impact on private investment and conclude that the public sector remain crucial in the development processes.

METHODOLOGY

The data used in this research is secondary with a period starting from 1986 until 2008. Data was sourced from the Central Bank of Nigeria bulletin and statement of account for various years, National Bureau of Statistics, Federal Ministry of Education and World Bank. In order to achieve the desired objectives the study analyzed the inter-relationship between government expenditure and economic growth by using Johansen cointegration and error correction model because it has been used in a wide range of economic relationship with fairly satisfactory results and its mechanisms are simple to understand.

MODEL SPECIFICATION

The implicit form of the model is given as:

$$(Equation 1) \quad y = \beta_0 + \beta_1c + \beta_2r + \beta_3s + \beta_4p \dots\dots\dots (1)$$

Where;

y = domestic output (GDP)

c = education expenditure on physical structures (CEXPEDU)

r = recurrent expenditure on education (REXPEDU)

s = school enrolment (SCHENROL)

p = population growth rate (POPUGR)

Expressing the model in a log form:

$$(Equation 2) \quad \log Y = \beta_0 + \beta_1 \log CEXPEDU + \beta_2 \log REXPEDU + \beta_3 \log SCHENR + \beta_4 \log POPUGR \dots\dots\dots (2)$$

Where;

logY= log of Gross Domestic Product (GDP)

logCEXPEDU = log of Capital Expenditure on Education

log REXPEDU = log of Recurrent Expenditure on Education

logSCHENR = log of School Enrolment

logPOPUGR = log of Population Growth Rate.

PRIORI EXPECTATIONS

It is expected that a positive relationship exist between government expenditures on education and economic growth. The argument is that an educated labor force performs a major role in the determination of productivity level instead of entering the production function as a factor. The expenditure on education is assumed to influence the level of human capital which is expected to leads to an improvement in total factor productivity. In addition, higher level of human capital speeds up the level of adopting foreign technology which would increase production.

The coefficient β_1 , and β_2 are expected to be positive because the higher the expenditure on education the higher the productivity of labor and output.

The coefficient β_3 is expected to be positively related to growth because the more the people enroll into schools the better they become educated which would result in the increase in efficient work force in the economy and thereby leading to overall expansion in output and economic growth.

The coefficient β_4 is also expected to be positive. The argument here is that the higher the population growth the more the available labor in the economy and more production.

EMPIRICAL RESULTS

TABLE 1: AUGMENTED DICKEY-FULLER TEST OF UNIT ROOT

Variable	Critical value	ADF stat	Order I	%
Log GDP	-4.4691	-4.785438	I(1)	1
LogCEXEDU	-4.4691	-4.502235	I(1)	1
Log REXEDU	-4.4691	-6.316701	I(1)	1
LogTEXEDU	-4.4691	-4.841828	I(1)	1
LogSCHENR	-4.4691	-4.612252	I(1)	1
LogPOPUGR	-4.4691	-8.447494	I(1)	1

Source: Researcher Computation with Eviews software 5.1

From table 1 above, If the calculated value of the ADF statistics is less than the tabulated or critical value, we do not reject the null hypothesis in which case the variable is stationary. On the other hand if the calculated value of ADF statistics is greater than the tabulated or critical value we reject the null hypothesis in which case the variable is non stationary. Thus all the variables included in the model are stationary after taking the first difference.

TABLE 2: JOHANSEN COINTEGRATION TEST

EigenValue	Likelihood Ratio	5 Percent Critical Value	1 Percent Critical Value	Hypothesized No. of CE (s)
0.692137	91.04772	68.52	76.07	None **
0.493039	47.45800	47.21	54.46	At most 1 *
0.270887	22.32314	29.68	35.65	At most 2
0.216066	10.63385	15.41	20.04	At most 3
0.043018	1.626932	3.76	6.65	At most 4

Source: Researcher Computation with Eviews software 5.1

From table 2 above, Johansen procedure to test whether the variables that are non stationary have any long run equilibrium relationship or not was carried out and the long run test show that we reject the null hypothesis of no cointegration and accept the alternative hypothesis of there is at most 2 cointegration between the variables. Johansen procedure is then used to obtain the long run coefficient of the model.

TABLE 3: NORMALIZED COINTEGRATING COEFFICIENTS

One cointegration equation		Likelihood	152.1976		
loggdp	Logcexpedu	Logrexpedu	Logschenrol	Logpopugr	
1.0000	0.5230***	0.4462***	0.2545***	0.1102**	
(0.000)	(0.1756)	(0.1432)	(0.0157)	(0.0430)	
	(-2.978)	(-3.116)	(16.210)	(2.563)	

Source: Researcher Computation with Eviews software 5.1

Note: *** denote significance at 1 percent. ** denote significance at 5 percent

Table 3 is then used to derive the co-integrating equation with log of GDP as the dependent variable while logs of Capital Expenditure on Education, Recurrent Expenditure on Education, School Enrolment and Population Growth Rate as the independent variables, as follows:

LONG RUN ANALYSIS

$$\text{Equation 3} \log \text{GDP} = 4.362 + 0.523 \log \text{cexpedu} + 0.446 \log \text{rexpedu} + 0.254 \log \text{schenrol} + 0.110 \log \text{popugr} \dots \quad (3)$$

Then looking at the numerical values of the coefficients and their respective signs, the above equation is saying that a 10 percent permanent increase in capital expenditure on education will lead to an increase in GDP by 5.23 percent and the coefficient is statistically significant at 1 percent. Similarly, a 10 percent permanent increase in recurrent expenditure on education will cause an increase in GDP by 4.46 and the coefficient is also significant. The positive signs of the coefficients of capital and recurrent expenditures are consistent with the theory. But a 10 percent permanent increase in the level of total school enrolment will lead to a 2.54 percent increase in GDP and the coefficient is highly significant at 1 percent. A 10 percent permanent increase in the level of population growth rate will cause GDP to increase by 1.10 percent and the coefficient is statistically significant at 5 percent.

SHORT-RUN ANALYSIS: AN ERROR CORRECTION MODEL

The short-run effect of capital expenditure, recurrent expenditure on education, school enrolment and technological advancement on GDP in Nigeria are examined. According to Engle and Granger (1987) cointegrated variables must have an ECM representation. The major advantage of the ECM representation is that it avoids the problem of spurious correlation between dependent and explanatory variables, and makes use of any short-and long-run information in the data. Hence, the motive of the analysis is to discover whether the short-run dynamics are influenced by the estimated long-run equilibrium conditions, that is, the cointegrating vectors

TABLE 4: SHORT-RUN VECTOR ERROR CORRECTION MODEL (VECM) RESULTS

Variable	Coefficient	Std Error	t-stat	Probability
ecm (-1)	-0.48	0.104	-4.615	0.001
dlogcexedu(-1)	0.37***	0.101	3.663	0.002
dlogrexedu(-1)	-0.09	0.070	-1.286	0.189
dlogschenro(-1)	0.40***	0.065	6.154	0.001
dlogpopugr(-1)	0.35***	0.100	3.500	0.002
R ²	0.86	D.W statistics	1.893	
Adj R ²	0.84	F-statistics	519.703	0.000

Source: Researcher Computation with Eviews software 5.1

Note: *** denote significance at 1 percent

The results from table 4 above shows that in the short run, a unit increase in capital expenditure on education will cause GDP to increase by 0.37 percent all things been equal and the coefficient of capital expenditure is statistically significant at 1 percent. A unit increase in recurrent expenditure on education reduces GDP by 0.07 percent but the coefficient is not statistically significant even at 10 percent. This is consistent with the findings of Njiforti 2008 arguing that recurrent expenditure on education is mostly diverted through ghost workers at lower level of education in Nigeria. A unit increase in the level of school enrolment will increase GDP by 2.40 percent and the coefficient of school enrolment is statistically significant at 1 percent. Similarly, a unit increase in the level of population growth rate will increase GDP by 0.35 percent all things been equal and the coefficient is significant at 1 percent.

The coefficient of error correction term is a crucial parameter in the estimation of the short-run dynamic model which measure the speed of adjustment of GDP to its equilibrium level. The result indicates that the parameter of the error-correction terms in the model is statistically significant and correctly signed confirming that GDP in Nigeria has automatic adjustment mechanism and the respond to deviation from equilibrium in a balancing manner.

DIAGNOSTIC TESTS

In order to test for the statistical significance of the coefficients the calculated t statistics is compared with the tabulated t values. If the calculated t statistics is greater than the tabulated t value at a chosen level the null hypothesis is rejected leading to a conclusion that the coefficient is statistically significant and vice-

versa. Thus the null hypothesis is rejected leading to a conclusion that the coefficients are statistically significant with the exception of that of recurrent expenditure.

It can also be observed that the values of R^2 is very high about 0.86 which shows that all the explanatory variables included in the model do explained the changes in GDP. In other words 86 percent variation in GDP is explained by the explanatory variables in the models. From the results F calculated is 519.703 which is very high and this shows that the variables in the model combined are significant in explaining economic growth in Nigeria. The Durbin-Watson statistics is used to test for the presence of autocorrelation and from the result it is given as 1.89 which is close to 2 and this shows the absence of autocorrelation in the models.

Normality test is also conducted and based on the probability value of 0.559510 and Jarque-Bera test value of 1.161389 we reject the null hypothesis and accept the alternative hypothesis leading to a conclusion that the data is normally distributed.

The test for heteroskedasticity shows that the calculated F value of 27373.52 is greater than the tabulated F-value at 5% and 25 degree of freedom, thus the null hypothesis is accepted and the alternative hypothesis is rejected leading to a conclusion that there is absence of heteroskedasticity

CONCLUSION

Capital expenditure on education enhances growth in Nigeria than recurrent expenditure on education and generally the expenditure is very low which does not conform to 26 percent of total budget as recommended by UNESCO. Much of the increase in education expenditure has been from the recurrent side which could easily be diverted and this explain why the state of infrastructure in the institution of learning is so poor in the country and the lack of incentive for academic staff to commit their time to research and development. Capital expenditure is very low compared to recurrent spending and this explained the limited and low growth of structures in the institutions of learning with the result that there is over crowding of students in classes. To promote growth, therefore, government should increase spending on education at all level and sincerely fight corruption in the public sector.

REFERENCES

1. Adamu G. M. (2002) "Manpower Development Strategies and Educational Planning" Heineman Educational Books, Nigeria.
2. Aigbokhan B. E. (1996) "Government Size and Economic Growth" The Nigerian Experience. The Nigerian Economic Society, 1996 Annual Conference Paper, p. 505-523.
3. Ajetomobi C. (2007). "Human Capital and Long-run Growth." *Journal of Development Economics*, Vol. 48, pp. 91-110.
4. Akpan N. I. (2005) "Government Expenditure and Economic Growth in Nigeria: A Disaggregated Approach". CBN Vol. 43, No.1
5. Anyanwu, J.C (1997). "Empirical evidence on the relationship between human capital and the income of Nigeria women" *Journal of Economic Management*, vol.3, no 1.
6. Babatunde, C. (2008), "The Nigerian Education System: Past, Present and Future," Nelson Pitman Limited, Lagos, Nigeria
7. Bello D. (1995) "Public expenditure and Economic Growth in Nigeria" Thesis, Economic Department, ABU Zaria, Nigeria.
8. CBN (2000), "The Economy and Implications for Development", Central Bank of Nigeria, Statistical Bulletin, Vol. 9. No. 2 Realm Communications, Lagos.
9. Ekpo, A. H (1996), "Health, education and population in Nigeria's development calculation: Theory and evidence," A paper delivered at the 11th Annual conference of the Nigeria Statistical Association, 28th-30th October, Owerri, Imo State, Nigeria.
10. Engle, R. F., and C. W. Granger (1987), "Co-integration and Error Correction: Representation, Estimation, and Testing," *Econometrica*, Vol. 55, 251-276.
11. Federal Office of Statistics. (1996). Annual Abstract of statistics. Lagos: FOS, Nigeria.
12. Gordon J. (1973) "Human Capital Accumulation and Endogenous Growth in a Dual Economy". Economic Research Unit. Indian Statistical Institute. Kolkata-700108. West Bengal, India.
13. Habrison F. H. (1973). "Human Resource as Wealth of Nations". London, Oxford University Press.
14. Ibrahim A. (2000). "Human Capital Formation in Nigeria: A Case Study of Tertiary Education" Thesis, Ambrose Alli University, Ekpoma.
15. Ishola R. A and Felix A. A. (2006) Optimizing National Growth Through Human Resource Investment. *European Journal of Scientific Research* issn 1450-216x Vol. No.3, pp. 433-443.
16. Iyoha G. and Ekanem K. (2004). "Public Expenditure on Education in Nigeria: Issues, Estimates and Some Implications". Abuja, World Bank.
17. Johansen, S. (1988), "Statistical Analysis of Cointegration Vectors," *Journal of Economic Dynamics and Control*, Vol. 12, 231-254.
18. Moja, T. (2000). Nigeria Education Sector Analysis: An Analytical Synthesis of Performance and Main Issues. Abuja, World Bank.
19. Motor R.T (2004). Education and consumption: In: Education, Income and Human Behaviour: Fuster, F.T.ed. New York Mc Graw-Hill Book Company, 235-352.
20. Njiforti P.P and Ohwofasa B.O (2008), Government Expenditure on Social and Community Services and Economic Growth in Nigeria (1970-2006).
21. Park, N. (2004), "The Paradox of Education in Nigeria", IPPA Conference, University of Calabar.
22. Psacharopoulos, G. (1985). Returns to Education – A.L further international update and implications. *Journal of Human Resources*, XX, 583 – 604.
23. Romer, P. M, (1990). Endogenous Technological Change." *Journal of Political Economy*, 98, S71-S102. *Statistics*, 52, 169-210.
24. Tsauni, A. (2008) "An Examination of the Causal Relationship Between Education Expenditure and Economic Growth in Nigeria". *Journal of Social and Management Science (JOSAMS)*, Bayero University, Kano.
25. United Nation Development Program. Human Development Report for 1996 (UNDP 1996:20)
26. World Bank (2004), World Development Indicators 2004 on CD-ROM, World Bank, Washington D.C.

THE EFFECTS OF BUSINESS PLANNING ON SERVICING OF LOANS BY SMALL AND MEDIUM ENTERPRISES: A CASE STUDY OF HAIR SALON ENTERPRISES IN ELDORET TOWN

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ABSTRACT

Small and medium enterprises contribute significantly to employment and economic growth for any country. However, lack of capital funding, business planning related issues and poor management practices, are among constraints hindering the growth and development of small and medium enterprises in Kenya. The general objective of this study was to assess the effects of business planning on the servicing of loans by small and medium enterprises in Eldoret town. The study was conducted in Eldoret municipality on small and medium enterprises engaged in hair salon businesses. The research design adopted for this study was a survey research design. The target population was 617 Hair Salons from Eldoret town; beneficiaries of financial institutions loans and which had been in operation for at least three years by the time the study was being conducted. A purposive sampling technique was used to select 123 Hair Salon owners who had benefited from bank loans. The survey data was obtained with the aid of structured questionnaires. In this study, a pilot survey preceded the actual data collection. The approach that was adopted in this study was based on the theory that servicing of loans by small and medium enterprise owners will always be affected by or depend on the way the business is planned. The findings of the study indicated that inadequate business planning among Hair Salon entrepreneurs in Eldoret town significantly affect their loan servicing at 5% significance level. Adequate business planning is therefore a pre-requisite for ultimate success of Hair Salon enterprises in Eldoret town and Kenya in general. Entrepreneurs should have a keen business plan that includes competitive analysis, marketing plan, operating plan, and financial plan. This would ensure that the entrepreneurs run their enterprises profitably and hence afford to service their loans effectively. On the other hand, there is need for further studies to be done on the factors that contribute to loan defaulting among SMEs in Kenya in order to ensure policy makers in the country adopt uniform strategy in addressing small and micro business challenges.

KEYWORDS

Business, Enterprises, Loans, Medium, Planning.

INTRODUCTION

BACKGROUND OF STUDY

The business daily of 30th September 2007 reported that Kenya's SME sector is the engine of growth for the economy. The sector employs most of the 9.4 million working people. According to the Kenyan economic survey of 2008, the private sector created 72,000 new jobs in 2007. In most economies, smaller enterprises form the bulk of all existing enterprises. In the European Union (Zavatta, 2008), SMEs comprise approximately 99% of all firms and employ between them about 65 million people. In many sectors, SMEs are also responsible for driving innovation and competition. Globally, SMEs account for 99% of business numbers and 40% to 50% of GDP (Zavatta, 2008). In India, the Micro and Small Enterprises sector plays a pivotal role in the overall industrial economy of the country. It is estimated that in terms of value, the sector accounts for about 39% of the manufacturing output and around 33% of the total export of the country. The major advantage of the sector is its employment potential at low capital cost. As per available statistics, this sector employs an estimated 31 million persons spread over 12.8 million enterprises and the labor intensity in the sector is estimated to be almost 4 times higher than the large enterprises (Zavatta, 2008).

BUSINESS PLAN

Surveys of enterprises in Kenya and other East African countries show that enterprises and particularly SMEs have traditionally lacked access to long-term capital. With the exception of family and friends, there are very few long term financial sources in the country. Government and donors alike have tried to address this issue. Lack of short or long term financing is one of the most frequently cited causes of business failure. SMEs largely rely on internal and bank financing to finance their operations.

There are also many lending opportunities. Although many SMEs are aware of these funds, there is still need for more of them to be educated about this (Kenyan Economic Survey, 2008).

A business plan is a document setting out information about the way in which the business will operate. The business plan is written for the owner to give a guide to run the business. It is also written for financial bankers, and lenders of money such as banks. Business plans are drawn up when a business sets up for the first time and are amended and revised when the business wants to change, typically when it wants to expand. The businesses that produce detailed plans are far more likely to succeed than when only a sketchy plan or no plan at all is prepared. The entrepreneurs who make realistic predictions about cash flow, break even and profit and loss are far more likely to be able to raise funds than those that provide widely exaggerated claims for capital. The break-even point for a business will be at the point where business costs are equal to returns on investment made. A break-even chart shows how much needs to be produced in a period of time before break-even occurs (The Times 100, 2009).

The plan will, therefore, become a useful tool in securing capital before start-up. Then the plan becomes the owner's manual guiding the daily operation and activities. Among other things, the business plan describes the products and services being sold, the customers to whom they will be sold, the production, management and marketing activities needed to produce the offerings, and the projected profit or loss that will result from these efforts. Business planning is an ongoing activity. Existing businesses, as well as start-up firms, benefit from writing and updating their goals, plans and activities. Although plans differ in some content elements depending on whether the firm is a retail, manufacturing, distribution or service enterprise. (Ward, S. 2008).

LITERATURE REVIEW

BUSINESS PLANNING BE ENTERPRISES

Business plan creates greater certainty in terms of the direction of the business and greater efficiency in the way the business gets on with the job. The reason why so many SMEs do not have a business plan, even an informal one, lies in the maxim that owner-managers are too busy working in their business to be working on it. People running SMEs are so focused on the day-to-day operations that they rarely step back to consider where the business should be going and how it should get there. There is also a lack of understanding of what a business plan is and how to prepare one. (Jennison, B. 2008).

The key elements of a good business plan include setting objectives for the business, identifying what needs to happen for these objectives to be achieved and measuring progress regularly. In developing your plan, make sure you remain objective and collect reliable information about key external trends that will have a major impact on your business (Hallberg, 2000).

According to Atieno Ndede –Amadi (In Kenya Country Incubator 2007), a business plan is a step by step of how one sets up the business, runs it, markets the products and services, and finances the operations. It is a road map for operating a business. Thus, a business plan serves as an operating tool or manual that

helps one to manage the business and communicate business ideas to people who are important to the business such as financiers. A business plan helps the owner of the business to work out details of every part of the business. As a starting point for developing a business plan, information needs to be carefully collected and findings recorded.

ELEMENTS OF A BUSINESS PLAN

Business plans contain a number of specific elements as well as certain general characteristics. These include a general description of the company and its products or services, an executive summary, management and organizational charts, sales and marketing plans, financial plans, and production plans. They describe the general direction of a company in terms of its underlying philosophy, goals, and objectives. Business plans explain specific steps, actions, to be taken as well as their rationale. In effect, business plans are a set of management decisions about how the company will proceed along a specified course of action, with justifications for those decisions. Listed below are brief descriptions of the major elements found in business plans. (Timmons et.al. 2004).

JUSTIFICATION OF THE STUDY

Business enterprise promotion centres are developing research and training programs to support economic development programs in Kenya through entrepreneurship (English and Levitsky, 2007). A vibrant Small and Medium Enterprise (SME) sector can form the bedrock on which all economic activity is built such as economic growth and job creation.

Africa, Kenya included where SMEs and the informal sector represent over 90% of businesses, contribute to over 50% of GDP, and account for about 63% of employment in low income countries (Clements-Hunt, 2008).

The motivation for this study was the increasing number of SMEs loan defaulters in Eldoret Municipality, which may be partially attributed to poor planning (GoK, 2007).

Additionally, a number of scholars who are interested in training and empowering other business minded citizens could draw a lot of information from this study.

STATEMENT OF THE PROBLEM

In developing countries, small and medium-sized enterprises (SMEs), particularly micro and small enterprises, have great difficulty in obtaining the necessary financial resources to effectively scale up and grow their businesses (Zavatta, 2008). As a result, inadequate access to financing caused by poor planning continues to be one of the most significant impediments to creation, survival, and growth of SMEs in Kenya. The hesitance of many financial institutions to fund the SMEs specifically saloon enterprises in Eldoret town may be partly attributed to poor servicing of loans which comes as a result of inadequate or poor business planning or even worse of, lack of business planning. This has been the case because most financial lending institutions will always ask for a business plan from which they can establish the viability of the proposed enterprise before giving credit. Furthermore, another cause that can be associated with poor business planning is the technical aspects involved in developing a business plan. Entrepreneurs need technical skills in developing a viable business plan. Most small and medium enterprise owners are unskilled in such areas resulting in weak business plans. When financial institutions lend basing on such weak plans, consequently, loan servicing is negatively affected.

RESEARCH OBJECTIVES

The general objective of this study was to assess the effects of business planning on servicing of loans by small and medium enterprises in Eldoret town.

1. To assess the effect of market analysis on repayment of loan by Hair Salon enterprises in Eldoret town.
2. To assess the effect of management plan on repayment of loan by Hair Salon enterprises in Eldoret town
3. To appraise the effect of operational plan on repayment of loan by Hair Salon enterprises in Eldoret town
4. To investigate the effect of financial plan on repayment of loan by Hair Salon enterprises in Eldoret town

RESEARCH METHODOLOGY

STUDY AREA

The study area was the Eldoret Central Business District (CBD) Hair Salons. In the research, Hair Salons were selected as a representation of small and medium enterprises in Eldoret town of Uasin Gishu District-Kenya.

RESEARCH DESIGN

The research design adopted for this study was a survey research design. This design was chosen because it would enable good data collection and analysis of the effects of business planning on servicing of loans by SMEs in Eldoret town. It specifically enabled investigation of the relationship between servicing of loans as influenced by business planning on the part of SMEs. The design enabled the researcher to make enough provision for protection against bias and maximize reliability, thus facilitating the economical completion of the research study.

TARGET POPULATION

The target population was the hair salons that have been operating in Eldoret town for the last three (3) years by the time the study was being conducted. In the study, all the 617 Hair Salons in the CBD were the target population (GoK, 2007). This choice of Hair Salons for the study was mainly based on the rapid growth of the entrepreneurs in recent past in Eldoret town (GoK (2007). Considering the fact that this enterprise is fairly capital intensive, the investors are often faced with the option of seeking loans from banks and non-banking financial institutions.

SAMPLE AND SAMPLING PROCEDURE

In this study, a sample of 123 Hair Salons was selected from the total population of 617 Hair Salons because resources (money and time) available would ensure success of the project. This also formed 20% of the total population and anything beyond this would not be significant to the findings according to Robson, 1982.

SAMPLING TECHNIQUE

A purposive sampling technique was used to select the sample objects. Selection was based on the rule that only Hair Saloon entrepreneurs who had borrowed from a bank or a financial institution would make the sample. This means that only those who had borrowed were interviewed and those who had not were left out since they did not meet the research condition. It was found that among the 123 Hair Salons interviewed 99 (80.5%) of them were non-defaulters while 24 (19.5%) of them were defaulters for this study. Therefore this implies that there was disparity in loan repayment in the sample selected and hence a justification for modeling.

RESULTS

In this study, the effects of business planning on servicing of loans among SMEs in Eldoret town were analyzed using a multiple regression model on Hair Salon owners. The research revealed that, financial plan, marketing plan, operating plan, and competitive analysis influence the ability of Hair Salon owner to service a loan at 5% significance level (Table 4.17). However, Market Analysis and Management Plan were not significant at 5% in influencing loan servicing among the Hair Salon owners in Eldoret. The results from this study have led to the findings that competitive analysis ($p = 0.002$; $t = 3.130$), marketing plan ($p = 0.007$; $t = 1.181$), operating plan ($p = 0.051$; $t = 0.538$), and financial plan ($p = 0.002$; $t = 0.931$) variables are statistically significant at 5% level in determining the effects of inadequate business planning on servicing of loans by hair salon businesses in Eldoret town. This is because their p (significance) values are equal to or greater than 0.05 which is equal to or less than the 5% level of significance. However, the market analysis ($p = 0.589$; $t = 0.540$) and management plan ($p = 0.430$; $t = 0.788$) variables were not statistically significant at 5% level in explaining the effects of inadequate business planning on servicing of loans by hair salon businesses in Eldoret town because their p (significant) values are more than 0.05.

The multiple regression model explains the effect of business planning on the repayment of loans by the Hair Salon enterprises, and it is estimated from equation (1) as follows:

$$Y = 3.634 + 0.214 X_1 + 0.177 X_2 + 0.462 X_3 + 0.593 X_4 + 2.097 X_5 + 0.203 X_6 \dots (2)$$

(2.318) (0.396) (0.670) (0.502) (0.586) (0.329) (0.218)

Where:

- Y = Loan Defaulters among the Hair Salon entrepreneurs
 - X₁ = Market analysis carried out by the entrepreneur of the Hair Salon
 - X₂ = Competitive analysis conducted by the entrepreneur of the Hair Salon
 - X₃ = Marketing plan prepared by entrepreneur of the Hair Salon
 - X₄ = Management plan structured by entrepreneur of the Hair Salon
 - X₅ = Operating plan designed by entrepreneur of the Hair Salon
 - X₆ = Financial plan deliberated by entrepreneur of the Hair Salon
- NB: Y and X are both the Dependent and Independent Variables respectively.

TABLE 4.17: FACTORS THAT INFLUENCE LOAN DEFAULTERS BY SMEs IN ELDORET TOWN

Factor	Coefficient	S.E.	T-Test	Prob. (%)	Sig.
Market Analysis (X ₁)	0.214	0.396	0.540	55.3	0.589
Competitive Analysis (X ₂)	0.177	0.670	0.130	89.1	0.002*
Marketing Plan (X ₃)	0.462	0.502	1.181	35.6	0.007*
Management Plan (X ₄)	0.593	0.586	0.788	38.7	0.430
Operating Plan (X ₅)	2.097	0.329	0.538	45.6	0.051*
Financial Plan (X ₆)	0.203	0.218	0.931	44.9	0.002*
Constant	3.634	2.318	1.568	02.6	0.117

-2 Log likelihood	105.198
Chi-square	16.219
Cox & Snell R Square	47.382%
Nagelkerke R Square (R ²)	69.174%
Field Data, 2008	

CONCLUSIONS AND RECOMMENDATIONS

CONCLUSIONS

This study aimed at establishing the effects of business planning on servicing of loans by small and medium enterprises. The research was conducted among Hair Salon businesses in Eldoret town. From the results obtained for the study, financial plan, marketing plan, operating plan, and competitive analysis were found to significantly influence the ability of Hair Salon owner to service bank loans at 5% significance level. Therefore it may be concluded that, inadequate business planning among Hair Salon entrepreneurs in Eldoret town significantly affect their loan servicing. Inadequate business planning is significantly responsible to poor servicing of loans, from banks, by the Hair Salon entrepreneurs in Eldoret municipality.

There is hence a need for the business operators to know how to prepare business plans in order to be able to avert heavy losses and consequently loan defaulting. The market analysis section of a business plan in Hair Salon sub-sector is very difficult to prepare, especially for start-ups or established businesses diversifying in new (to them) markets (Kawasaki, 2008). These difficulties will be compounded, due to an absence of any reliable data or evidence of likely demand, for businesses entering completely new markets or launching radically new offerings. Nonetheless, this section is critical as it underpins the business plan and demonstrates that the promoters have done their homework and know their marketplaces (at least as well as the incumbent players or other new entrants). If this section is unclear, vague or superficial, it begs the question as to whether there might be any real, sustainable demand for the proposed services.

RECOMMENDATIONS

Basing on the findings from this study, the following recommendations were proposed;

- Hair Salon entrepreneurs should have a keen business planning that includes competitive analysis, marketing plan, operating plan, and financial plan. This would ensure that the entrepreneurs run their enterprises profitably and hence afford to service their loans efficiently.
- The competitive analysis section is the most difficult section to compile when writing a business plan for the Hair Salon. The first step of preparing competitive analysis for the Hair Salon business should be to determine the competitors. Secondly, there is a need to gather information about the competition that is needed for the competitive analysis. Once the information about competitors is compiled, it is then analyzed.
- The Marketing Plan should show how to get customers to buy your products and services in the Hair Salon.
- The marketing plan includes details of products and services; unique selling proposition; pricing strategy; sales/distribution plan; advertising and promotions plan. The sections should be worked through while referring to the market research completed when writing the previous sections of the business plan.
- The operating plan should describe the physical necessities of operation in the Hair Salon business, such as physical location, facilities and equipment. It may also include information about inventory requirements and suppliers for the Hair Salon.
- The operating plan should be an outline of the capital and expense requirements the Hair Salon business needs to operate from day to day. There should be an explanation of the quality control measures that are set up.
- The financial plan determines whether the Hair Salon business idea is viable, and is a key component in determining whether the business plan is going to be able to attract any investment. Basically, the financial plan section of the business plan consists of three financial statements: the income statement, the cash flow projection and the balance sheet and a brief analysis of these three statements. This article will lead you through the preparation of each of these three financial statements on the following pages. The list of operating expenses may include: salaries, rent or mortgage payments, telecommunications; utilities, raw materials, storage, distribution, promotion, loan payments, office supplies, and maintenance.
- There is a need to expand this study to other parts of the country and include different SMEs. The studies should assess the effects of inadequate business planning on repayment of loans by the SMEs in the country.
- This will ensure that policy makers in the country adopt a common strategy in alleviating the challenges that face SMEs in Kenya.
- Knowledge transfer is needed such that SMEs understand what relevant standards must be met to access the lucrative markets. There is a lack of convergence in the needs of SMEs and investment/fund managers. The former needs finance so they can go advance their businesses. The latter needs assurance in the form of business plans, sound financial sustainability, credit ratings and skills that prove the money invested will not be lost. Lack of standardized reporting is a barrier for investors trying to understand the landscape.

SCOPE FOR FURTHER RESEARCH

There is a need to expand this study to other parts of the country and include different SMEs. The studies should assess the effects of inadequate business planning on repayment of loans by the SMEs in the country. There may also be a need to have a study made on why a number of entrepreneurs appear to have challenges in preparing business plans.

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REFERENCES

- Clements-Hunt, P., "Innovative Financing for Sustainable Small and Medium Enterprises in Africa." International Workshop Geneva, Switzerland. <http://www.unepfi.org>. (2008)
- English, P. & Levitsky, J., "The Other Two Thirds: A Summary of Papers, Discussions, and Closing Remarks". (2007): 8:12.
- Gluck, F., Kaufman, S. & Walleck, S., The Evolution of Strategic Management. The McKinsey Quarterly. Available from: <http://www.mckinseyquarterly.com>. [cited 7 September 2007]. (2000)
- Gluck, F., Kaufman, S. & Walleck, S., The Evolution of Strategic Management. The McKinsey Quarterly. Available from: <http://www.mckinseyquarterly.com>. [cited 7 September 2007]. (2000)
- GoK "The Municipal Council of Eldoret: Strategic Plan 2006 – 2010". Government Printer, Nairobi. GoK. (2007).
- Government of Kenya Economic Survey, Nairobi: Government Printers. (2008),
- Hallberg, K., "A Market-Oriented Strategy for Small and Medium-Scale Enterprises". IFC Discussion Paper, N. 40. (2000)
- <http://www.sbinfocanada.about.com>. (2008)
- Jennison, B. "Inadequate business planning by SMEs". <http://www.rsmbentleyjennison.com> (2008).
- Kawasaki, G., "Developing a Strategic Business Plan. The Art of the Start". www.planware.org (2008)
- Kenya Country Business Incubator Enterprises. "Overview of Incubation. Birowaks Production." www.opencube.com. (2007)
- Milovanović, G., "Small and Medium Enterprises as a base for Restructuring Serbian Economy". Economics and Organization (2005):. 2: 3, Pp. 201 – 208.
- Robson C., "Real World Research", 2nd Edition. Oxford. Blackwell Publishers. (1993)
- Snodgrass, D. & Biggs, T., "Industrialization and the Small Firm: Patterns and Policies". International Center for Economic Growth. (1996).
- The Times 100. "Business Planning: Bringing Business Studies to Life. Business Studies for Students and Teachers". The Times Newspapers Ltd and MBA Publishing Ltd, London. <http://www.thetimes.co.uk>. (2009)
- Timmons J.A, Zacharakis A & Spinelli S. "Business Plans That Work: A Guide For Small Business," McGraw Hill. (2004).
- Ventura, A. and Druet, A., "Effective Small Business Lending Process: A Model for Nanjing City Commercial Bank in China", PlaNet Finance. www.planetfinance.org. (2006)
- Ward, S., "Business Plan Outline. The Writing a Business Plan Series".
- Zavatta, Roberto, Financing Technology Entrepreneurs and SMEs in Developing Countries. Washington, DC: infoDev / World Bank. Available At <http://www.infodev.org/publications>. (2008).

APPENDICES**APPENDIX 1**

Dear Sir/Madam,

I am a postgraduate student in the school of Human Resource Development, Moi University. As an academic requirement in the university, I am collecting survey data in order to write a research thesis. Since your enterprise has been selected for interview, I request you to answer all the questions provided to you in order to make the exercise a success. All information provided will be treated with utmost confidentiality and used strictly for academic purposes.

Thank you for your cooperation.

Yours sincerely,

Nandwa J. Musambayi.

APPENDIX 2**A SURVEY QUESTIONNAIRE****THE EFFECTS OF INADEQUATE PLANNING ON SERVICING OF LOANS BY SMALL AND MEDIUM ENTERPRISES: THE HAIR SALON BUSINESSES IN ELDORET TOWN, KENYA****INSTRUCTIONS TO THE RESPONDENT**

Please Answer ALL the Following Questions as Accurately as Possible

SECTION A:**DEMOGRAPHIC INFORMATION**

- Gender: Male Female
- Age:
- Marital status: Single Married Divorced Widowed

SOCIO-ECONOMIC INFORMATION

- Level of Education: No Education Primary Secondary College University
- Professional training on hair dressing: Yes No
- Years of experience in the current business:
- Level of monthly income from the business: below Ksh5,000
Ksh5, 001 – Ksh10, 000 Ksh10, 001 – Ksh15, 000 Ksh15, 001 – Ksh20, 000 Ksh20, 001 – Ksh30, 000 Over Ksh30, 000
- Number of employees in the salon:

9. What was your initial capital for your hair dressing business?
 Below Ksh10,000 Ksh10,001 – Ksh20,000 Ksh20,001 – Ksh30,000 Ksh30,001 – Ksh40,000 Ksh40,001 – Ksh50,000 Over Ksh50,000

SECTION B: BUSINESS INFORMATION

1. Which financial institution/ Bank offered you the last loan?
 Barclays Bank Standard Bank National Bank
 Cooperative Bank Family Bank Equity Bank Kenya Women Finance Trust Industrial Development Bank
3. What are the most common services offered by the saloon?
 Manicure and Pedicure Hair relaxing Plaiting style Braid style Chemical application Popcorns style
 Facial wash services Line styles
4. How do you charge for the services offered?
 Fixed service charge Variable service charge
5. Do you have quality control measures in place?
 Yes No
6. Are there instances where you subcontract your services?
 Yes No
7. Which mode of payment do you prefer for services offered?
 Cash Credit Both
8. What strategy do you adopt to keep your loyal clients?
 Excellent services strategy Promptness strategy Competent service strategy Inexpensive service strategy Very low labour cost
 Hair relaxing Braid style Chemical application Facial wash services Line styles Plaiting style Popcorns style
9. What was the asset that underpinned SME obligations?
 Receivables Inventory Goodwill Auto Real estate Equipment Unsecured loans
10. What did the finance products offered to your SME include?
 Fully drawn advances Bank bill facilities Revolving credits Overdrafts Trade facilities Corporate credit cards Equipment finance contracts
11. What profiles were sought by the bank for your SME loan?
 Industry of the company
 Length of establishment
 Owners background of the company
 Amount and number of financial obligations
 Banking transaction history
 Existing bank credit support
 Recent financial history
 Recent financial performance
 Amount of commitment owners have put into the company
 Debtor profiles of borrowers
11. What were the factors that the bank considered in analyzing the loan?
 Legal entity
 Enterprise's ownership
 Liability with official documents
 Productive-based analysis
 Investment plan
 Firm's development
 Firm's payment capacity
 Collateral
12. Identify the general steps followed in analyzing your SME for loan:
 Visiting the enterprise
 Building up the enterprise's financial statements
 Comparing them with the official financial statements
 Analysis of the enterprise's ownership aspects
 Review the business plan
 Analysis of the enterprise's current management
 Investigation of the personal references of owner(s) and guarantors
13. The evaluation of a small business loan proposal requires general and specific information. Identify the appraisal activities considered in your business for the loan:
 General analysis of the Small Business
 Business plan and Cash flow analysis
 Collateral review and evaluation
 Preparation phase for the submission to the credit committee
 Credit committee decision
 Delegation of the credit decision
- SECTION C: BUSINESS PLAN ANALYSIS**
- This provides the credit officer with a brief history of the business before trying to assess the future risks and ability of the entrepreneur to service the debt.
1. What background information about the business was provided to bank?
 Its origin
 Its products and services
 Its market segments
 None of the above
2. Identify the ownership and management information provided to the bank:
 Ownership structure
 Experience of management team
 Key skills
 None of the above
3. Select the sales and delivery information on services provided to the bank:
 Sales (for at least 12 months)
 Main customers or type of customers

Delivery channel

Competitors and competitive advantages

None of the above

4. Which production methods did the bank seek before the loan?

Main components or raw material

Suppliers and market conditions

Machines and production method

Staff

None of the above

5. Identify the financial records that were provided to the bank:

Trading performance - sales and profits

Capital base

Debt structure

Liquidity

None of the above

6. What future prospects and plans were considered for the loan?

Market conditions

Sales and profit expectations

Capital expenditure plans

Strategy for implementing plans

None of the above

7. Does your business have the following in place?

Business planning components	Yes	No
Market analysis		
Competitive analysis		
Marketing plan		
Management plan		
Operating plan		
Financial plan		

8. Have you been able to comfortably service your loan?

Yes No

9. If no in 8 above, why

My enterprise is small and in a location that does not attract sizeable number of clients

Building up the enterprise's financial statements

Comparing them with the official financial statements

Analysis of the enterprise's ownership aspects

Review the business plan

Analysis of the enterprise's current management

Investigation of the personal references of owner(s) and guarantors

SECTION D: ANALYSIS OF COLLATERALS

Check List of information to be included in the Loan agreement

1. Specify the amount of the approved small business loan (amount):

2. Give a brief description of purpose(s) of the loan (purpose):

3. What securities were offered and required for the loan (security)?

4. How long did the loan application take before maturing (availability)?

5. What interest rate was charged on the loan (interest)?

6. Which arrangement fees, legal fees were paid in connection with the loan and security (arrangement fee)?

7. What were repayment details, such as by installments, did you put in place (repayment)?

8. What were the arrangements made for early repayment (repayment)?

9. Explain the undertaking for customer considered in provision of financial information (financial information)?

10. List the conditions which constitute default including liquidation of the company (Default):

11. Were there agreement made not to contravene any other agreements or laws & pending actions (Representations & warranties)?

I. Check List of items to be included in the Monitoring File

1. Which follow-up covenants were included in the loan agreement?

Periodical provision of financial documents

Financial ratios

Changes in organization in share-holders

Others, specify

2. What re-payment records were sought for loan monitoring by the bank?

Late re-payments

Penalties

Others, specify

3. What internal risk rating was involved by the bank on your business?

Good performance

Loss incurred

Others, specify

SECTION E: WARNING SIGNS FOR FAILURES

Please indicate the areas which led to poor loan servicing for your SME and hence require positive management action:

CAUSES OF LOAN SERVICING FAILURE	REMARKS
1. Lower sales than expected	
2. Change of terms of trade	
3. Unanticipated expenditures in fixed assets	
4. Unanticipated expenditures in current assets	
6. Unusual losses through fraud	
7. Unusual losses through insufficient management	
8. Unusual losses through insufficient supervision	

APPENDIX 3

THE FINANCIAL INSTITUTIONS IN KENYA

Banks	Non Banking Financial Institutions	Building Societies
African Banking Corporation Ltd.	Housing Finance Co. Of Kenya	Family Finance Building Society
Akiba Bank Ltd.	Prime Capital and Credit Society	
Bank of Africa Kenya Ltd.	Savings & Loan Kenya Ltd.	
Bank of Baroda (K) Ltd		
Bank of India Ltd.		
Barclays Bank of Kenya Ltd.		
CFC Bank Ltd.		
Charterhouse Bank Ltd.		
Chase Bank (K) Ltd.		
Citibank N.A.		
City Finance Bank Ltd.		
Commercial Bank of Africa (K) Ltd.		
Consolidated Bank of Kenya Ltd.		
Co-operative Bank of Kenya Ltd.		
Credit Bank Ltd		
Delphis Bank Ltd		
Development Bank of Kenya		
Dubai Bank Ltd		
Diamond Trust Bank Kenya Ltd.		
Dubai Bank Ltd.		
Equatorial Bank Ltd.		
Equity Bank Ltd.		
Fidelity Commercial Bank Ltd.		
Fina Bank Ltd.		
Giro Commercial Bank Ltd.		
Guardian Bank Ltd.		
Habib A.G. Zurich		
Habib Bank Ltd.		
Imperial Bank Ltd.		
Investment & Mortgages Bank Ltd.		
Oriental Commercial Bank Ltd		
K-Rep Bank Ltd.		
Kenya Commercial Bank Ltd.		
Middle East Bank Ltd.		
National Bank of Kenya Ltd.		
National Industrial Credit Bank Ltd.		
Paramount Universal Bank Ltd.		
Prime Bank Ltd.		
Southern Credit Banking Corporation Ltd.		
Stanbic Bank (K) Ltd.		
Standard Chartered Bank Ltd.		
Transnational Bank Ltd.		
Victoria Commercial Bank Ltd.		

THE POLITICAL ECONOMY OF POVERTY IN NIGERIA

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ABSTRACT

The paper aimed at analyzing the pervasive high level of poverty in Nigeria within the purview of political economy. Secondary sources of data were used. The alarming rates of poverty in the country over the years were shown to be a direct consequence of the amalgam of economic and political forces which reinforce each other. The paper posits that in Nigeria, economic poverty is rooted in political poverty, since political actions set the pace for economic activities, and where political actions are driven more by personal caprice than by economic realities. Secondary sources of data were utilized in the study. The method of critical analysis was used. Because a great many Nigerians live outside the benefit system of government, poverty has been very high in both rural and urban centres and predominantly so with people engaged in informal activities. The major cause of poverty in Nigeria is corruption, which is perpetuated essentially by use of political power, reinforced by inert institutions that have very little impact on stifling the will to be corrupt. It is recommended that for poverty to be alleviated in the country, political and economic structures which allow corruption to go unfettered should be strengthened.

KEYWORDS

Corruption, Nigeria, political economy, poverty.

INTRODUCTION

The resurgence of poverty to the centre stage of global economic discourse in the past two decades cannot be overemphasized, as its alleviation has become a cardinal principle of many governments' policies. Available records of the poverty levels in Nigeria are alarming. According to the Federal Office of Statistic (1996), poverty was about 15% among the country's population in 1960. An upward trend has since been the vogue. In 1980, it grew to about 28%; in 1985 it was about 46% and only recorded a marginal decrease to 43% in 1992. As at 1996, it was a dismal picture of 66% of an estimated population of 110 million people. Between 1960 and 1996, a period of 36 years, the states in Nigeria recorded varying degrees of poverty. As at 1992, only 10 states had more than half their population in poverty. This can be contrasted with the period 1992 to 1996 where all the states in Nigeria except Bayelsa had more than half their population in poverty. About 45 million Nigerians lived in abject poverty in 1990, and in 2007 about 70 percent of the Nigerian population lived in poverty (World Bank, 1996; Elaigwu, 2007).

As at 2004, when the per capita income of the world was estimated as \$7,140, that of Nigeria for the same year was a dismal \$290, making her to rank alongside such countries as Rwanda (\$220), Togo (\$270) and Mali (\$210) (Garba, 2006). This was even at a time when the federal government of Nigeria had established various poverty alleviation Programmes, the latest of them being the National Poverty Eradication Programme (NAPEP) which was established in 2001 and given the mandate to wipe out poverty in the country by the target year of 2010.

Factors responsible for poverty are usually given as high unemployment, bad governance, corruption, high population growth rate, poor human and natural resource utilization, globalization and macroeconomic distortions. Some of the reasons are obviously superficial and tend to treat the symptoms of poverty as causes. Although internal factors contribute and promote poverty, there is a need to delve into the root cause of the pandemic which may be explained through recourse to historical experience.

The aim of the paper is therefore to explore the causes of the alarming rate of poverty in Nigeria within the ambit of political economy. Following the introduction, the paper proceeds as follows: section 2 deals with literature and theoretical issues. Section 3 involves discussions while section 4 encompasses conclusion and the way forward.

LITERATURE AND THEORETICAL ISSUES

X-RAY OF POVERTY

According to the Central Bank of Nigeria (1999), poverty is a state where an individual is not able to cater adequately for his or her basic needs of food, clothing and shelter; is unable to meet social and economic obligations, lacks gainful employment, skills, assets and self-esteem; and has limited access to social and economic infrastructure such as education, health, portable water, and sanitation; and consequently, has limited chances of advancing his or her welfare to the limit of his or her capabilities.

Defining poverty seems to be a rather Herculean task. Narayan (2000) opines that the definition of poverty is relative and that it must be anchored on such factors as age, gender, culture among other economic and social contents. On the other hand, OECD (2001) stresses that poverty as a concept must be comprehensive and should take account of crucial areas in which people of both sexes are deprived as well as perceived as incapacitated in different local and societal contexts. Thus, for OECD, issues relating to the environment, cultural capabilities, economic and human potential must be incorporated in the definition. From the gender perspective, the World Bank (1999) maintains that poverty as related to the sex of the person is instrumental. There are instances where utter powerlessness to fulfill expected responsibilities by men as demanded by culture and tradition are glaring. This is more debilitating in a society such as Nigeria where males predominantly are expected to discharge the role of family upkeep. In any case, poverty-inducing processes tend to afflict females in various degrees and that females tend to be more affected than their male counterparts (OECD, 2001).

There has been recent discussion about time poverty, related specifically to gender. This refers to the structural gender inequality imposed on women, which results in lack of time or their part to discharge the many economic and social burden placed on them (OECD, 2000).

In terms of categorization, poverty can be seen as relative, absolute or material, on the one hand, and transient or permanent on the other hand. Aliyu (2002) opines that absolute poverty is a condition in which a group or an individual is not able to satisfy their basic requirements in terms of education, housing, health, transport and so on. Absolute poverty connotes a tendency on the part of an individual to be incapable of providing himself with the basic needs such as food, clothing, shelter, portable water, health service, education and transport, all of which lead to deprivation and non-participation in the decision making processes which affect the life of the individual (National Planning Commission, 1990). In terms of material poverty, the World Bank (1990) relates it to the lack of ownership and or control of physical assets that include land as well as animal husbandry. Relative poverty describes a situation where an individual or group may be able to meet their basic needs but are, on the basis of comparison, poor among the people living in a community. In terms of transience or permanency, poverty can be seen to be transient if it is widespread in a population but its occurrence is of limited duration, while poverty permanency is usually related to distribution of resources in which there is widespread concentration of resources in the hands of a few, a condition that engenders relatively permanent incapacity of the majority to meet their basic needs.

The need to specify benchmarks for measuring poverty led to the construction of poverty lines, national poverty rate, urban poverty rates and rural poverty rates. Poverty lines, according to the Central Bank of Nigeria (2000) represents the value of basic (food and non-food) needs considered essential for meeting the minimum socially-acceptable standard of living within a given society. Thus, any individual whose income or consumption falls below the poverty line is regarded as poor. This ordinarily means that there is a minimum acceptable poverty line at which an individual's income or consumption falls below to be

classified as poor. The most common poverty lines for international comparisons are US\$1 a day for low-income countries, US\$2 for middle income and US\$4 for transition economies. It may be said however that the poverty lines as stated could generate misleading ideas of poverty as most countries' currencies if converted to US\$1 will give significant value that may be greater than what is expected in that country to escape the poverty line. What can be said therefore is that most countries have their own poverty lines reflecting different social, economic and climatic conditions to determine what an acceptable minimum income should be.

There is widespread discussion of the concept of vicious circle of poverty in economic literature. A vicious circle is referred to as a self-reinforcing situation in which factors exist that tend to perpetuate a certain undesirable phenomenon. When applied to poverty, a parallel can be drawn. For example low incomes generate low consumption which leads to poor health and poor productivity which promote the incidence of poverty. Bulama (2003) maintains that vicious circle operates on both the demand and supply sides. On the demand side, low level of income leads to a low level of demand, which results in low investment. Low investment leads to deficient capital which leads to low income. On the supply side, low productivity is reflected in low real income, which results in low savings. Low savings lead to low level of investment and consequently to deficiency in capital accumulation. Low level of capital generates low productivity which consequently leads to low income.

According to Jhingan (1987), a third type of circle of poverty exists in the presence of underdeveloped human and capital resources. As development of natural resources depends significantly on the people's productive capacity, educational backwardness reflected in deficient technical know-how and inadequate entrepreneurial capacity tends to the misutilization or underutilization of the available natural resources.

The Central Bank of Nigeria (1999) groups the causes of poverty into two, i.e. low economic growth and market imperfections. On the other hand, the World Bank (1999) maintains that one way of investigating the causes of poverty is to examine the dimension highlighted by poor people, while the Federal Office of Statistics (1996) asserts that the causes of poverty in Nigeria are inadequate access to employment opportunities, assets, means of fostering rural development, health, education, water services, sanitation, among others. These views are defective in many respects when applied to Nigeria. To simply attribute low economic growth rate, market imperfections and the dimensions exhibited by the poor without looking at the causes of poor growth rate and others is to engage in academic acrobatics. The essential questions to ask are "What causes low growth rate? What is responsible for market imperfections? How did the poor come to exhibit certain dimensions?"

Aliyu (2002) asserted that poverty is caused by such factors as effects of globalization, corruption, debt burden and low productivity. Although this view largely reflects the poverty levels in Nigeria, what must be emphasized is that globalization, debt burden and other problems are rooted in economic and political relations. They must be studied within the context of history, if a proper understanding of the phenomenon in Nigeria is to be gained.

Mistaken interpretation of the causes of poverty is usually borne from prejudiced thinking or from the fatal error of believing the answers can be aimed at through the study of the underdeveloped countries. This is because many of the causes usually adduced for poverty are merely symptoms of the problem. The true explanation and analysis lies in seeking the political and economic relationships between Nigeria and the developed countries and recognizing that at the heart of poverty lies a configuration of the international system. A good example is the standard classical strategy of increased primary export production on the basis of comparative advantage, whereas deteriorating terms of trade and the intensification of inequality are either ignored or rationalized.

The overall consequence of the present world order of globalization, for instance, is to mystify economic conditions, thereby preventing a clear and graphic understanding of the true character of the causes of poverty in many countries. Underdeveloped countries are continually beguiled into blind economic alleys through the propagation of capitalist values and policies as well as the promotion of its models as the only strategy for development. This further intensifies the contradiction of the causes of poverty by denying the historical genesis of the pandemic and only superficial reference is made to it where it cannot be discarded entirely. However, this is not to say that poor countries do not share the blame in their poverty levels. Corruption and bad leadership certainly contribute to the pandemic. However, they are also a product of historical processes which cannot be ignored.

INDICATORS OF POVERTY

There are many indicators of poverty in a country. While the Central Bank of Nigeria (1999) suggests the social indicators of poverty measure as the availability and access to health, education and welfare facilities as well as basic infrastructure, the World Bank (2001) classified indices of poverty from the following social factors: health and education, gender disparities, caste, ethnicity, and indigenous status and volatility at the household level. For OECD (2001), there is the need to use various kinds of measures while discussing poverty. These include relative, contextual, qualitative, and multidimensional indicators, which are best for understanding a specific situation and intervening in it effectively.

A narrow approach of measuring poverty based on consumption and income perhaps seems appropriate, in order to permit the identification and statistical analysis of those households falling under an absolute poverty line. The World Bank (2001) presents a comprehensive approach of measuring poverty at different aggregation levels by recourse to the following:

- Single indicator: Consumption.
- Composite indexes: Human Development Index, Human Poverty Index, and Gender-Related Index.
- Discrete indicators: Economic, Human, Socio-Cultural and Political.

A recent approach has been the one offered by the United Nations Development Programme (UNDP) which provides a composite quantitative measure of both the economic and the social indicators of human development. This is the Human Development Index (HDI) that combines a measure of purchasing power with measures of physical health and educational attainment to indicate progress or retrogression in human life. This approach gives comprehensive and more reliable information as the critical components of indicators of poverty. The building blocks of the HDI are data on longevity, knowledge and income. While longevity is measured solely by life expectancy at birth, knowledge is measured by the adult literacy rate and mean years of schooling weighted at 2:1 respectively and income, purchasing power parity (PPP) (based on real GDP) per capita adjusted for the local cost of living. It is to be emphasized that these three measures are combined in a 3-step process to arrive at an average index. Consequently, there is a minimum and maximum rate for each component of measures in HDI. However, its main limitation as a composite socio-economic indicator is that it conceals the wide distribution of inequalities within a population.

POLITICAL AND ECONOMIC FOUNDATIONS OF POVERTY IN NIGERIA

One of the disturbing paradoxes of the Nigerian economy is the increasing amount of revenues earned and the likewise increase in the level of poverty of the people. Thus, it is superficial to attribute the level of poverty to falling revenues. It is indeed perplexing that increases in oil revenues over the years have resulted in increases in poverty! It is therefore germane to note that to explain the concomitant causes of increasing poverty levels in Nigeria, recourse needs to be taken to the politico-economic architecture, which can simply be viewed as representing an edifice stifling attempts at leaving the poverty dragnet and resolving the contradictions of poverty amidst plenty. Although political and economic structures reinforce each other, what can be said about the Nigerian state is that the political power largely determines the flow and direction of national resources, and therefore the extent to which any lingering socio-economic quagmire can be solved. One need dissect the factors usually adduced as causes of poverty in Nigeria to see the political and economic undertones of the pandemic.

Corruption is said to be a major cause of poverty in Nigeria. In fact, Nigeria has, in recent times, assumed an unenviable position of the most corrupt country in the world. Corruption has not only been institutionalized but also assumed a national dimension. This has eaten deep into the fabrics of the society and accounts for the reason efforts so far made to alleviate poverty have not yielded the desired result. The bulk of the nation's wealth has been distributed in favour of the few privileged to the detriment of the majority of Nigerians who continually wallow in abject poverty. The country lost N56 trillion to military regimes alone, starting from the end of the civil war in 1970 (Ribadu, 2005). Nigeria ranked 152 out of 159 countries in the Transparency International's 2005 Corruption Perception Index and placed 94 out of 155 countries in the *World Bank's 2006 Ease of Doing Business* (Elaiwu, 2007).

In 2007, Transparency International ranked Nigeria as the 7th most corrupt nation in the world. Corruption and its facets are still a major problem in Nigeria. Where reforms have been embarked upon, the results have not been particularly favourable. Even the cost of doing business in Nigeria is heightened by various forms of bottlenecks, some of which are hinged on outright corrupt practices.

One prong of corruption in Nigeria is apparent lack of transparency and accountability at all levels of governance. According to Bertucci (2004), transparency is a sine qua non for fighting corruption. It is imperative for achieving macroeconomic objectives, as evidenced in New Zealand, Denmark and Chile, whose economies experienced marked growth due to fiscal transparency. Arne (2001) and Bernado and Angus (2000) considered lack of transparency to be at the heart of grave global economic and financial crisis. In Nigeria there is an overt display of recklessness in public expenditure. It can be said that the problem of transparency in Nigeria was worsened by the years of military punctuation of political affairs, a situation that has been reinforced and intensified by subsequent civilian regimes. Andrew (2001) overemphasized that blatant disregard of transparency and accountability results in resource misallocation, investor apathy, restiveness and general breakdown in community cohesion. Lack of transparency and accountability is a major deterrent for capital inflow, which often augments domestic savings available to grow the economy.

Corruption is largely the result of the political and economic structure of the country. Corruption in Nigeria, especially of the monumental variety has a political colouration. Political office is mostly an avenue for rent-seeking, with politics being a major and "lucrative" business venture for many politicians. For instance many public officials in Nigeria, far from the genuine intentions to help the development process rather seek re-election because of the many privileges of holding office such as the direct access to state's coffers, in addition to the immunity from prosecution which the offices offer. To get re-election in a society that has been bastardized by poverty occasioned by massive and serial rape of public treasury, all the politician needs to do is to buy votes or rig an election. The political economy of corruption in Nigeria can be situated within the ambit of the international financial system which allows, permits and helps the illegal transfer of funds. In a study of past and present leaders in Nigeria, Paul Collier of Oxford University's Centre for the Study of African Economies concluded that about \$280 billion dollars of the Nigeria's oil proceeds were stolen and stashed in foreign countries, with the active connivance of financial firms like Lloyds, UBS and Barclays.

That corruption is the major cause of poverty in Nigeria as well as many other developing countries is supported by a plethora of data. The crippling level of underdevelopment in Africa is occasioned by corruption. According to Transparent International in a study of 51 countries, there is an inverse relationship between access to safe drinking water and bribery, as people's access to safe drinking water falls as bribery increases, so that the effect of a reduction of bribery is synonymous with that of improving access to clean water as household incomes are increased. Corruption is a huge tax on the Nigerian economy. Because Nigeria is basically a government-oriented economy as most people are reliant on government services and to meet most of their basic needs, meeting the needs in an environment of corruption has meant payment of various forms of regressive taxes. Socially, corruption apart from undermining poverty alleviation efforts tends to ensure social exclusion, alienation, mass frustration, while undermining the rule of law (UNODC, 2004).

From the foregoing, it goes without saying that development and corruption are antithetical. It is a hydra-headed monster in Nigeria because the justice system is weak, the legislature is usually an appendage of the executive arm of government, political opportunism and patronage are the norm, applying the rule of law is alien, while the means of holding perpetrators of corruption to account by civil society are lacking (Lawal, 2007). Because many Nigerians rely on government services, it is not difficult to see why corruption is a major impetus to poverty levels in the country. Corruption affects agriculture, health, education and other aspects of the society. Although there are many facets of corruption in Nigeria, ranging from high-level political graft of monumental scales to low-level bribes to the police officer at checkpoints, it is however the former that exerts the largest financial cost on the country.

Unemployment is adduced as another cause of poverty. Over the years, there has been a steady increase in the number of people who are jobless (CBN, 2002). What must be said is that unemployment in Nigeria is significantly influenced by political actions and the structure of the economy. One glaring area of policy summersault is the educational system, where the curriculum rarely reflects the dynamics and needs of modern society. A disturbing phenomenon is the predominant inability to transmit skills and training acquired at various strata of the educational system into goods and services. In other words, the economy is not geared towards producing skills and training reflective of industrial needs. Poverty alleviation goes beyond the rhetoric of quantum leap in educational institutions, funding and the mantra of universal basic education. What is imperative is congruence between the demands of industry and the supply of skills by educational and training institutions. Poverty, apart from the many symptoms which are taken as causes, and apart from the many forces which trigger it, is one of the products of policy rascality.

In Nigeria, gender inequality contributes to the poverty levels. This is especially so in areas where traditional and or cultural institutions combine to constrain women from exercising their full potentials and contributing their quota to the country's development. Gender inequality is amply demonstrated in girl-child education, which is not accorded a significant right of place. In politics, Nigeria has not been able to achieve the 30% inclusion of women. Cultural and traditional constraints still pose huge challenge. The structures, processes and actors which precipitate and reinforce the operation of gender stratification in Nigeria exist at the macro and the micro levels, each with a feedback on the other (Afonja, 1988).

Economic shifts have been identified as a cause of poverty in Nigeria. This shift is reflected in the relative decline in agriculture. A growing number of young and agile Nigerians have tended to move away from agriculture to industrial concerns. This scenario has been engendered by the relative urbanization in the economy, leading to sharp rural-urban migration, with its attendant consequences on employment, social services and fall in productivity in rural-based economic activities. What is instructive is to highlight the increasing congestion of the urban centres, a major feature of which is the divergence between the skills possessed by the bulk of the rural-urban migrants and those required by modern urban industries for employment. Thus, there is a fast rising massive pool of the unemployed and the unemployable, and consequently on the number of poor people.

The Structural Adjustment Programme (SAP) of 1986 has been blamed for the sharp rise in poverty levels in Nigeria. SAP was an initiative of the International Monetary Fund (IMF) and the World Bank. It is even ironical that both institutions are involved in efforts toward reducing poverty, with the World Bank sponsoring many researches on poverty reduction. Some scholars maintain that the IMF and World Bank- prescribed structural adjustment policies means that nations that are lent money abide by certain conditions, such as that they cut social expenditure, which is vital for economic growth and development in order to repay the loans. In the light of this, Nigeria was tied to opening up its economy and being primarily commodity exporters, a situation that led to worsening terms of trade between the country and the advanced countries of the world. One implication of the structural adjustment programme in Nigeria is incessant hikes in the price of petroleum products, which have negatively impacted industrial productivity, real incomes, resulting in a general deterioration of living standards. The most notorious cases were recorded between 1999 and 2007, when fuel hikes were the norm rather the exception, and where flimsy rather than purely rational reasons were advanced. In early 2002, government announced petroleum price increases from N22 to N26 per litre of petrol, diesel from N21 to N26 per litre and kerosene from N17 to N24. In September, 2003, the government deregulated the price of fuel which led to a 15% increase in prices. This was after an unsuccessful attempt in June of that year to increase price by as much as 54%, i.e. from N26 to N40 per litre. This resulted in a sharp reaction by the trade union movement when a strike that lasted for 8 days was embarked on. At the end of it, government was compelled to reduce the price from N40 to N34. An attempt to increase pump prices of petrol occurred in 2007, a day before the new government of Umaru Yar'Adua was to be sworn in. Government raised the pump price from N65 to N90. A nationwide strike greeted the announcement. At last, the price was reduced to N65. In 2012, the government raised the price of fuel pump from N65 to N141 and when labour embarked on industrial action, the figure was brought to N97. The cost to the economy of these measures is high in term of lower purchasing power, lower productivity and unemployment.

Globalization might have contributed its own quota to the frightening poverty level in Nigeria. It is the view of some scholars that globalization results in increasing inequality in the world; it maintains the historic unequal rules of trade. In many cases, international political interests have led to a diversion of available resources from domestic needs to western markets. Politics and power-play by the developed countries have therefore meant that Nigeria and her people can be controlled, a situation that has perpetuated dependency. Until a country has achieved some level of good governance, a revamped industrial base, modest economic growth, fairly efficient public infrastructure and utilities, the gains of globalization are difficult to quantify. One pertinent issue with globalisation is the "globalisation of policy making." Many developing countries are "policy takers" in the sense that they have little say in the making of the rules or policies of powerful international agencies, particularly the IMF, World Bank and the WTO, while having to implement the policies at national level. This is

impelled and promoted by the overwhelming influence which the developed countries have at the World Bank and IMF due largely to their enormous advantage in the voting system which is weighted by equity shares. This has led to the continual waning of influence of developing countries in decision-making over economic and social issues at the international level, with many developing countries being at the receiving end.

CONCLUSION AND THE WAY FORWARD

Poverty is a multidimensional phenomenon which appears in various dimensions. These dimensions include lack of adequate food and shelter, economic dislocation, vulnerability to ill health, inaccessibility to education and health, natural disasters and inability to speak out in matters concerning the poor of society and be heard by relevant institutions. It should be emphasized that until an understanding of all the multi-dimensional nature of poverty is brought into focus, all the various strategies mapped out to tame the monster may end up addressing only a parochial aspect of the problem. Of all the guises in which it may appear, economic poverty is most manifest, in such characteristics as inability to meet the basic needs of life such as food, clothing, shelter and good health, all of which are perpetuated by inaccessibility of many people to the wealth of the state.

Majority of Nigerians are increasingly being faced with the daunting task of releasing themselves from the shackles of misery and squalor. This is ironic considering that the relatively high oil revenues earned by the country have not been translated to higher living standards. The country is therefore faced with the paradox of resolving the contradiction of growth without development.

Among other causative factors, corruption resulting from political and economic structures is at the heart of the poverty pandemic. This is because it promotes reckless and visionless leadership, misplaced priorities and consistent inconsistencies in policy formulation. Various efforts aimed at stemming the tide of rising poverty in Nigeria have not been successful. The reason is that poverty is rooted in the politico-economic structure of the country. Providing succour to the many people who suffer from poverty is not negotiable in the final analysis. Attention must be paid to the phenomenon. The first step to fighting poverty in Nigeria is the riddance of corruption at all levels. This can be achieved through a re-configuration of the political and economic matrix (the political system, the justice system, the productive and allocative base of the economy) devoid of pecuniary interests. Strategies directed towards poverty alleviation must be holistic, commencing with a frontal attack on corruption.

The benefits of a frontal attack on corruption are not exclusive to poverty alone. It is capable of ensuring an equitable and responsible political culture which can enthrone a stable macro-economic environment through proper policy formulation and implementation; and proper identification of the needs and interests of the country and the pursuance of same within the ambit of the international economic system. Above all, the growth and development of the economy, the development of the human and natural resources and the broader provision of an environment where Nigerians can be truly allowed to develop their humanity are ensured when corruption is brought to the barest minimum, if not eliminated.

REFERENCES

1. _____ (2002). Statistical Bulletin.
2. _____ (1997). Poverty and Welfare in Nigeria. Federal Office of Statistics, National Population Commission and the World Bank.
3. _____ (1999). "Nigerian Consultations with the Poor". Report of the Global Synthesis Workshop September 22-23.
4. _____ (1996). Socio-Economic Profile of Nigeria 1996. FOS Lagos, 1996.
5. Afonja, S. (1988): "Critical Issues in Women's Studies in Nigeria— A Sociological Perspective" being a paper presented at the workshop for the Canadian-Nigerian Linkage in Women Studies, held at Obafemi Awolowo University, January.
6. Aliyu, A. (2002). Re-Structuring of the Poverty Alleviation Activities of the Federal Government of Nigeria. National Poverty Eradication Programme Abuja.
7. Andrew, S. (2001): "Transparency, Accountability and Governance in Asian Markets." 21st Turkur Abdul Rahman Lectures, April 17.
8. Bertucci, G. (2004), Transparency and Accountability in Government Financial Management. United Nations, New York.
9. Bulama, B. (2003): Economic Growth Inequality and Poverty in Nigeria. Retrieved from the web 08/06/10.
10. Central Bank of Nigeria (1999), Nigeria's Development Prospects: Poverty Assessment and Alleviation Study. Central Bank of Nigeria in Collaboration with the World Bank.
11. Elaigwu, J (2007): "Nigeria: The current state of the Federation: Some Basic Challenges." Paper presented at International Conference on Federalism in Honour of Professor Ronald Watts, Organized by the Institute of Intergovernmental Relations. Queens University, Kingston, October 18 – 21.
12. Federal Office of Statistics (1996). Poverty and Welfare in Nigeria. American Writing Co-operation. Washington D.C
13. Garba, A. (2006). "Alleviating Poverty in Northern Nigeria." Presented at the Annual Convention of Zumunta Association, Minneapolis, USA July 28 – 29.
14. Jingham M. L. (1987). Economics of Development. Vrinda Publishers.
15. Lawal, G. (2007). "Corruption and development in Africa: challenges for political and economic change", Humanity and Social Sciences Journal, 2(1), pp. 1-7, 2007.
16. Narayan, D. et al (2000), Voices of the Poor: Can Anyone Hear Us? World Bank, New York.
17. National Planning Commission (1995). "Community Action Programme for Poverty Alleviation." CAPPA, Lagos.
18. Organization for Economic Co-operation and Development (2001), "Development Assistance Committee (DAC) Guidelines on Poverty Reduction" Policy Statement by the DAC on Poverty Reduction. Paris.
19. Ribadu, N. (2005): "Nigeria lost N56 trillion to military regimes." Front page of The Guardian, Wednesday May 18.
20. United Nations Office on Drugs and Crime (2004). United Nations convention against corruption. New York: United Nations, www.unodc.org.
21. World Bank (1990). World Development Report on Poverty. Oxford University Press.

MICRO, SMALL AND MEDIUM ENTERPRISES IN INDIA- AN ANALYSIS

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ABSTRACT

The socio-economic policies adopted by India since the Industries (Development and Regulation) Act, 1951 have laid stress on MSMEs as a means to improve the country's economic conditions. Micro, Small, Medium Enterprises have registered a remarkable growth in 1980-81 from 8.74 lakh units to an estimated lakh 298.08 units in 2009-0-10. The most recent change was in the year 2006 wherein the "Service Sector" was introduced through Micro, Small, and Medium Enterprises Development Act, 2006. Micro, Small and Medium Enterprises (MSMEs) credited with generating the highest rates of employment growth, account for a major share of industrial production and exports. MSME also play a key role in the development of economies with their effective, efficient, flexible and innovative entrepreneurial spirit. This sector contributes and supports to Indian economy and hence the study has been done to find out the performance of MSME, problems faced by MSME and suggestions for improving MSME. The study is based upon the published data available from government records, reports, books, journals and official government websites. The study explained that MSME have been accorded high priority due to vital role they play by, employment generation, equitable distribution of national income, improvement in entrepreneurial skills and contribution to export earnings. The study also examines the problems faced by MSME. The study concludes that this dynamic sector is now facing number of problems which make them sick. Based on the results, a number of recommendations have been provided at the end to promote the growth of this sector.

KEYWORDS

MSME, Performance, Problem, Employment generation, Suggestions.

INTRODUCTION

The Micro, Small and Medium Enterprises are playing a vital role in the growth of national economies the world over and is considered to be the engine of growth in most countries. The MSMEs are labour - intensive and provide employment to nearly 1.86 crores persons in the country. MSMEs are that they ensure a more equitable distribution of national income, enhance balanced regional industrial development, act as a nursery for Entrepreneurship and facilitate mobilization of local resources and skills which might otherwise remain unutilized. They also play a key role in the development of economies with their effective, efficient, flexible and innovative entrepreneurial spirit. Now the small scale industry is called as Micro, Small and Medium enterprises based on their investment.

The Industrial policy resolution, 1956 clearly stresses upon the role and significance of Small Scale Industries. The economic liberalization process since 1991 has provided opportunities to the small scale sector to access larger markets, improve manufacturing techniques and management processes. Today 95 percent country's industrial units come under Micro, Small and Medium Enterprises. This sector has around 298.08 units (provisional 2009/2010) and produced thousands of products. Small industries in India produce a diverse range of products with the very simple products produced by household enterprises at one end of the spectrum and highly advanced ones at the other end.

The Micro, Small and Medium sector has emerged as a dynamic and vibrant sector of the Indian economy in recent years, displaying extraordinary growth in the field of production, employment and dispersed development in general and exports in particular. Consequently, the Government of India had been encouraging and supporting the promotion of Small-Scale Industries through deliberate policies such as protection from large-scale industries, capital subsidies, differential tax treatment, reservation etc.

REVIEW OF LITERATURE

The role of the Ministry of Micro, Small and Medium Enterprises (M/o MSME) and its organisations is to assist the States in their efforts to encourage entrepreneurship, employment and livelihood opportunities and enhance the competitiveness of MSMEs in the changed economic scenario.(Ministry of Small Scale Industries, Annual Report 2009-2010).

The role of micro, small and medium enterprises (MSMEs) in the economic and social development of the country is well established. The MSME sector is a nursery of entrepreneurship, often driven by individual creativity and innovation. This sector contributes 8 per cent of the country's GDP, 45 per cent of the manufactured output and 40 per cent of its exports. The MSMEs provide employment to about 60 million persons through 26 million enterprises. (Report of Prime Minister's Task Force on Micro, Small and Medium Enterprises, January 2010).

India was the first to display special concern towards SSI and developed several support programmes before it became fashionable to do so among many other developing countries. A basic focus of Indian government thinking has been that employment generation is of paramount importance in a labour surplus economy (Mohan, University of Chicago Press, 2002).

Government of India, Planning Commission, and the committee on the Village and Small Scale Industries in its report has stressed that the setting up of small scale industries will provide employment to the people in the rural areas. (Report of the committee on village and SSI ,1970).

It is evident that small scale sector is an improving sector. It is necessary to bring about performance of the sector.

OBJECTIVES

1. To understand the present scenario of MSME in India.
2. To evaluate the performance of MSME.
3. To analyse the problem of MSME.
4. To provide proper suggestions.

NEED FOR THE STUDY

Micro, Small and Medium enterprises as per MSMED Act, 2006 are defined based on their investment in plant and machinery (for manufacturing enterprise) and on equipment for enterprises providing or rendering services. The defined limit on investment for enterprises to be classified as micro, small and medium enterprises is as follows,

Classification	Manufacturing Enterprises*	Service Enterprises**
Micro	Rs. 2.5 million / Rs. 25 lakh	Rs. 1 million / Rs. 10 lakh
Small	Rs.50 million / Rs. 5 crore	Rs. 20 million / Rs. 2 crore
Medium	Rs. 100 million / Rs. 10 crore	Rs. 50 million / Rs. 5 crore

- Investment limit in Plant & Machinery ** Investment limit in equipment
- Source: MSME Annual Report 2009-10

Now-a-days small scale industries have undergone enormous changes. In 2006, "Service Sector" was introduced through Micro, Small and Medium Enterprises Development Act. It segregated the manufacturing enterprises and service sector units and accordingly defined and raised the investment ceilings to provide the small scale sector an opportunity to compete globally. This sector contributes and supports hugely to our economy and hence the study has been done to find out the performance of Micro, Small, Medium enterprises in India.

RESEARCH METHODOLOGY

This study is based on secondary data. Data has been collected from books, journals, periodicals, newspapers and websites. The fourth Censuses on SSI conducted in 2006-2007 were mainly referred to for data analyses. The data collected was tabulated, analyzed and interpreted for drawing conclusions. After the analyses of the data, few suggestions are made at the end.

PERFORMANCE OF MICRO, SMALL AND MEDIUM ENTERPRISES IN INDIA

The Micro, Small and Medium enterprises are one of the most essential sectors of the Indian Economy in terms of employment generation, the strong entrepreneurial base. It helps to create and its share in production. The Micro, Small and Medium enterprises sector contributes significantly to the manufacturing output such as production, employment and exports of the country. The sector accounts for about 45% of total production and 40% of the total exports of the country. The sector provides employment opportunity to 59 million units throughout the country. There are over 6000 products ranging from traditional to high-tech items. The products are Food parts, Metal products, Rubber and plastic products, Electrical and Machinery parts, Basic metal industry, Chemical and Chemical products and so on.

TABLE: 1.1 PERFORMANCE OF MICRO, SMALL AND MEDIUM ENTERPRISES IN INDIA

Sl.NO	Year	Total MSMEs (lakh numbers)	Production (Rs. Crore)	Employment (lakh person)	Exports (Rs. Crore)
1	1992-93	73.51	84413	174.84	17784
2	1993-94	76.49	98796	182.64	25307
3	1994-95	79.60	122154	191.40	29068
4	1995-96	82.84	147712	197.93	36470
5	1996-97	86.21	167805	205.86	39248
6	1997-98	89.71	187217	213.16	44442
7	1998-99	93.36	210454	220.55	48979
8	1999-00	97.15	233760	229.10	54200
9	2000-01	101.1	261297	238.73	69797
10	2001-02	105.21	282270	249.33	71244
11	2002-03	109.49	314850	260.21	86013
12	2003-04	113.95	364547	271.42	97644
13	2004-05	118.59	429796	282.57	124417
14	2005-06	123.42	497842	294.91	150242
15	2006-07	261.01	709398	594.61	182538
16	2007-08	272.79	790759	626.34	202017
17	2008-09	285.16	880805	659.35	N.A.
18	2009-10	298.08	982919	695.38	N.A.

Source: Ministry of Micro, Small and Medium Enterprises, Government of India.

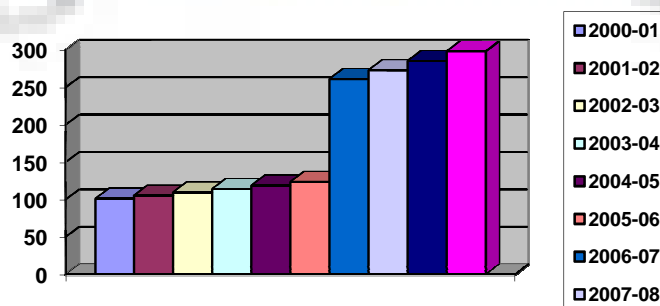
GROWTH OF SMALL SCALE UNITS

The MSMEs are played a very important role in the socio-economy development of the country during the past 50 years. It has significantly contributed to the overall growth in terms of the Gross Domestic Product (GDP), employment generation and export. The performance of the SSI, therefore, has a direct impact on the growth of the overall economies.

The MSMEs registered a remarkable growth from 1992-93 till 2009-2010. Sluggish growth is seen in number of units till 2005-2006. In 2006-2007, growth in small scale units is rapid level. This also pointed out that government protection is helped the growth of units under the competitive business environment.

The growth of the SSI unit is drawn in a bar chart. It reveals SSI units are rapidly increased after 2006. Government policies are motivated to SSI units and protect them.

GROWTH OF SSI UNITS



Source: Ministry of Micro, Small and Medium Enterprises, Government of India.

PERFORMANCE OF MSME PRODUCTION

Preference of Micro, Small and Medium products have discouraged of large scale industries from specializing in labour intensive products in which India has a comparative advantage. In fact, the growth rate of large scale industries had been at least 1.5 times larger than small scale growth. When we compare to 2005 to 2006, the production rate has increased as a twice. The Gross output of MSME in the year 2006-2007 was estimated to be Rs. 7, 09,468.15 crore whereas in the manufacturing sector and service sector it was 6, 68,937.31 crore (94.29%) and Rs. 40, 530, 84 crore (5.71%) respectively.

In 2011, the production rate has been estimated to increase 100, 00, 00 crores.

EMPLOYMENT OPPORTUNITY

The MSMEs provide employment to about 60 million persons through over 26 million enterprises producing over six thousand products. A major strength of the sector is its potential for greater innovation both in terms of products and processes. An inherent strength of the sector is that these enterprises can be set up with very small amounts of investments and have the location flexibility to be located anywhere in the country. Their employment potential is higher compared to large enterprises and are presently estimated to employ 6 crores persons. The total employment from the MSE sector in the country as per the Fourth Census of MSEs with Reference Year 2006-07 was 594.61 lakh numbers. As per the estimates compiled for the year 2009-10, the employment was 695.38 lakh persons in the sector. However, employment generated by the SSI has not solved the problem of unemployment in rural areas.

EXPORTS

The MSMEs contributes hugely to India's exports. The total exports of MSMEs increased from Rs.400 crores during 1973-74 to Rs.13883 crores in 1991-92. In 2005-06, the total exports from MSMEs accounted for Rs.150242 crores. Surprisingly, the total exports in 2007-08 accounted for Rs.202017. India uses low level technology and low level capital but compete with other countries. New opportunities are being created for linkages among MSMEs across the globe under the World Trade Organization (WTO) regime. The Garments exports are main contribution of MSMEs sector. Other sectors, such as bio-tech, IT and IT-enabled services, footwear, etc. have shown a promising potential.

PROBLEMS FACED BY MSMEs

The MSMEs in India could not progress satisfactorily due to various problems that they are confronted with while running enterprises. In spite of huge potentials, the MSME faces the following problems,

1. PROBLEM OF SKILLED MANPOWER:

The success of MSMEs revolves around the entrepreneur and its employees, provided the employees are skilled and efficient. Inefficient human factor and unskilled manpower create innumerable problems for the survival of MSMEs. Non-availability of adequate skilled manpower in the rural sector is the major problem of MSMEs. While we have large pool of human resources, this sector continues to face shortage of skilled manpower due to lack of paying capacity and poor managerial capabilities. Some of the MSMEs entire manufacturing process is based on the craftsmen's memory. Normally the skills used to get transferred to the new generation as the craftsmen's children. But now the youngsters are selecting white coloured job and are leaving their traditional business.

2. INADEQUATE CREDIT ASSISTANCE:

Most of the time, the equity is coming from savings and loans from friends and relatives rather than through banking systems. Very often, the credit is coming from operations or domestic savings rather than established systems of cheap banking credit for working capital. This problem is particularly acute for the village industries as well as the lower end of micro industries. Whereas, the Government of India has taken several steps to increase the lending of this Sector, this remains even now the most difficult problem faced by the MSME.

3. IRREGULAR SUPPLY OF RAW MATERIAL:

MSMEs are faced problems in procuring the raw materials. So, they are used locally available raw materials. The problems arise due to faulty and irregular supply of raw materials. Poor quality of raw material affected the MSMEs quality product. Non-availability of sufficient quantity raw materials affected the day to day work. The fourth all India census of MSME sector indicates some reasons given by the units suffering from sickness. Non-availability of raw material is one of the reasons. Its proportion of sick is 15.1%.

4. ABSENCE OF ORGANISED MARKETING

MSMEs products compare unfavourably with the quality of the product of large-scale units because large scale units has well organised marketing strategy. They also fail to get adequate information about consumer's choice, taste and preferences of the type of product. MSMEs depends very few buyers. There are no possibilities for sales promotion. MSMEs are lag in proper distribution system and they follow in poor delivery schedules.

5. LACK OF MACHINERY AND EQUIPMENT

Small-scale units are striving hard to employ modern machineries and equipment in their process of production in order to compete with large industries. Most of the small units employ outdated and traditional technology and equipment. Lack of appropriate technology and equipment create a major stumbling block for the growth of small-scale industries. Unsatisfactory performance of certain machines results in low production due to lack of routine and preventive maintenance leading to frequent breakdown. The most of the MSMEs follows obsolescence of the manufacturing process ie; without technological development.

6. ABSENCE OF ADEQUATE INFRASTRUCTURE

Indian economy is characterized by inadequate infrastructure which is a major problem for small units to grow. Most of the small units and industrial estates found in towns and cities are having one or more problems like lack of power supply, water and drainage problem, poor roads, raw materials and marketing problem. Thus absence of adequate infrastructure adversely affects the quality, quantity and production schedule of the enterprises which ultimately results in under-utilization of capacity.

7. COMPETITION FROM LARGE-SCALE UNITS AND IMPORTED ARTICLES

The term globalization refers to the integration of economies of the world through uninhibited trade and financial flows, as also through mutual exchange of technology and knowledge. Small-scale units find it very difficult to compete with the product of large-scale units and imported articles which are comparatively very cheap and of better quality than small unit's product. India's production and export of specialized handicrafts was simply unmatched to exchange relations. India is a developing country, so minimum volume of customers purchased the MSMEs product.

8. OTHER PROBLEMS

Besides the above problems, small-scale units have been of constrained by a number of other problems also. They include poor project planning, managerial inadequacies, old and orthodox designs, high degree of obsolescence and huge number of bogus concerns. Increase in project cost, delay in getting power connection, water connection, permission of concerned authorities to discharge effluents etc. affects the MSMEs prosperity. Co-ordination and control of the sector is very much essential. But it is very lack in that sector. Due to all these problems the development of small-scale industries could not reach a prestigious stage.

MAJOR FINDINGS OF THE STUDY

The major findings of the study are as follows:

1. There has been continuous growth in the number of MSME in India.
2. Production from MSME sector has been increasing over the years but the protection to this sector has not indicated very impressive results.
3. MSME has generated large employment though employment from manufacturing sector is not growing.
4. Exports from MSME sector have shown an increasing trend and show a great potential for exports from this sector.
5. There are many more problems faced by MSME. Problems are fallen in Production, Marketing, Human resource and Finance.
6. The problems are lead to create the sickness of the sector.

There is a remarkable scope for increasing the potentials of MSME in India.

SUGGESTIONS

On the basis of review of literature and data analyses, the study makes the following suggestions to promote the growth of MSME further:

1. Compulsory Registration for MSME is required. It is essential to create authenticated data and statistics for growth of the sector.
2. Government should institute proper monitoring system for implementation of Government laws and schemes and control the working of small scale units
3. Manufacturing capabilities should be developed to a level where products are competitive across global markets in terms of price, quality, technology, delivery of services. To achieve this, Indian firms should be enabled to access the latest technology from across the globe.
4. To improve standard of living through manufacturing growth, workers should be enabled to move from lower value added to higher value added jobs. MSMEs and cottage industries should be encouraged to grow and become competitive.
5. State governments and industry bodies have to take a lead to identify MSME clusters, promote cooperation between business and local authorities for cluster development, and formulate policies that attract investment to these clusters.
6. FDI restrictions in retail need to be removed to support by actions in associated areas like granting tax benefits, enabling ease of technology transfer, easing labour regulations, removing MSME restrictions, facilitating easy setting up of business and enabling infrastructure in the country.
7. It is recommended that a State Technology Development Fund for small industries be established in the state to act as the main conduct of transmission mechanism of the State Mission on Technology.
8. The industrial estates can provide the following facilities in addition to developed plots and buildings such as (i) common utilities like power, water, electricity, industrial gas, compressed air etc., (ii) offsite facilities like water tanks, storages, fuel supplies etc., (iii) common effluent treatment and disposal, (iv) communication facilities, (v) secretarial facilities, (vi) staff housing, (vii) transport facility, (viii) medical facility, (ix) fire protection services etc.
9. The recommendations of the various circulars and committee reports of RBI should be implemented minimize the financial problem, authorities can minimize the time taken for loan sanctioning and ensure the collateral free loans at the time of requirement.
10. Maintaining the prices of several raw materials is essential to foster the growth of MSMEs. Investment in research and development has so far been negligible for the MSME sector, hence more allocations to this arena are required.

CONCLUSION

With the liberalization, privatization and globalization of economy, competition has increased and changed the business environment. Significantly, with the flood of foreign brands of products, Indian MSME brands are facing a serious challenge to survive and companies are forced to redesign their marketing strategies for effective marketing and penetration in markets. Firms are making efforts to improve manufacturing capability. This is being done through building alliances as well as through initiatives within the firm. Quality up gradation seems to be their key priority. The efforts at improving manufacturing capability may still prove to be inadequate to meet the competitive challenges. The inclusion of service sector is indeed a good initiative to have new schemes to promote this sector. However, to achieve greater growth, it needs to achieve technological excellence and increase its competencies in the areas of finance management, business management and labour management. It needs to improve its product and service quality to global standards and seek ways of innovation. Ministry of Micro, Small and Medium Enterprises gives marketing support through buyer seller meet, Exhibition and technology support. For meeting credit needs of MSMEs are through tie-up arrangements with Banks.

LIMITATIONS OF THE STUDY

The study is based on secondary data collected from books, articles in newspapers, magazines, journals and websites only.

REFERENCES

1. Government of India (2007), Annual Report 2006-07, Ministry of Small Scale Industries, New Delhi.
2. Government of India, Annual Report (2010-2011), Ministry of Micro, Small and Medium Enterprises, New Delhi.
3. Government of India, Economic Survey, Various Issues, Economic Division, New Delhi.
4. Mishra, S.K. and Puri, V.K.(2008), "Small – Scale Industries in India " in Indian Economy, Himalaya Publishing House, Mumbai, pp 177-190.
5. Prof.A.K.Senguptha, "A Study of the problems of sick small scale industries in Uttar Pradesh and suggested strategies for their revival", Planning Commission Government of India, Luck now.
6. Sridhar Krishna(2000) , The impact of phasing out of import licensing on small scale industries, Indian Council for Research on International economic relations, New Delhi.
7. Urmila Moon, (2010), A critical evaluation of Small Scale Industries in India, BVIMSR's, Volume:2 ,Issue :1 April 2010.,pp.41 to50.
8. <http://theviewspaper.net/small-scale-industries-an-important-catalyst-for-the-growth-of-india%E2%80%99s-economy/>
9. <http://www.preservearticles.com/201101153374/problems-faced-by-small-scale-industries-in-india.html>

SCOPE OF NEEM (AZADIRACHTA INDICA) PESTICIDES IN AGRICULTURE – A STUDY IN WEST BENGAL**DR. A. K. NANDI****ASSOCIATE PROFESSOR****DEPARTMENT OF AGRICULTURAL ECONOMICS
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BIDHAN CHANDRA KRISHI VISWAVIDYALAYA
MOHANPUR****ABSTRACT**

Intensive exploitation of synthetic pesticides pollutes the environment by contaminating soil, water, air and food. Since antiquity, neem as a botanical insecticide is used by our predecessors. But with the onslaught of synthetic pesticides during 1940s the use of neem pesticide becomes obsolete. There is an urgent need to switch over from chemicals to botanical pesticides specifically neem. In spite of enactment of Insecticides Act, banned and very highly toxic pesticides (red label) are in vogue in protecting the crops from the ravages of insect pests. Organochlorine and organophosphorus groups of pesticides are found widely used for all crops. Vegetables are found consuming pesticides much higher than other crops. On the contrary, neem as a botanical insecticide proves its excellence from the viewpoint of reducing cost of cultivation, income and employment generation and above all its eco-friendly nature. Phase-wise processing of neem pesticide and cost involvement is highlighted here. The concept of preparing home-made pesticide comes to the fore in this context. Thirty three man-days per hectare are estimated to be created for the preparation of requisite quantum of neem pesticides for spraying pointed gourd followed by chilli (22 man days) and Brinjal (about 17 man days). Serious efforts are to be taken by public and private agencies to motivate farming community in favour of using neem-based pesticide.

KEYWORDS

Scope of Neem, Employment generation, Neem Pesticide, Neem, Use of Neem Pesticides.

INTRODUCTION

With the explosion in population within few decades the country will be facing severe problem to meet the overwhelming domestic demand for food in the forthcoming future. Land, a major factor of production, is limited and cannot be expanded further. In order to keep pace with the growing demand for food a substantial hike in the productivity of land through sustainable use of natural resources is of prime importance today. At the same time adoption of low cost cultivation techniques through exploiting natural resources with a view to safeguard public health becomes very pertinent. Excessive and indiscriminate exploitation of chemical pesticides not only endangers human civilization but also pollutes the environment to a great extent and has given rise to genetic resistance of pest species. Merely, 1 percent of the pesticides applied to a crop reach the target pests and the remaining 99 percent contaminates soil, water, air, food etc¹². In view of preventing imminent danger for human being, other creatures and restoring environmental balance, attention must be given towards judicious and need based pesticide use or using biodegradable and environment friendly botanical pesticides to maintain the sustainability. Pesticide derived from neem comes under the purview of botanical pesticides and it is envisaged that these products will substitute the synthetic plant protection materials quite satisfactorily.

¹² Dhaliwal, G. S. and Arora, R. Integrated Pest Management - concepts and approaches, P. 282

Neem (*Azadirachta indica*), an evergreen perennial crop is used widely by our ancestors since time immemorial. It belongs to the family Meliaceae and is indigenous to India. The repellent and antifeedent effects of neem have been reported against a wide range of insect pests. All parts of the tree possess insecticidal activity but seed kernel is the most active. Nearly hundreds of chemicals have been extracted from various parts of neem tree and Azadirachtin, the most important biologically active component exhibits phagorepellent and toxic effects to various insect pests¹³.

Commercialization of neem-based pesticide is expanding very fast. Nearly hundreds of products are either being marketed or are awaiting commercialization in India. Preparation of neem-based pesticides by local production units comes to the fore¹⁴ keeping in view the resource poor small and marginal farmers.

OBJECTIVES

The major objectives of the study are as follows:

- i. to study the present status of pesticide uses in West Bengal
- ii. to observe the degree of uses of different labels of synthetic pesticides in sample area
- iii. to point out the magnitude of application of different groups of pesticides in different crops
- iv. to calculate the cost of preparation of neem pesticides, and
- v. to observe the employment potentiality generated from the preparation of neem pesticides.

METHODOLOGY

The present study attempts to evaluate the economics of using neem pesticide in crop production. A survey was conducted in 2001-02 among 430 farm households spread over five agricultural districts namely, Bardhaman, Hooghly, Nadia, South 24-Parganas and Murshidabad of West Bengal following three-stage random sampling to examine the extent of use of various types of traditional pesticides *vis-à-vis* neem pesticide in agriculture. The costs have been inflated at 12.50 per cent per annum to reach the expected costs for the year of 2011-12.

RESULTS & DISCUSSIONS

A. PRESENT STATUS OF PESTICIDE USE

At the outset, consumption of pesticides in terms of physical volume as well as active ingredient form in West Bengal over time is presented here. A slightly upward trend in the consumption of pesticides is visualized from 1991 to 1994 whereas from 1994 onwards a declining trend is noteworthy. This diminishing trend in the use of quantity of pesticides may be due to efficient implementation of IPM, use of biological control techniques and uses of modern pesticides. The further investigation may be done to churn out the probable causes of declining trend of pesticide uses. The graphical presentation of the data-set presented in Table-1 visualizes clearly from Fig-1.

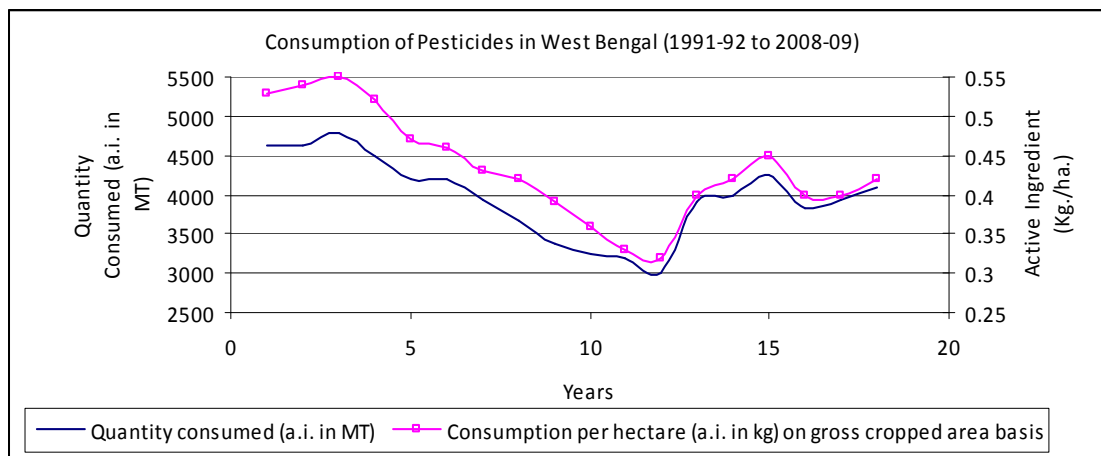
TABLE-1: CONSUMPTION OF PESTICIDES IN WEST BENGAL

Year	Quantity consumed (a.i. in MT)	Consumption per hectare (a.i. in kg) on gross cropped area basis
1991-92	4612	0.53
1992-93	4625	0.54
1993-94	4790	0.55
1994-95	4500	0.52
1995-96	4210	0.47
1996-97	4196	0.46
1997-98	3930	0.43
1998-99	3678	0.42
1999-2000	3370	0.39
2000-01	3250	0.36
2001-02	3180	0.33
2002-03	3000	0.32
2003-04	3900	0.40
2004-05	4000	0.42
2005-06	4250	0.45
2006-07	3830	0.40
2007-08	3945	0.40
2008-09	4100	0.42

Source: Directorate of Agriculture, Plant Protection and Quality Control, Govt. of West Bengal, India.

¹³ Saxena, R. C. Scope of neem for developing countries, Souvenir World Neem Conference, Feb. 24-28, 1993, Bangalore, India, pp. 30-36

¹⁴ Lim, G. S. and Bottrell, D. G. (1994) Neem pesticides in rice: potential and limitations, International Rice Research Institute, Manila, Philippines



The study uses the concept of Intensity of using of a particular label of pesticide for a particular crop to observe the degree of uses of different labels. The following formula has been used to work out the intensity of pesticide uses.

Intensity of using a particular label of pesticide for a particular crop

$$= \frac{\text{No. of application of a particular label of pesticide for a particular crop of total surveyed farmers}}{\text{No. of farmers cultivating that particular crop}} \times 100$$

TABLE-2: INTENSITY OF DIFFERENT LABELS OF PESTICIDES USED BY THE HOUSEHOLDS DURING 2001-02

Vegetables	Banned	Red Label	Yellow Label	Blue Label	Green Label
Chilli	5.55	100.00	116.67	33.33	11.11
Bhindi	0.00	107.14	57.14	57.14	0.00
Brinjal	0.00	104.35	65.22	69.56	4.35
Cabbage	12.50	37.50	41.67	8.33	145.83
Potato	1.92	50.00	50.00	7.69	80.77
Tomato	6.67	13.33	113.33	0.00	13.33

According to the degree of toxicity, pesticides are generally classified into varying labels e.g. red, yellow, blue and green labels defined as very high toxic, highly toxic, moderately toxic and slightly toxic pesticides respectively. Intensity of using different labels of pesticides for some important vegetables by the farm households is highlighted in Table-2. Red label pesticides are found to be widely used in case of bhindi and brinjal whereas pesticides belonging to yellow label are reported to be used massively in case of chilli and tomato. Slightly toxic pesticides are used mostly in case of cabbage. The study also points out the uses banned pesticides in an insignificant proposition.

TABLE-3: APPLICATION OF VARIOUS CHEMICAL GROUPS OF PESTICIDES AND THEIR ACTIVE INGREDIENTS (KG / HA) IN DIFFERENT CROPS IN THE SELECTED CROPS OF WEST BENGAL

Crop	Organo-chlorine	Organo-phosphorus	Carbamate	Benzi-midazole	Dithio-carbamate	Synthetic Pyrethroid	Azadirachtin	Organophosphorus +synthetic Pyrethroid	Total
Winter Paddy	0.66 (68.25)	0.19 (19.65)	0.10 (10.34)	0.004 (0.42)	0.01 (1.03)	0.002 (0.21)	0.001 (0.10)	-	0.967 (100.00)
Summer Paddy	0.45 (64.01)	0.12 (17.07)	0.12 (17.07)	0.001 (0.14)	0.01 (1.43)	0.001 (0.14)	0.001 (0.14)	-	0.703 (100.00)
Jute	0.47 (73.44)	0.13 (20.31)	0.04 (6.25)	-	-	-	-	-	0.64 (100.00)
Wheat	0.06 (6.79)	0.004 (0.45)	0.23 (26.02)	0.57 (64.48)	0.02 (2.26)	-	-	-	0.884 (100.00)
Mustard	0.05 (31.25)	0.11 (68.75)	-	-	-	-	-	-	0.16 (100.00)
Brinjal	0.23 (4.51)	0.72 (14.12)	3.83 (75.10)	-	0.08 (1.57)	0.24 (4.70)	-	-	5.10 (100.00)
Bhindi	0.32 (3.66)	2.67 (30.51)	-	-	-	0.29 (3.31)	-	5.47 (62.52)	8.75 (100.00)
Pointed gourd	9.56 (29.68)	0.41 (1.27)	0.30 (0.93)	2.20 (6.83)	19.74 (61.29)	-	-	-	32.21 (100.00)
Chilli	1.27 (38.25)	1.77 (53.31)	0.08 (2.41)	0.06 (1.81)	0.05 (1.51)	0.09 (2.71)	-	-	3.32 (100.00)
Tomato	0.67 (62.04)	0.15 (13.88)	0.03 (2.78)	0.10 (9.26)	0.10 (9.26)	0.03 (2.78)	-	-	1.08 (100.00)
Potato	0.77 (21.21)	0.12 (3.31)	0.21 (5.79)	0.16 (4.41)	2.37 (65.28)	-	0.00003 (0.001)	-	3.63003 (100.00)

Note: Figures within parenthesis indicate percentage of the respective total.

Pesticide use behaviour in different crops is presented in Table-3 based on various chemical groups along with the actual application of active ingredients. Pesticides are consumed heavily by the vegetables as compared to other crops. Organochlorine and organophosphorus groups of pesticides are reported to be used for all the crops surveyed. Highest utilization of the former group of pesticides is observed in case of jute (73.44 percent) followed by winter paddy,

summer paddy and tomato. Efficacy of this group of pesticides is well-known for controlling mites in jute, Brown Plant Hopper (BPH), Green Leaf Hopper (GLH), yellow stem borer of rice and fruit borer in tomato.

Organophosphorus group of pesticides is reported to be used massively in case of mustard (about 69 percent) to check the aphid infestation. Carbamate group of pesticides is visualized excessively used for Brinjal (75 percent) to fight out against the fruit and shoot borer. Redundant use of benzimidazole group of pesticides is observed for wheat (64 percent) to prevent the fungal diseases. Dithiocarbamate group of pesticides are very effective against late blight disease of potato and nematode infestation in case of pointed gourd as reflected by its use. Consumption of neem based pesticides containing Azadirachtin is noticed in case of summer paddy, winter paddy and potato, though in a very small quantum.

B. COST OF PREPARATION AND APPLICATION OF NEEM SEED KERNEL EXTRACT

Costs incurred for various components and for performing some operations in the preparation of exact amount of neem pesticide from neem seed for selected vegetables are furnished in Table-4. Treatment with neem pesticide containing various quantities of neem seed kernel for different vegetables is approximate. In-depth study is required to determine the accurate dose of neem pesticide to be applied for various crops. Considering the duration of crop and thereby the number of sprays needed for each crop at an interval of 10 days, the total expenditure for processing of neem pesticide is worked out though it is imputed.

TABLE-4: ESTIMATED COST FOR PREPARATION OF NEEM PESTICIDE FROM NEEM SEED FOR SPRAYING PER HECTARE OF DIFFERENT VEGETABLES DURING 2011-12

Crop	Duration (months)	Quantity of neem kernel used (gm)	No. of sprays needed	Cost of neem seeds(Rs.)	Cost of labour (Rs.)	Cost of gunny bags (Rs.)	Cost of adjuvant (Rs.)	Total cost (Rs.)
Brinjal	6	25	18	5468	1849	547	501	8364
Chilli	4	50	12	7290	2465	729	668	11152
Bhindi	3	25	9	2734	924	273	251	4182
Tomato	3	25	9	2734	924	273	251	4182
Cabbage	3	25	9	2734	924	273	251	4182
Cauli-flower	3	10	9	1094	370	109	100	1673
Pointed gourd	6	50	18	10935	3697	1094	1002	16728

** considering statutory wage rate (Rs. 110/ man-day); Costs deflated at 2011-12 prices

*** Based on moderate infestation of pests.

A comparison between costs on chemical pesticides vs. neem is visualized from Table-5. From the point of view minimization of cost in crop production, neem pesticide as a plant protection material exhibits its excellence over chemicals in most cases. Negative differences are observed in case of tomato and chilli may be attributed to use of over exploitation of chemicals as general farmers believe that higher doses of pesticides yield more crop production.

TABLE -5: CROP WISE COMPARISON OF CHEMICAL PESTICIDE COST AND NEEM BASED PESTICIDE COST PER HECTARE DURING 2011-12

Crop	Chemical pesticide*	Neem kernel**	Difference
Tomato	3580	4182	-602
Chilli	9225	11152	-1927
Cabbage	10903	4182	6721
Bhindi	21772	4182	17590
Brinjal	32993	8364	24628
Pointed gourd	43091	16728	26362

* Calculated on the basis of Prime Cost (Cost D) concept of farm

** Estimated on the basis of field level experiment at Central Research Farm, Gayeshpur, B. C. K.V. due to lack of present use at farmers' level.

C. EMPLOYMENT POTENTIALITY

Besides value addition, there is an ample scope for generation of income and employment in the rural sector from the processing of neem pesticide¹⁵ as depicted from Table-6. The computation is made on the basis of duration of the crops, doses applied to the crops and prevailing wage rate (Rs. 110 per man-day) for all operations. The highest man-days (33 man-days) are estimated to be created for the preparation of requisite quantum of neem pesticide for spraying pointed gourd followed by chilli (22 man-days) and brinjal (16.67 man days). So there is an immense opportunity for unemployed rural masses to be engaged in the collection of neem fruits and manufacture of neem pesticide indigenously for their subsistence. Singh (2002)¹⁶ in his study also expressed similar opinion regarding the creation of huge employment opportunities to rural and tribal population through harnessing the potential of neem. In addition to that, the farming community has to lay more emphasis on the preparation of homemade neem pesticide exploiting the family labour including female labour with a view to reduce the cost of cultivation.

TABLE-6: ESTIMATION OF MAN-DAYS FOR PROCESSING OF NEEM PESTICIDE FROM NEEM SEED PER HECTARE FOR DIFFERENT VEGETABLES

Crop	Operation wise requirement of man-days							
	Cleaning and grading	De-pulping	Warming	Drying	Storing	Pulverisation	Packaging	Total
Brinjal	1.96	1.76	2.16	2.16	2.16	5.03	1.44	16.67
Chilli	2.61	2.35	2.87	2.87	2.87	6.71	1.92	22.21
Bhindi	0.98	0.88	1.08	1.08	1.08	2.52	0.72	8.33
Tomato	0.98	0.88	1.08	1.08	1.08	2.52	0.72	8.33
Cabbage	0.98	0.88	1.08	1.08	1.08	2.52	0.72	8.33
Cauliflower	0.39	0.35	0.43	0.43	0.43	1.01	0.29	3.33
Pointed gourd	3.92	3.53	4.31	4.31	4.31	10.06	2.87	33.31

¹⁵ Mruthyunjaya and Jha, D. Economics and policy issues, Neem, Society of pesticide science, 1993, pp. 311-317

¹⁶ Singh, S. R. Role of small scale Industries in harnessing the true potential of neem products, Proceedings of World Neem Conference, 2002, p. 10

CONCLUSION

Neem as a botanical insecticide is used since antiquity to protect agricultural crops from the ravages of insect pests. However, the efficacy, simplicity and flexibility of broad spectrum synthetic pesticides evolved during 1940s made the use of botanical pesticides obsolete. Exclusive reliance and dependence on synthetic insecticides for managing all insect pests have created a number of ecological problems and aggravation of pest attack on crops. In realizing the adverse effects of synthetic chemicals neem has attracted the attention of the scientific community. Taking into account the economic aspects as well as environmental aspects of using neem insecticide the need of the hour is to motivate and direct the farming community in favour of using the same in lieu of synthetic ones wherever possible and for that to promote neem plantation on the uncultivable marginal lands leading to wasteland development and thereby boosting agricultural economy to some extent. The study also points out the low cost involvement in use of neem pesticides than chemical pesticides in most of vegetable crops except tomato and chilli. Generation of man days could be possible through the preparation of neem pesticides and application of it. Preparation of neem pesticides can generate 33 man-days of employment per hectare in case of pointed gourd followed by chilli and brinjal. Self Help Groups (SHG) comprising particularly the village women are to be engaged for preparation of neem pesticides to provide them an alternative engagement of job.

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REFERENCES

1. Dhaliwal, G. S. and Arora, R. Integrated Pest Management - concepts and approaches, P. 282
2. Lim, G. S. and Bottrell, D. G. (1994) Neem pesticides in rice: potential and limitations, International Rice Research Institute, Manila, Philippines
3. Mruthyunjaya and Jha, D. Economics and policy issues, Neem, Society of pesticide science, 1993, pp. 311-317
4. Saxena, R. C. Scope of neem for developing countries, Souvenir World Neem Conference, Feb. 24-28, 1993, Bangalore, India, pp. 30-36.
5. Singh, S. R. Role of small scale Industries in harnessing the true potential of neem products, Proceedings of World Neem Conference, 2002, p. 10

MOOD STATE AND CUSTOMER ORIENTATION**DR. ANANT GWAL****PROFESSOR****ACROPOLIS INSTITUTE OF MANAGEMENT & RESEARCH****INDORE****RAJESHWARI GWAL****ASST. PROFESSOR****ACROPOLIS INSTITUTE OF MANAGEMENT & RESEARCH****INDORE****DR. SANJEEVNI GANGWANI****ASSOCIATE PROFESSOR****MEDICAPS INSTITUTE OF TECHNOLOGY & MANAGEMENT****INDORE****ABSTRACT**

In this experiment, mood states were induced by exposure to two different categories of songs one joyous and another gloomy, with specific verbal instruction from experimenters. Subsequently, scale of customer orientation was administered. Results show that listening music of different categories namely Joyous and Gloomy with respect to control group does not differ significantly with respect to customer orientation.

KEYWORDS

customer orientation, marketing.

INTRODUCTION

In a contemporary research, lot of emphasis has been given on the emotional aspects and its importance in the business environment. In this context, the studies have shown significant influence of emotions on relationship marketing. In relationship marketing the customer has become a peripheral and reflected a whole new set of customer needs that had not previously been properly appreciated. Customers need the rational side to justify their buying decision. But it's the emotional side that really plugs a product into their lives.

Personality researchers have discovered important patterns in the way which individuals experience emotions and moods that influence their behavior (Derlega, et al., 1998). The study attempts to understand the influence of mood state with respect to customer orientation. The experimental study was designed to demonstrate that do mood state contributes in the customer orientation. The concept of mood has been widely studied by the psychologists. Mood has been considered as a multi faceted concept.

Moods are temporary feeling states that are accompanied by mental phenomena, which is consciously experienced as subjective feeling state that last for hours and days (Ekman, 1994a); they may linger as after effects as earlier emotional reactions, but they often seem to have no obvious source (Frijda, 1994). Because of their duration moods can color a persons outlook for extended periods, at any given time. People current moods subsequently influence how they feel about themselves (Sedikides, 1992) and the decisions they make (Isen, 1993).

Customer orientation influences success or failure in a relationship (Anderson and Weitz 1987). According to the dictionary of marketing (American Marketing Association, 2004) in which the customer's needs and interest are paramount. Customer orientation is a combination of cognitive and behavioral style of the sales person, which is reflected in their interactions with the customers. These styles are desired to help customers to make good purchase decisions, helping customers to assess their needs, offering products that will satisfy those needs, describing products accordingly avoiding deceptive or manipulative influence, tactics and thus, avoiding high pressure (Misra and Misra, 2002, Goyal, Misra, and Misra, 2003, Mittal and Misra, 2004; Beardin et al, 1993).

REVIEW OF LITERATURE

The review of literature on moods indicated that there are related concepts, such as, emotions, moods and temperament that are need to be critically evaluated and distinction need to be established. According to Davidson there are two distinguishing features between emotions, moods and temperament. He explains that typically short-lived and sudden emotions exist upon a background of a particular longer lasting mood. One distinguishing feature is function - emotions bias action, while moods bias cognitive processes. Another feature is what circumstances elicit each - emotions are triggered by sudden unexpected events, while moods follow events that occur over a slower time course. He defines 'temperament' as early consistent differences of part genetic and part environmental origins, and 'affective style' as individual, consistent, trait-like ways of reacting to emotional events.

Building on Davidson's answer, Ekman concentrates mostly on duration (brief emotions, longer moods) and on circumstances that elicit each (moods can be triggered by changes in body's biochemistry or by extended periods of continual intense recurring emotion). Ekman implies that emotions exist within moods since moods can lower the threshold for feeling certain emotions and since it is difficult to control certain emotions when in a particular mood.

Nico H. Frijda makes a distinction between emotions, feelings, moods, sentiments and personalities. They all differ on the basis of two major aspects:

- (1) If a relationship between the subject and object exists (emotions are related to a particular object while moods are not) and
- (2) Whether one is talking about an acute state or enduring disposition (sentiments or temperaments acquired through social learning and heredity that serve as the bases for emotions).

Goldsmith uses definitions to distinguish emotional reactions, moods and temperamental traits. Emotions are senses that something has changed in relation to oneself, similarly expressed and elicited and usually involve a motivation for action. Mood is a longer-term state usually following an acute emotional reaction. Temperamental traits are very similarly defined as Davidson.

Kagan describes the differences between affective states through a biological paradigm stating that 'acute emotion' can be defined as a sudden, temporary change in psychological and biological processes, while a chronic mood is characterized by an enduring emotional quality in a variety of situations, across various contexts and over longer periods of time. He adds that both of these affect states vary among individuals because of biologically based biases reflected in temperament.

Richard Lazarus also defines a number of affective constructs. 'Emotional state' is a reaction to specific kinds of encounters dependant on the circumstance or event that elicited it. An 'emotional trait' is a tendency to react in a particular emotional way to an encounter.

Lazarus also emphasizes an existing 'person-environment relationship' that typically results in the latency or recurrence of the emotional state (therefore making 'duration' not an essential distinguishing feature between emotions and moods). He defines acute emotions as brief states that arise from particular encounters and moods as background response states that rely on the dispositions of temperament.

Panksepp declares that there is no clear way to distinguish between affective states; however he encourages researchers to keep searching. He distinguishes affective states through their different types of brain processes. Emotions display high levels of arousal in emotional operating systems while moods tend to have very a low level. Emotional systems can evoke certain cognitions, and cognitions may evoke moods and emotions. He also mentions individual emotional strengths and weaknesses, which are influenced by temperamental tendencies.

Watson & Clark define emotions as distinct, integrated psychophysiological response systems, while viewing mood as a longer transitory episode not restricted to feelings that accompany specific emotions. Since the majority of our day is spent in a continuous stream of affect containing some type of often mixed mood, the authors propose an alternative structural approach that consists of two (not mutually exclusive) mood factors: Negative Affect and Positive affect which may incorporate these mixed states.

In conclusion, Davidson & Ekman point out that all the authors make a distinction between emotion, mood and temperament, but except for temperament (which was relatively similar) they have differing views about what the distinguishing features are. Most mention 'duration' as a widely accepted distinguishing feature, however Lazarus claims emotions are neither brief or prolonged, but recurrent. Ekman points out the differences in antecedents of emotions vs. moods, with greater focus on relational aspects by Frijda and Lazarus.

Kagan takes a biological view to the differences. Other distinguishing features included Davidson's consequences of different affective states and different conceptualizations of the constructs like Watson and Clark's continuous stream of affect. Many authors also described other constructs including affective style, sentiments, and personality dispositions that although differ in details and exact definitions but are all related. A question of semantics arises from the fact that many authors had similar ideas but different definitions. For example, Ekman would probably view Frijda's 'emotional episodes' as a mood because of the long duration and the 'dense emotional experience'. The only thing that distinguishes Frijda's definition is that his 'emotion episodes' have an object focus whereas moods do not

Velten (1968) proposed a method for inducing mood states in controlled laboratory situations, opening up a new chapter in basic research on human emotions. The procedure used by Velten consisted in drawing up three lists of 60 sentences in the first person (i.e., self-referential). Each list had a different emotional content: depressive, euphoric or neutral. There were three groups of subjects, so that each group read only one of the three lists of sentences. Subsequently, all subjects were administered various psychological tests, and it was found that this simple procedure induced a mood state capable of producing marked differences in writing speed, decision-making speed, word association and subjective expression of affect.

The importance of these results is due to the fact that, until now, basic research on emotions has focused on its antecedents, especially cognitive determinants, on the analysis of subjective experience and on physiological concomitants; but not so much on the way emotional states alter psychological functioning. Currently, it is accepted that a particular mood state includes an affective component, that is, a subjective experience, but also a cognitive context and a general state of the organism (Mayer, Salovey, Gombert-Kaufman and Blainey, 1991).

However, as regards the relationships between these different components, a variety of approaches can be found. There are those who argue that it is thinking that produces both affective states, that is, the experience of emotion, and behaviors associated with the emotions and all other effects derived from them (Lazarus, 1982). Others, like Zajonc (1980), defend the primacy of affect over cognition. Finally, there are intermediate propositions, such as those of Teasdale and Fogarty (1979), who suggest a reciprocal relationship between cognition and affect, since, while some cognitions might produce changes in mood states, these states may, in turn, affect or alter certain cognitive processes, such as memory. Bower (1981, 1987, 1992) made a considerable contribution to research on the relationship between emotion and cognition, demonstrating the influence of mood states on memory and other cognitive processes, developing new experimental procedures, producing an important body of empirical data and formulating an influential theory on the relationship between emotions and cognition.

In another study (Huron, 2004) mood and music has been analyzed and reported that people appear to differ in their susceptibility to various mood states. Some people tend to be frequently morose or depressed, whereas other people tend to be perpetually sanguine and optimistic. In short, people may differ according to temperament. Possible sources for differences in temperament might include genetic factors, cultural environment, or significant life experiences.

The studies have shown that the music and "atmosphere" go together. At different occasion people put on relaxing music at dinnertime, but listen to something livelier while doing some physical work or exercise or out socializing in larger groups. Similarly it has been found that farmers able to increase production by playing music to their animals, recent studies showing that listening to fast music whilst driving increases the rate of car accidents, and the Mozart Effect claims to increase intelligence (www.mfiles.co.uk, 2004).

In addition, Musical patterns give rise to figures, phrases, themes, melodies, forms and styles and help musicians to provide both recognition and variety in music and optimize the listener's experience by providing works that seems consistent and balanced yet with interesting features to make the experience enjoyable. Sometimes people listen with concentration to music and become involved with it, but at other times the music is playing in the background (see Film Music) or accompanying another activity.

Nevertheless the unconscious experience can have an affect on us, largely due to Pattern Recognition. Repetition of similar music creates a pattern. If we see something familiar, then it triggers memories and related thoughts, sometimes consciously and sometimes unconsciously. The repetition needn't be exact, but "similar" enough to trigger that familiarity. (www.mfiles.co.uk, 2004).

RATIONALE OF THE STUDY

The aforementioned review of literature highlights that there is influence of music with respect to mood in maintaining relationship with the customer. This seems that study undertaken would able to demonstrate the influence of mood in enhancing customer orientation.

OBJECTIVE

To compare mood states (joyous, gloomy and controlled) with respect to customer orientation.

HYPOTHESES

Following null hypotheses were formulated

- (1) H₀₁: There is no significant difference between gloomy and joyous condition groups.
- (2) H₀₂: There is significant difference between gloomy and controlled condition groups.
- (3) H₀₃: There is no significant difference between joyous and controlled condition groups.

METHODOLOGY**THE STUDY**

It was an experimental study.

THE DESIGN

It was a multi experimental control design. Ten subjects were in each of the three experimental condition (Joyous Mood, Gloomy Mood and Control) groups were selected randomly eliminating the subject on the basis of age. These subjects had normal range of Emotional Intelligence level as per the group Joyous, Gloomy, and Control respectively.

	Joyous	Gloomy	Control
Average	74.8	67.7	59.7
S.D.	12.67	13.74	4.79

The experiment was conducted in a room, where extraneous variables such as noise, temperature and illumination were controlled by constancy. Everything else (environment), other than mood, was tried to keep the same. The experiment was conducted in the morning session. Subjects voluntarily participated in the experiment. Each group was called to the testing room one by one.

THE SAMPLE

Thirty management graduates participated in the experiment as subjects of the age group of 22-25 years who were divided into three groups of size ten each.

THE TOOLS

To induce mood states, an audio CD Player loaded with Hindi joyous and gloomy songs sung by Kishore Kumar (Appendix-1) were played. A judge who had a good ear for music selected these songs.

The experiment was conducted in the following way to collect the data:

1. The first condition group was administered the emotional intelligence scale followed by instruction-I and II (Appendix-2). The time taken to complete the scale was 10 minutes. After the administration of emotional intelligence scale, joyous songs for the duration of 30 minutes were played. The subjects were provided customer orientation scale followed by instruction IV (Appendix-2).
2. The second condition group was administered the emotional intelligence scale followed by instruction-I and II (Appendix-2). The time taken to complete the scale was 10 minutes. After the administration of emotional intelligence scale, the subjects were immediately provided customer orientation scale followed by instruction IV (Appendix-2).
3. The third condition group was administered the emotional intelligence scale followed by instruction-I and II (Appendix-2). The time taken to complete the scale was 10 minutes. After the administration of emotional intelligence scale, gloomy songs for the duration of 30 minutes were played. The subjects were provided customer orientation scale followed by instruction IV (Appendix-2).

The analysis was conducted in the following way with the help of the following tools:

Two measures such as Emotional Intelligence and Customer Orientation scale were used to measure level of emotional intelligence and customer orientation.

In this study, Emotional Intelligence scale developed by Hyde et al. (1998) was used to identify the normal range of Emotional Intelligence to form homogenous groups. The scale consisted of 34 statements on five points scale. The split-half reliability was 0.88 and validity was 0.93.

Customer Orientation scale (Saxe and Wietz 1982) was used to measure the extent of customer orientation. This scale consisted of 24 statements. Each statement was rated on a 9-point scale ranging from "never" to "always". The negatively stated items were reverse-scored and a total score was derived by summing the item scores. The internal reliability for the scale was 0.90 and the validity was 0.83.

After getting the sum of the item scores for the Customer Orientation scale the stated hypotheses was tested by applying t-test at 5% level of significance.

RESULTS AND DISCUSSION

In this section, the obtained results would be interpreted and discussed.

On applying t-test it was found that there was no significant difference between different mood states such as Joyous, Gloomy and Control groups. All the three null hypotheses were accepted in the two conditions of the experimental and control groups (Appendix-3).

The research undertaken demonstrated the unique phenomenon where a mood state is not able to influence customer orientation. This phenomenon can be understood as cognitive style of response dominates the mood.

Moods are temporary feeling states that are accompanied by mental phenomena, which is consciously experienced as subjective feeling state that lasts for a short time period (Ekman, 1994a) and of lower intensity than emotions (Oatley, 1992). Unlike emotions, moods are continuing "background states" that remain largely unaffected by external stimuli (Ortony, 1998). They often seem to have no obvious source (Frijda, 1994), which may not be generated by mere music, but requires some additional source.

In a study, Rholes *et al* (1987), demonstrated that the effect of mood states on recall, and possibly on other cognitive processes, depends not on the intensity of the affective experience, but mainly on the cognitive context activated.

In another study Castro *et al.* (1998) in their experiment, induced mood states by exposure to two film clips, one joyous and another gloomy, without any specific verbal instruction from experimenters. Subsequently, tests of immediate memory were performed. Subjects had to remember lists of positive, negative or neutral words. Their results showed that watching films produces a reliable and strong bias on remembering but a lesser effect on expression of mood. Moreover, verbal affect expression and biased remembering were unrelated. They argued that these results are more favorable to a cognitive priming hypothesis than to an affective state-dependent one.

In another study on impact of mood state on group cohesiveness, the researcher Lane and Levitt (2002) found that when the members are known to each other forms a cohesive group and is associated with positive mood.

IMPLICATION

The study reveals the following implications:

- (1) For the formation of team of workforce, the finding of the study provides a guideline. That is, the individuals who are in the age range of 22-25 years. This age group usually found to be more enthusiasts and able to form a cohesive group and are null and void of mood states.

SUGGESTIONS

1. The experiment need to be conducted by using repeated single subject design where is likely to induce mood by repetition of the condition.
2. The experiment can be designed by considering different modes of audio and visual clippings to instigate mood.
3. The experiment can also be designed by incorporating subjects from various disciplines and can be compared with respect to professional groups.
4. A comparative experiment on moods on the basis of gender and other demographic variables need to be studied.
5. Like customer orientation as a dependent variable other related concepts can be explored.

CONCLUSION

The study was conducted with the objective to compare different mood states condition groups (joyous, gloomy and controlled) with respect to customer orientation and the findings reveled that there is no significant difference in comparison to customer orientation under different conditions.

REFERENCES

1. Anderson, Erin and Barton, Weitz (1987). Determinants of Continuity in Conventional Industrial Channel Dyads. Working Paper Marketing Department, The Wharton School of the University of Pennsylvania.
2. Beardin, W.O.; Netemeyer, R.G. and. Mobly M.F. (1993). Handbook of Marketing Scales Multi-Item Measures For Marketing And Customer Behaviour Research. Newbury Park: C.A. Sage
3. Bower, G.H. (1981). Mood and Memory. *American Psychologist*, 36, 129-148.
4. Bower, G.H. (1987). Commentary on mood and memory. *Behavior Research and Therapy*, 25, 443-456.
5. Bower, G.H. (1992). How might emotions affect learning. In S. A. Christianson (Ed.) *Handbook of emotion and memory*, (pp. 3-31). Hillsdale: Erlbaum.
6. Castro, J.F., Pérez, R.G., Barrantes, N., Capdevila, A. (1998). Mood State And Recall Biases: The Role Of Affect Psychology in Spain, 2.(1), 92-99.
7. Davidson, R.J. (1994b). On emotion, mood & related affective constructs. In P. Ekman & R.J. Davidson (Eds.) *The nature of emotion: fundamental questions* (PP 51-55) NewYork: Oxford University Press.
8. Ekman, P. (1994a) Moods, emotions, and traits In P. Ekman & R.J. Davidson (Eds.). *The Nature of Emotion: Fundamental questions* (PP 56-58). New York: Oxford University Press.
9. Frijda, N.H. (1994). The Social roles & functions of emotions. In S. Kitayama & H.R. Markus (Eds.), *Emotion & Culture: Empirical Studies of mutual influence* (PP 51-87). Washington, D C: American Psychological Association.
10. Goyal, R. Misra, A.K. and Misra, R.K.(2003). Practice of Customer Relationship Management Among Bank Employees. In Dhar U., Dhar S. and Agarwal, R. (Editors) *Changing Trends in Management: Challenges and Opportunities*. Excel Books. New Delhi. Chapter 38, pp 339
11. Huron, D. (2004). Emotion: A Summary of Principal Research Findings; <http://csml.som.ohio-state.edu/Music829C/Notes/Summary.html>
12. Hyde, A., Pethe, S., and Dhar, U. (2001). *Manual for Emotional Intelligence Scale*. Vedant Publications, Lucknow.
13. Isen, A.M. (1992) Positive affect & decision-making. In M. Lewis & J.M. Haviland (Eds.), *Handbook of emotions* (PP 261-277). New York: Guilford.
14. Lane, A., Levitt, P. (2002) The influence of depressed mood on other mood states and cohesion. (Part V: psychology). *Journal of Sports Sciences*, 20(1), 67
15. Lazarus, R.S. (1982). Thoughts on the relations between emotion and cognition. *American Psychologist*, 37, 1019-1024.
16. Mayer, J.D., Salovey, P., Gromberg-Kaufman, S. and Blainey, K. (1991). A Broader Conception of Mood Experience. *Journal of Personality and Social Psychology*, 60, 100-111.
17. mfiles (2004). What is music? how music affects moods and creates atmosphere; www.mfiles.co.uk
18. Misra, A. K. and Misra, R. K. (2002). Customer Orientation and Emotional Intelligence: An Empirical Study On Insurance Agents. In Dhar U., Dhar S. and Srivastava M. (Editors) *Local Champions To Global Masters: Mobilising For Growth*. Excel Books. New Delhi. Chapter 35, pp 306-318.
19. Mittal, S. and Misra, A. K.. (2004) Emotional intelligence and relationship building: a study of the insurance agents. In Upinder Dhar, Santosh Dhar and Yogeshwari Phatak (Eds.) *Excel Books*. New Delhi. Chapter 11.
20. Oatley, Keith. *Best Laid Schemes: The Psychology of Emotions*. Cambridge, Cambridge UP: 1992.
21. Ortony, Andrew, Gerald L. Clore, and Allan Collins. *The Cognitive Structure of Emotions*. Cambridge, Cambridge UP: 1988.
22. Sedikides, C. (1992) Changes in the valence of the self as a function of mood. In M. S. Clark (Ed.), *Emotion & Social Behavior* (PP 271-311). Newbury Park, C A: Sage.
23. Teasdale, J.D. and Fogarty, S.J. (1979). Differential effects of induced mood on retrieval of pleasant and unpleasant events from episodic memory. *Journal of Abnormal Psychology*, 88, 248-257.
24. Velten, E. (1968). A laboratory task for induction of mood states. *Behavior, Research and Therapy*, 6, 473-482.
25. Zajonc, R.B. (1980). Feeling and thinking: preferences need no inferences. *American Psychologist*, 35, 151-175.

APPENDIX**APPENDIX-1: LIST OF JOYOUS AND GLOOMY SONGS**

JOYOUS SONGS	GLOOMY SONGS
Apni to jaise taise	Mera jeevan kora kagaz
Pag ghunghroo bandh	Ye jeevan hai
Dekha na hai re	Koi hamdam na raha
Thodi si jo peeli hai	Ghunghroo ki tarah
Khai ke paan banaras wala	Koi lauta de mere
Om shanti om	Aadmi jo kehta hai
Ek chatur naar	Nahin mein nahin dekh sakta

APPENDIX-2: INSTRUCTIONS GIVEN TO THE GROUPS

Instruction-I

We have gathered to participate in an experiment. You are requested to pay attention to the instructions carefully.

Instruction-II

Please fill in the emotional intelligence scale provided to you. Complete the scale in 20 minutes time.

Instruction-III

Now you will be listening to a series of Hindi songs for duration of 30 minutes time. All of you are requested to listen to the music carefully.

Instruction-IV

Now you will be provided with a customer orientation scale. You are requested to respond to all the statement given on the scale. Think about a situation where in you are involved in a sales related behavior.

APPENDIX-3: COMPARISON BETWEEN DIFFERENT MOOD STATES WITH RESPECT TO CUSTOMER ORIENTATION

Joyous State			Gloomy State			t _{cal}	t _{tab}	Result
n	Mean	S.D.	n	Mean	S.D.			
10	141.4	22.83	10	140.8	16.21	0.06	2.101	H ₀₁ accepted

Gloomy State			Control State			t _{cal}	t _{tab}	Result
n	Mean	S.D.	n	Mean	S.D.			
10	140.8	16.21	10	140.3	16.48	0.06	2.101	H ₀₂ accepted

Joyous State			Control State			t _{cal}	t _{tab}	Result
n	Mean	S.D.	n	Mean	S.D.			
10	141.4	22.83	10	140.3	16.48	0.12	2.101	H ₀₃ accepted

PERFORMANCE EVALUATION OF MUTUAL FUNDS IN RECESSION IN INDIA: AN EMPIRICAL STUDY

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ABSTRACT

The examination of mutual fund performance has got a special attention to the academicians as well as professionals worldwide. In this study, the risk-adjusted performance and the consistency of performance of the open-ended growth type of mutual fund schemes (Birla Sunlife Mutual Fund Company) have been examined in India during the recession occurred in 2008; post recession period (2007) and after the recession period (2009). The data relating to the above mentioned company has been obtained from the website of association of mutual funds in India (AMFI) and daily closing net asset value (NAV) has been considered. The evaluation of performance of the open-ended mutual fund schemes based on Sharpe, Treynor, Jensen, Treynor & Mazuy and auto-regressive (AR₁) models for the three year period highlighted different market characteristics and movement. Finally, the study reported that Sharpe ratio and Treynor ratio of all the schemes have been found positive in pre-recession period (2007) and consequently, negative in recession (2008) period and mixed performance in post recession (2009). However, the positive selectivity and market – timing performers of post recession (2009) period is higher than the pre (2007) and recession (2008) periods. However, the persistence of NAV performance of pre, post and recession periods has no significant differences. But, in case of persistence of return the results are quite same in pre and post recession periods.

KEYWORDS

Birla Sun Life, Mutual Fund, Performance, Recession, India.

INTRODUCTION

With the recent development of financial market in India, the mutual fund industry has got an immense importance for investment to the general public. Different types of investors however they are financially strong or weak, aggressive or defensive can invest in mutual fund without having any knowledge in mutual fund investment because the money invested in mutual funds is managed by the expert managers. In India, the mutual fund institutions are in a growing phase. The investment in mutual fund industry increases the real GDP in the country which indicates a healthy economic prosperity. Therefore, the positive effect of economic growth falls into the stock market that represents strong economic growth. But, in the time of recession it is assumed that the economic growth of a country will be declined because the financial indicators which are formed by the economic activities like real GDP including employment, real income and different stock indices are declined. During the recession period the stock market declines and after that rises when the stock-market gets good signal. So, at the time of recession, it is also expected that the mutual fund industry will decline in the same way like stock-market as a result the variation of performance of the mutual fund will be occurred. In this study, the performance will be evaluated of some selected open-ended growth schemes of a particular mutual fund company in India and its effect on performance before recession, during recession and after the recession should be judged.

REVIEW OF LITERATURE

The literature on mutual fund is enormous. A large number of academicians as well as professionals are spending their valuable time on mutual fund research. The research on mutual fund performance first started in USA and gradually the importance on mutual fund research is rising tremendously all over the world because the mutual fund is the attractive source of investment today. Some of the pioneer works will be discussed here in order to develop the basis of the present empirical research in the Indian context.

It has been found that most of the earlier researches were based on Sharpe, Treynor, Jensen and Fama's models. In Treynor's (1965) model popularly known as reward to volatility ratio found that risks are divided into two categories namely total risk and systematic risk. According to the Treynor's model it is assume that portfolios are well diversified and there is non-existence of diversifiable risk. Therefore, beta (a measure of systematic risk) is the appropriate measure of risk. Similarly, Sharpe (1966) developed another model of portfolio performance evaluation popularly known as reward to variability ratio. In R/V ratio total risk is considered in place of systematic risk. This is the difference between Sharpe ratio and Treynor ratio. Therefore, total variability is the appropriate measure of risk. According to this model it may be said that return is not the only measure of mutual fund performance, the component of risk obviously influence the performance. After that Jensen (1968) developed an important model for the evaluation of portfolio performance which is popularly known as Jensen alpha (J_{α}) which is derived from capital asset pricing model (CAPM). The basic objective of this model is to predict the ability of the portfolio managers through successful prediction of security prices. According to this model the ability of the portfolio managers can be judged with the help of alpha value. If the value of alpha is positive it may be expected that the portfolio managers will provide to the investors higher return. However, there was no such evidence of positive alpha could be found in the study. After, Sharpe, Treynor and Jensen, Fama (1972) developed an important model of portfolio performance evaluation. The earlier research studies mainly based on risk and return and confined into a single period only. But, Fama's model evaluates portfolio performance on different dimensions namely stock-selection, market-timing, diversification and return for bearing risk. It may be said that the earlier research works on market-timing performances were very poor. In spite of poor performances, little evidence of positive market-timing performances was present. Treynor & Mazuy (1966) which is popularly known as T & M examined the ability of the market forecasting of the investment managers by taking into consideration of 57 sample fund. The study reported

that there was no evidence of statistically significant market-timing performances. Similarly, Henrikson & Merton (1981), hereafter referred to as H&M, evaluated the performances of 116 mutual fund schemes. Finally, the study reported that only three schemes offered statistically significant market-timing performance. EL-Khouri (1993), examined the risk-return relationship by taking into account the data from Amman Stock Exchange. The study reported that the debt equity ratios of the funds were not correlated with required return. Shah & Hijazi (2005), examined mutual fund performance in Pakistan over a period from 1997 to 2004. They considered equity and balanced funds as sample and used Sharpe, Treynor and Jensen differential measures. Their study reported presence of negative Sharpe ratio but on overall basis the Sharpe ratio was 0.47 as compared to the market (0.27). Similarly, the Treynor ratios of all the funds were less than the beta values however on overall basis the Treynor ratio was 0.13. Finally, the study reported that some of the funds had negative alpha but on overall basis the alpha value of the funds industry was found to be 6.03. Kapil Choudhary (2007) examined the performance of 50 equity investments managers in India over a period of eight years started from January 1998 to December 2005. Fama's decomposition theory had been used in this study to measure investment performance. Finally, the study reported that the stock-selection ability of the investment managers was satisfactory but the market-timing performance was absent. However, the risk bearing and diversification performances were positive. G.Artikis evaluated the performance of 30 domestic bond mutual fund managers in Greece over a period from 15/03/1999 to 31/12/2001 by applying Treynor & Mazuy model. The study reported that 90% of the fund managers have the ability to choose under priced securities, 20% of the sample mutual funds have the power to outguess the market at right time and another 20% of the sample mutual funds have the ability to select under priced securities as well as outguess the market at correct time. Similarly, Filippas Psoma (2001) examined the mutual fund performance of 7 Greek equity mutual fund in Greece. Treynor & Mazuy model had been applied in the study. However, the study reported that four mutual funds out of 17 mutual funds exhibited superior market-timing performance. Santos, Costa, Tusi & Silva (2005) examined the mutual fund performance in Brazil over a period from April 2001 to July 2003. For the study purpose, 307 Brazilian stock funds were considered and applied stochastic frontier approach for the identification of the leaders among the Brazilian stock mutual funds. The study reported that the efficiency of a fund increases with the increase of management skills and finally beat the market and also reported that no relationship between fund size and performance were found. Jordan, Jorgensen & Smidira (2004), examined the mutual fund performance over a period from 1995 to 2001 by taking into consideration those funds which were closed to the new investors for new investment. For the study, they collected data from Centre for Research in Security Prices mutual fund data base and finally applied Sharpe, Treynor, Jensen and Fama & French models. Their study reported that those mutual funds closed their doors to the new investors performed well in the 12 months before closing and also found that the performance of funds tended to decline relative to its previous performance after closing. Thanou (2008) evaluated the Greek mutual funds' performance over a period from 1997 to 2005. To examine the mutual fund performance, he selected 17 Greek equity mutual funds from Association of Greek Institutional Investors and ensured continuity and uniformity. For the analysis, he employed risk-adjusted performance measures of Sharpe, Treynor, Jensen and Treynor & Mazuy. For the study, he divided the total periods in three sub-periods and also divided the market in two categories namely up-market condition and down-market condition. In this study monthly return data was considered for analysis and finally the study reported that the ranks were given to all the mutual funds as per various performance measures were almost same and the mutual funds were well diversified. The study also reported non-existence of market-timing ability and finally two mutual funds out-performed the market index. Zakri Y.Bello (2009), examined the performance of 5 categories of U.S. equity mutual funds during the recessions of 1990 and 2001 and during the 12 months after each recession that was identified by the National Bureau of Economic Research (NBER). After analysis of results the study reported that the return performances of all the mutual funds significantly higher during the post recession period of 1990 and also reported that the return performances of the mutual funds during the recession were higher than the market index and after the recession of 1990. Similarly, during the recession of 2001, he reported that the entire samples performances were in declined trend in post-recession period and also observed that only one category fund (small company) had positive return during the recession and the remaining samples were experienced negative return during the recession and after the recession.

IMPORTANCE OF THE STUDY

In Indian financial market different types of mutual fund companies according to their ownership (Public, Indian private & Foreign private) are operating by providing different types of schemes to the investors. In this study Birla Sun Life Mutual Fund company has been selected among so many private companies. This is one of the important competitors among the private competitors that provide to the investors different types of schemes particularly growth type of open-ended schemes has been considered here. Actually, the importance of the study to investigate the performance of this particular type of schemes and provide a basis (information) by which the investors can judge and take decision when they go for mutual fund investment.

STATEMENT OF THE PROBLEM

The research relating to the performance of mutual funds is enormous. A lot of researches are available world-wide. But, the performance of mutual fund relating to recession period is limited. In Indian context the performance of mutual fund during recession is scanty. Therefore, this problem should be addressed on a particular type of open-ended schemes (Growth) of the fastidious private company (Birla Sun Life MF).

OBJECTIVES

The present study seeks to examine the following objectives:

1. To examine the comparative risk-adjusted performances of the open-ended growth schemes before the recession, during the recession and after the after the recession.
2. To examine the persistence and effect of such performances during the recession.
3. To test whether the return performances of pre and post recession periods are better that the recession period.

HYPOTHESES

In this study two hypotheses have been formulated and tested. The first hypothesis as under:

H₀: The return performance of the open-ended growth schemes of Birla Sun Life MF Company in pre-recession period is equal to the return performance of the recession period.

H₁: The return performance of the open-ended growth schemes of Birla Sun Life MF Company in pre-recession period is higher than the return performance of the recession period.

Similarly, the second hypothesis as follows:

H₀: The return performance of the open-ended growth schemes of Birla Sun Life MF Company in post-recession period is equal to the return performance of the recession period.

H_a: The return performance of the open-ended growth schemes of Birla Sun Life MF Company in post-recession period is higher than the return performance of the recession period.

RESEARCH METHODOLOGY

In this study, several methods have been used to evaluate the risk-adjusted performance and the market-timing performance during the up and down market movements under the consideration of capital asset pricing model (CAPM) framework. In this study the risk-adjusted performance measures of Sharpe and Treynor have been applied and rank has been given to each scheme according to their performances and finally, Spearman rank correlation coefficient test has been conducted for comparison purposes. In 1965, Treynor proposed the first risk-adjusted model for the evaluation of portfolio performance. First, he computed the risk premium which is the excess return of mutual fund over the risk-free return and divided the same by the systematic risk component popularly known as beta coefficient of the schemes. The model as under:

$$T_i = \frac{R_i - R_f}{\beta_i} \tag{1}$$

Where, T_i is Treynor ratio of ith scheme, R_i is the daily return of ith scheme, R_f is the risk-free rate of return that has been computed by taking into account the daily yield of seven years Govt. dated securities and β_i is the beta coefficient of ith scheme which is a numerical measure of systematic risk that has been computed simply by running ordinary regression equation (OLS) between scheme’s return and market return as dependent and independent variables respectively.

Similarly, in 1966 William Sharpe proposed an alternative risk-adjusted performance measure where beta coefficient was replaced by the standard deviation which is a numerical measure of total risk of the ith scheme. The ratio popularly known as reward to variability ratio which as under:

$$S_i = \frac{R_i - R_f}{\sigma_i} \tag{2}$$

Where, S_i is the Sharpe ratio and σ_i is the standard deviation of the ith scheme which is a numerical of total risk of the ith scheme, computed as under:

$$\sigma_i = \sqrt{\frac{\sum R_i^2}{n} - \left(\frac{\sum R_i}{n}\right)^2} \tag{3}$$

It measures the return earned per unit of total risk and compared it to the Treynor index. From these two models it is assumed that if the mutual fund invests money in the same market and evaluates the performance of the mutual fund and found that the performance rankings on both the methods are identical then it may be concluded from this happening that the total risk of the mutual fund has been abolished or diversified then the Sharpe ratio will convert to Treynor ratio in this situation. In this research paper, Jensen portfolio performance measure has been applied to evaluate the stock-selection ability of the mutual fund managers in a statistically significant way. The model as under:

$$R_i = \alpha_i + \beta_i(R_m) + e_i \tag{4}$$

Where, R_i is the daily return of ith mutual fund scheme, R_m is the daily return of the market index, β_i is the beta coefficient, α_i is the intercept of ith scheme in this model which is popularly known as Jensen measure that indicates the managers’ forecasting ability in a volatile market. The managers’ market forecasting ability can be judged by α value which is produced by the mutual fund scheme itself. It is argued that a statistically positive significant α value of a mutual fund scheme indicates superior stock-selection ability of the managers. Similarly, a negative α value gives picture on inferior quality of stock-selection ability of the managers. Moreover, in this study market-timing ability of the mutual fund manager has been examined. A fund manager having superior market-timing ability can easily predict or forecast the market movement and adjust his/her portfolio accordingly. It may be said that when the market is upward rising the market return exceeds the risk free return and similarly, when the market is downward sloping generally opposite scenario is occurred. At that time the risk-free return exceeds market return (R_f > R_m). In this situation, an efficient mutual fund manager changes his/her portfolio composition according to the risk profile. In up market the mutual fund manager shift his/her high risk securities with the expectation of earning higher return than the market return and switching to low risk securities with the fear of loss at the time of down market movement. As a result, the systematic risk composition of his/her portfolio will be changed overtime. To predict the market-timing ability of the Indian private mutual fund company like Birla Sun Life Mutual Fund Company Treynor and Mazuy model has been applied which is quadratic (parabolic) regression equation model that separates the effects of stock-selection skill of the manager and market-timing ability of the manager. In this study the model has been estimated after including the error term into the model as under:

$$R_i - R_f = \alpha_i + \beta_i(R_m - R_f) + \gamma_i (R_m - R_f)^2 + e_i \tag{5}$$

Where, R_i-R_f is the excess return over the risk-free rate of ith scheme, γ_i is the gamma coefficient, a numerical measure of market-timing ability of the mutual fund manager. It is a non negative term. It is assumed that a statistically significant gamma value indicates superior market-timing ability of the manager and a negative gamma value represents inferior market-timing ability of the manager.

Finally, the persistence of scheme’s return has been examined in this study during the pre and post recession periods. During the up-market period it is expected that the return of the mutual fund scheme’s will increase and during the recession period the return of the mutual fund scheme will tend to reduce and thereafter in correction period it will again try to make up the loss that has been occurred in recession period. In this volatile market situation it has been examined whether the mutual fund managers are able to maintain the persistence of ‘NAV’ performance or not. To examine this issue, autoregressive model (AR₁) has been applied. In autoregressive model, only daily NAV of mutual fund scheme has been considered as dependent variable and regressed with the one day lagged value of the former variable as independent variable. The model as under:

$$NAV_d = \alpha_i + \beta_i(NAV_{d-1}) + e_i \tag{6}$$

Where, NAV_d is the daily NAV of the ith mutual fund scheme, α_i is the intercept term of ith mutual fund scheme, β_i is the beta coefficient of ith mutual fund scheme, NAV_{d-1} is the one day lagged NAV of the ith mutual fund scheme and e_i is the error term with zero mean and constant standard deviation.

From this model it may be said that if the coefficient (β_i) of independent variable (Here, one day lagged value of dependent variable) is statistically significant then it may be argued that in volatile market situation the mutual fund managers are able to maintain the persistence in NAV performance and opposite will be happened if the lagged coefficient is statistically insignificant. But, before applying this AR₁ model, first of all simple regression equation has been formulated because the entire periods have been divided in three sub periods namely pre-recession (2007), during recession (2008) and post-recession (2009) for the

examination of persistence in return separately. Hence, the first regression model has been formulated by taking into account the daily NAV of pre-recession period as dependent variable that has been regressed with daily NAV of recession period as independent variable. The model as under:

$$NAV_{2007} = \alpha_i + \beta_i(NAV_{2008}) + e_i \quad (7)$$

Where, NAV_{2007} is the daily NAV of the i^{th} mutual fund scheme in the year 2007, α_i is the intercept term, β_i is the beta coefficient, NAV_{2008} is the NAV of i^{th} mutual fund scheme during the recession, e_i is the error term with zero mean and constant standard deviation.

Similarly, the second regression equation has been formulated by taking into consideration the daily NAV of recession period as dependent variable that has been regressed with the daily NAV of post recession period as independent variable. The regression equation as under:

$$NAV_{2008} = \alpha_i + \beta_i(NAV_{2009}) + e_i \quad (8)$$

After applying these models it has been found that the beta coefficient of both the models are statistically insignificant that indicates no persistence in NAV performance but it has also been observed that the autocorrelation exist in the error terms which has been provided by the 'd' statistic (Durbin-Watson). Therefore, the simple regression models are not relevant in this regard. To overcome this problem auto regressive model has been formulated that has been shown in equation six. But, before applying this model into time series data, auto-correlation test has been conducted and found from the 'd' statistic that no auto-correlation exist in one period lagged time series data and finally the model has been applied to examine the persistence of mutual fund performance.

Finally, 'z' test has been applied to test whether the return performance of the open-ended growth schemes of Birla Sun Life MF Company in pre and post recession periods is higher than the return performance of the recession period or not. The 'z' value has been computed and tested at 5% level of significance as under:

$$z = \frac{\bar{x}_1 - \bar{x}_2}{\sqrt{\frac{\sigma_{s1}^2}{n_1} + \frac{\sigma_{s2}^2}{n_2}}} \quad (9)$$

Where, \bar{x}_1 = Average return of the open-ended growth schemes of Birla Sun Life MF Company in pre-recession period and post recession, \bar{x}_2 = Average return of the open-ended growth schemes of Birla Sun Life MF Company during the recession period, σ_{s1} = standard deviation of return in pre-recession period, σ_{s2} = Standard deviation of return during the recession period.

RESULTS & DISCUSSION

The risk-adjusted performance of 25 open-ended growth schemes of Birla Sun Life Mutual Fund company has been presented in table one (Tab.1). The performances have been divided in three non-overlapping sub periods namely pre recession period (2007), during the recession period (2008) and post recession period (2009). Then Sharpe and Treynor ratios have been computed in three sub periods and analysed the performances. It has been found from the table that the Sharpe ratio of all the open-ended growth schemes of Birla Sun Life Mutual Fund Company is found to be positive and then rank has been given to each scheme according to their performances. The first rank has been given to Birla top 100-growth option whose Sharpe ratio is 0.9450 and the last rank has been given to Birla index fund-plan A (Dividend) whose Sharpe ratio is 0.0954 and so on in between two ranks in the year 2007. It has also been found that 13 schemes out of 25 schemes have out-performed the market index positively according to the Sharpe measure and those schemes offered to the investors' abnormally higher rate of return than the market index. Similarly, in the same way Treynor ratio has been computed of all the open-ended growth schemes of Birla Sun Life Mutual Fund Company during the pre recession period for the examination of risk-adjusted performance. It has been observed from the table that the beta values of the open-ended growth schemes of Birla Sun Life Mutual Fund Company are found to be positive and statistically significant except six schemes. After computation of risk-adjusted Treynor ratio, rank has been given to each scheme. It has been observed from the table that first rank has been given to Birla Sunlife basic industries fund-plan A (dividend) whose Treynor ratio has been found to be 11.6609 and followed by Birla Sunlife basic industries fund-plan B (growth) whose Treynor ratio is 10.0117 and then Birla Sunlife buy India fund-plan A (dividend) whose Treynor ratio is seen to be 8.8620 and so on that ranges between 0.9487 and 11.6609. Then it has also been observed that 12 schemes out of 25 schemes have out-performed the Treynor market index positively and generally offered to the investors' higher rate of return than the other schemes. It has also been observed from the table that the average return of the open-ended growth schemes of Birla Sunlife Mutual Fund Company is found to be 3.3496 and the average standard deviation (a measure of unsystematic risk) and also the average beta (a measure of systematic risk) of the open-ended growth schemes of Birla Sunlife Mutual Fund Company are 6.2881 and 0.6824 respectively. Along with these, the stock-selection ability of the manager has been examined in the year 2007 (pre recession period) that has been shown in Table one (Tab.1). It is generally assumed that the statistically significant α value represents superior stock-selection performance of the mutual fund managers. Hence, this issue has been examined here. It has been observed that 19 schemes out of 25 schemes offered positive α values and the remaining schemes offered negative α values during the pre recession period. However from this happening it may not be said that the managers of 19 schemes are superior. The superiority of the managers can be judged if they provide statistically significant α value which is possible by applying the strategy of superior stock picking ability. Here, it has been found that only four schemes out of 25 schemes are statistically significant at 5% level and the managers of those schemes offered to the investors' generally higher return than the other schemes and said to be superior in respect of stock picking ability. The average stock-selection ability of the manager has been found to be 1.0369 during the pre recession period (2007).

TABLE 1: RISK-ADJUSTED PERFORMANCE IN PRE-RECESSION PERIOD (2007)

Sl.No	Scheme Name	Sharpe Ratio	Rank	Treynor Ratio	Rank	Jensen Alpha	t-statistic
1	Birla Dividend yield plus-plan A (D)	0.4017	17	3.8558	16	0.361	0.243
2	Birla Dividend yield plus-plan B (G)	0.6145	9	7.3489	4	2.006	1.173
3	Birla Index fund-plan A (Dividend)	0.0954	25	0.9487	25	-2.994	-0.902
4	Birla Index fund-plan B (Growth)	0.5517	11	3.3587	19	0.228	0.569
5	Birla India gen next fund-divid option	0.4034	16	3.6776	18	0.275	0.179
6	Birla India gen next fund-growth option	0.6621	8	5.2183	12	1.336	1.194
7	Birla India opport. Fund-plan A (D)	0.3614	20	2.8222	23	-0.238	-0.262
8	Birla India opport. Fund-plan B (G)	0.3464	22	2.5814	24	-0.416	-0.494
9	Birla infrastructure fund-plan A (D)	0.7586	6	5.2352	11	1.778	2.031**
10	Birla infrastructure fund-plan B (G)	0.7698	5	5.5470	8	1.959	1.879
11	Birla midcap fund-plan A (Dividend)	0.5391	12	4.2726	14	0.823	0.583
12	Birla midcap fund-plan B (Growth)	0.8231	2	6.3451	6	2.521	1.996**
13	Birla MNC fund-plan A (Dividend)	0.4291	15	3.8451	17	0.302	0.298
14	Birla MNC fund-plan B (Growth)	0.3793	18	2.8500	22	-0.234	-0.283
15	Birla Sunlife buy India Fund-plan A(D)	0.6141	10	8.8620	3	2.426	1.262
16	Birla Sunlife buy India Fund-plan B(G)	0.5291	13	5.7297	7	1.248	0.862
17	Birla Sunlife basic india fund planA (D)	0.7913	3	11.6609	1	3.963	1.829
18	Birla Sunlife basic india fund planB (G)	0.4755	14	10.0117	2	3.652	0.971
19	Birla Sunlife equity fund-planA(D)	0.3591	21	5.0860	13	0.890	0.428
20	Birla Sunlife equity fund-planB(G)	0.6895	7	5.3415	10	1.731	1.314
21	Birla Sunlife frontline equ. fund-plA(D)	0.3730	19	4.0181	15	0.499	0.247
22	Birla Sunlife frontline equ. fnd-plB(G)	0.7760	4	5.4741	9	1.706	2.029**
23	Birla sunlife new mille fund-planA(D)	0.2525	24	3.1095	20	-0.029	-0.018
24	Birla sunlife new mille fund-planB(G)	0.2549	23	3.0783	21	-0.045	-0.028
25	Birla Top100-Growth Option	0.9450	1	6.5174	5	2.114	3.460**

Source: www.amfiindia.com, www.bseindia.org, www.rbi.org.in

** 5% level of significance.

In 2008, when the entire world economy was turning into financial crisis (specially US economy) in the form of recession, at that time the world's biggest stock exchanges were moving into down ward sloping not only that the effect of worldwide recession suddenly entered into the Indian economy and for that the Indian leading stock exchanges were turning into down ward movement. In that volatile situation what happened in Birla Sun life Mutual Fund Company of its open-ended growth schemes that issue has been discussed here. The risk-adjusted performance results have been presented in table two (Tab.2). It has been found from the table that the computed Sharpe ratios of the open-ended growth schemes of Birla Sun life Mutual Fund Company are negative but in spite of negative performances rank has been given to each scheme. According to such performances the first rank has been given to Birla Dividend yield plus-plan B (G) whose Sharpe ratio is found to be -0.2455 and the second rank has been posted to Birla Dividend yield plus-plan A (Dividend) and followed by Birla MNC fund-plan A (Dividend), Birla MNC fund-plan B (G) and so on and finally the Sharpe ratio ranges between -0.2455 and -0.7114. It has already been said earlier that the computed Sharpe ratios of all the open-ended growth schemes are negative because this time period is related (2008) to financial recession and its effect came into the Indian stock market and for that reason the market return of BSE sensitive index has come down to negative and finally the bad effect of recession had come into the open-ended growth schemes of Birla Sunlife Mutual Fund Company in terms of negative return. In the eye of investors the computed Sharpe, performance measures are totally unsatisfactory and it has also been observed that the returns of all the schemes are negative during the recession (2008) period. But, in spite of negative return the schemes which have outperformed the market index are identified and found that nine schemes out of twenty-five schemes have beat the market index negatively although this happening is not good signal to the investors. Similarly, the Treynor ratio has been computed of the open-ended growth schemes of Birla Sunlife mutual fund Company during the recession period (2008) in order to examine the risk adjusted performance that has been presented in table two (Tab.2). It has been from the table that the computed Treynor ratios of all the open-ended growth schemes of Birla Sunlife Mutual Fund Company are found to be negative. In spite of negative performance, rank has been given to each scheme and found that Birla Sunlife Dividend yield plus-plan B(G) has the highest Treynor ratio (-3.5604), Birla Sunlife Dividend yield the Treynor ratios and the market Treynor ratios of all the open-ended schemes are negative during the recession period (2008). But, having negative Treynor ratios, nine schemes have beat the market index negatively. Moreover, in this study the stock-selection performances of the open-ended growth schemes of Birla Sunlife Mutual Fund Company have been examined and found that all the schemes have negative alpha (α) values that represent inferior quality of stock-selection skills of the managers.

TABLE 2: RISK-ADJUSTED PERFORMANCE IN RECESSION PERIOD (2008)

Sl. No	Scheme Name	Sharpe Ratio	Rank	Treynor Ratio	Rank	Jensen Alpha	t-statistic
1	Birla Dividend yield plus-plan A (D)	-0.2519	2	-3.8181	2	-1.226	-0.567
2	Birla Dividend yield plus-plan B (G)	-0.2455	1	-3.5604	1	-1.00	-0.475
3	Birla Index fund-plan A (Dividend)	-0.3469	6	-4.4651	5	-1.421	-0.740
4	Birla Index fund-plan B (Growth)	-0.3480	7	-4.7645	6	-1.681	-0.787
5	Birla India gen next fund-dividend option	-0.4165	12	-11.276	24	-3.892	-1.540
6	Birla India gen next fund-growth option	-0.3616	10	-7.3052	13	-2.894	-1.261
7	Birla India opportunity Fund-plan A (D)	-0.7114	25	-13.213	25	-5.279	-2.516
8	Birla India opportunity Fund-plan B (G)	-0.7022	24	-11.233	23	-4.888	-2.525
9	Birla infrastructure fund-plan A (D)	-0.5220	18	-7.1870	12	-3.441	-1.554
10	Birla infrastructure fund-plan B (G)	-0.5250	19	-7.3621	14	-3.412	-1.664
11	Birla midcap fund-plan A (Dividend)	-0.5114	15	-7.9177	18	-3.780	-1.497
12	Birla midcap fund-plan B (Growth)	-0.4654	14	-7.5305	16	-3.389	-1.376
13	Birla MNC fund-plan A (Dividend)	-0.2909	3	-4.1365	3	-1.476	-0.852
14	Birla MNC fund-plan B (Growth)	-0.2912	4	-4.1857	4	-1.507	-0.860
15	Birla Sunlife buy India Fund-plan A(D)	-0.3804	11	-5.2167	9	-2.032	-1.158
16	Birla Sunlife buy India Fund-plan B(G)	-0.3611	9	-5.1157	8	-1.975	-1.029
17	Birla Sunlife basic India fund plan A (D)	-0.5866	21	-7.6845	17	-3.698	-2.043
18	Birla Sunlife basic India fund plan B (G)	-0.5216	17	-7.0023	11	-3.233	-1.666
19	Birla Sunlife equity fund-plan A (D)	-0.5180	16	-8.1897	20	-3.572	-1.726
20	Birla Sunlife equity fund-plan B (G)	-0.5379	20	-8.1909	21	-3.590	-1.846
21	Birla Sunlife frontline equity fund-pl A (D)	-0.4338	13	-7.3897	15	-3.125	-1.383
22	Birla Sunlife frontline equity fund-pla B (G)	-0.3526	8	-4.9604	7	-1.885	-1.024
23	Birla sunlife new mille fund-plan A (D)	-0.6456	23	-7.9742	19	-3.727	-2.769
24	Birla sunlife new mille fund-plan B (G)	-0.6099	22	-10.511	22	-4.276	-2.200
25	Birla Top100-Growth Option	-0.3053	5	-6.2548	10	-2.542	-0.913

Source: www.amfiindia.com, www.bseindia.org, www.rbi.org.in

What happened after the recession (2009) that has been discussed here? The risk-adjusted performance measures of the open-ended growth schemes of Birla Sunlife Mutual Fund Company have been presented in table three (Tab.3). It has been observed from the table that the average monthly return of all the open-ended growth schemes are positive and the standard deviation are also positive, finally, the computed Sharpe ratios of the open-ended growth schemes are positive. According to the Sharpe ratio (R/V ratio) rank has been given to each scheme in descending order. The first rank has been given to Birla infrastructure fund-plan A (dividend) (1.2050), Birla index fund-plan A (dividend) (1.1150) and so on. The ranks values of the schemes ranges between 0.3731 and 1.4334 in the year 2009. From the table it has been found that all the schemes have beaten the market index (Sharpe market index) positively. From this happening it may be said that all the schemes have offered to the investors' abnormally higher return during the post-recession (correction) period (2009). Similarly, Treynor ratios have been computed of all the open-ended growth schemes of Birla Sunlife Mutual Fund Company for examining the performances. It has been found from the Treynor ratios of all the schemes that eleven schemes have the positive performers and remaining are not. The reason behind negative Treynor ratio is negative beta value. Although, rank has been given to each scheme according to the Treynor ratio in descending order and found that Birla India opportunities fund-plan A (Dividend) is the highest performer whose Treynor ratio is found to be 280.3889. The second highest rank has been given to Birla Sunlife frontline equity fund-plan A (Div) at a Treynor ratio of 85.0621 and so on. The ranks are ranges between -158.6471 and 280.3889. It has been observed that three (3) schemes out of 25 schemes have outperformed the market index positively and expected that the schemes have offered to the investor's abnormally higher return than the others. It has also been found that eight schemes (8) which have negative Treynor ratios have beaten that market index negatively and found that the computed market Treynor ratios of those are found to be negative and also lower than the aforesaid (8) Treynor ratios in post-recession period. In addition to this selectivity performance of the open-ended Birla Sunlife mutual fund schemes has been examined during the post recession period. Generally it is expected that the statistically significant Jensen alpha represents superior selectivity performance of the managers. This issue has been examined here. It has been observed from the table that alpha values of the open-ended schemes found to be positive not only that but also statistically significant during the post recession period. From this happening it may be said that the managers of those open-ended schemes are efficient in stock-selection activity.

TABLE 3: RISK-ADJUSTED PERFORMANCE IN POST RECESSION PERIOD (2009)

Sl. No	Scheme Name	Sharpe Ratio	Rank	Treynor Ratio	Rank	Jensen Alpha	t-statistic
1	Birla Dividend yield plus-plan A (D)	0.5905	15	22.1506	7	4.068	4.312**
2	Birla Dividend yield plus-plan B (G)	0.7997	8	11.9056	12	4.313	4.803**
3	Birla Index fund-plan A (Dividend)	1.1150	3	-95.9000	23	5.559	6.921**
4	Birla Index fund-plan B (Growth)	0.4371	22	19.2765	9	4.407	2.562**
5	Birla India gen next fund-divid option	0.3731	25	35.4389	4	2.282	4.905**
6	Birla India gen next fund-growth option	0.3996	23	-13.7167	13	3.859	6.255**
7	Birla India opport. Fund-plan A (D)	0.9551	5	280.3889	1	5.295	5.757**
8	Birla India opport. Fund-plan B (G)	0.4771	19	12.1287	11	4.764	2.001**
9	Birla infrastructure fund-plan A (D)	1.2050	2	-22.5353	16	5.677	10.132**
10	Birla infrastructure fund-plan B (G)	1.4334	1	-44.3611	20	6.412	8.744**
11	Birla midcap fund-plan A (Dividend)	0.8707	6	-103.6212	24	6.423	4.713**
12	Birla midcap fund-plan B (Growth)	0.5205	18	-30.6014	17	7.981	2.766**
13	Birla MNC fund-plan A (Dividend)	0.4457	21	40.2354	3	4.489	2.993**
14	Birla MNC fund-plan B (Growth)	0.7644	9	-45.6889	21	6.046	4.677**
15	Birla Sunlife buy India Fund-plan A(D)	0.8295	7	18.4257	10	4.128	5.926**
16	Birla Sunlife buy India Fund-plan B(G)	0.4529	20	-158.6471	25	5.608	2.705**
17	Birla Sunlife basic india fund planA (D)	1.0089	4	-22.3367	15	4.491	10.916**
18	Birla Sunlife basic india fund planB (G)	0.5620	16	22.0788	8	5.091	2.810**
19	Birla Sunlife equity fund-planA(D)	0.5579	17	24.8211	6	4.290	3.740**
20	Birla Sunlife equity fund-planB(G)	0.6692	13	-32.9733	18	5.305	4.121**
21	Birla Sunlife frontline equ. fund-plA(D)	0.7478	10	85.0621	2	5.130	4.482**
22	Birla Sunlife frontline equ. fnd-plB(G)	0.7241	11	-44.0306	19	5.893	4.551**
23	Birla sunlife new mille fund-planA(D)	0.6500	14	-5.6714	22	4.124	6.509**
24	Birla sunlife new mille fund-planB(G)	0.7089	12	-17.7290	14	5.307	6.226**
25	Birla Top100-Growth Option	0.3993	24	26.5056	5	4.310	2.657**

Source: www.amfiindia.com, www.bseindia.org, www.rbi.org.in

** 5% level of significance.

After individual year-wise analysis, a comparative analysis has been done here. It has been found from the tables that the average monthly return of the schemes during the pre-recession period, recession period and post-recession period are 3.3496, -5.9823 and 5.0991 respectively. Here, it may be concluded from this happening that during the recession period the average monthly return of the growth schemes of Birla Sunlife Mutual Fund Company is found to be negative than the pre-recession (3.3496) and post recession (5.0991) period and also said that the average monthly return of the open-ended growth mutual fund schemes during the post-recession period is higher than the pre-recession period. It has been found from the risk perspective that the average unsystematic risk of the open-ended growth schemes of the Birla Sunlife Mutual Fund Company during the recession period is 8.5352 which is comparatively higher than the pre-recession period (6.2881) as well as post-recession (3.5934) period. During the recession period the investors' who have invested their savings into those schemes have taken maximum risk than the pre and post-recession periods and ultimately burnt their hands in the form of negative return. On the other hand, during the post-recession period the investors' have got maximum return (5.0991) in respect of minimum risk (3.5934) than the pre-recession return (3.3496) against risk (6.2881). It has also been noticed that the average market return during the recession period is found to be negative (-5.4533). But, during the pre-recession (2007) and post-recession (2009) periods the average market return is found to be positive (3.4493 and 5.4939) and here also the average market return during the post-recession period is highest than the pre and during recession periods. Similarly, in case of alpha (intercept), the highest average alpha (5.0110) value has been observed in post-recession (2009) period and the lowest in recession (2008) period which is negative and in between two periods the alpha value of the pre-recession period (2007) is positive. Furthermore, it has also been observed that during the pre-recession (2007) period 13 schemes out of 25 schemes have beaten the market index positively according to the Sharpe index. Moreover, during the post-recession period all the schemes have out-performed the market index positively as per Sharpe index. But, during the recession period none of them have beaten the market index according to the Sharpe and Treynor indices.

In this study market-timing performance has been examined by applying the Treynor & Mazuy model and the result has been presented in table four (Tab.4). It has been observed from the table that market-timing performances of all the open-ended mutual fund schemes during the pre-recession (2007) period have been found very poor. Most of the schemes have performed negative market-timing performance although four (4) of them have positive market-timing performances and only one scheme out of four has shown superior market-timing performances. Similarly, the market-timing ability of the mutual fund manager has been examined during the recession period (2008) and observed from the table that except one scheme, all the remaining schemes have negative market-timing performances and there is non-existence of superior market-timing performance.

Along with this, the market-timing performances of the open-ended Birla Mutual fund schemes have been examined during the post-recession (2009) period. It has been found from the table that 12 schemes out of 25 schemes have positive market-timing performances and the remaining schemes have negative market-timing performances. The market-timing performances of the schemes have been found very poor and the managers failed to offer superior market-timing performance during the post-recession period. Further, a comparative analysis has been made among the market-timing performances. It has been observed from the table that in post-recession period (2009) twelve schemes have offered positive market-timing performance as compared to the pre (4) as well as during the recession (1) periods. The number of positive performer is the lowest in recession period. But, one scheme has revealed superior market-timing performance in pre-recession period where superior market-timing performance is absent in recession and post-recession periods. The Birla Top-100-growth option has acquired superior market-timing performance. But, in overall sense the market-timing performances of all the open-ended schemes of Birla Sunlife Mutual Fund Company of all the years have been found to be negative.

TABLE 4: MARKET-TIMING PERFORMANCE DURING RECESSION, PRE-RECESSION AND POST RECESSION PERIODS

Sl. No	Scheme Name	2007	2008	2009	All Years
		β_i	β_i	β_i	β_i
1	Birla Dividend yield plus-plan A (D)	-0.037 (-1.435)	-0.015 (-0.794)	-0.009 (-1.304)	-0.015 (-3.102)
2	Birla Dividend yield plus-plan B (G)	-0.046 (-1.537)	-0.016 (-0.897)	0.012 (1.951)	-0.011 (-2.089)
3	Birla Index fund-plan A (Dividend)	0.047 (0.744)	-0.034 (-2.504)	0.003 (0.406)	-0.016 (-2.053)
4	Birla Index fund-plan B (Growth)	0.005 (0.703)	-0.024 (-1.383)	-0.005 (-0.395)	-0.017 (-3.060)
5	Birla India generati next fund-dividend option	0.015 (0.439)	-0.026 (-1.243)	-0.003 (-0.729)	-0.013 (-2.206)
6	Birla India generatio next fund-growth option	-0.022 (-1.123)	-0.013 (-0.644)	-0.005 (-0.014)	-0.014 (-2.524)
7	Birla India opportunity Fund-plan A (D)	-0.008 (-0.448)	-0.024 (-1.397)	-0.009 (-1.279)	-0.015 (-2.698)
8	Birla India opportunity Fund-plan B (G)	-0.015 (-0.997)	-0.018 (-1.114)	0.003 (0.157)	-0.008 (-1.196)
9	Birla infrastructure fund-plan A (D)	-0.015 (-0.948)	-0.008 (-0.400)	-0.001 (-0.135)	-0.021 (-3.636)
10	Birla infrastructure fund-plan B (G)	-0.020 (-1.088)	-0.025 (-1.484)	0.003 (0.503)	-0.021 (-3.669)
11	Birla midcap fund-plan A (Dividend)	-0.009 (-0.323)	-0.012 (-0.525)	0.003 (0.241)	-0.017 (-2.539)
12	Birla midcap fund-plan B (Growth)	-0.038 (-1.866)	-0.017 (-0.778)	0.020 (0.901)	-0.018 (-2.134)
13	Birla MNC fund-plan A (Dividend)	-0.034 (-2.167)	-0.022 (-1.563)	0.001 (0.097)	-0.014 (-3.034)
14	Birla MNC fund-plan B (Growth)	-0.020 (-1.396)	-0.022 (-1.564)	-0.001 (-0.102)	-0.016 (-3.248)
15	Birla Sunlife buy India Fund-plan A (D)	-0.039 (-1.136)	-0.026 (-1.967)	0.009 (1.825)	-0.016 (-3.111)
16	Birla Sunlife buy India Fund-plan B (G)	-0.011 (-0.597)	-0.016 (-0.974)	0.019 (1.250)	-0.014 (-2.171)
17	Birla Sunlife basic India fund plan A (D)	-0.052 (-1.373)	-0.019 (-1.273)	-0.002 (-0.628)	-0.024 (-4.202)
18	Birla Sunlife basic India fund plan B (G)	-0.103 (-1.643)	-0.013 (-0.762)	0.010 (0.670)	-0.018 (-2.177)
19	Birla Sunlife equity fund-plan A (D)	-0.046 (-1.267)	-0.010 (-0.539)	-0.004 (-0.389)	-0.014 (-2.406)
20	Birla Sunlife equity fund-plan B (G)	-0.034 (-1.514)	-0.020 (-1.197)	-0.001 (-0.140)	-0.017 (-2.954)
21	Birla Sunlife frontline equity fund-plan A (D)	-0.007 (-0.187)	-0.014 (-0.705)	-0.010 (-1.159)	-0.015 (-2.355)
22	Birla Sunlife frontline equity fund-plan B (G)	-0.027 (-2.058)	-0.020 (-1.327)	0.005 (0.502)	-0.017 (-3.354)
23	Birla sunlife new millennium fund-plan A (D)	-0.044 (-1.595)	-0.014 (-1.232)	-0.008 (-1.794)	-0.019 (-4.318)
24	Birla sunlife new millennium fund-plan B (G)	-0.045 (-1.668)	-0.018 (-1.066)	0.009 (1.505)	-0.015 (-2.555)
25	Birla Top100-Growth Option	0.021 (2.284**)	0.011 (0.450)	-0.016 (-1.300)	-0.011 (-1.713)

Source: www.amfiindia.com, www.bseindia.org, www.rbi.org.in

** 5% level of significance

After brief analysis of risk-adjusted performance of the open-ended schemes of Birla Sunlife Mutual Fund Company, persistence of return performance has been examined during the pre-recession, recession and post-recession periods that has been presented in table five (Tab.5) in this study. First of all, year-wise persistence of return performance of each open-ended mutual fund schemes of Birla Sunlife Mutual Fund Company has been examined. It has been found from the depicted result that all the open-ended mutual fund schemes have failed to depict a consistent return performance in the pre-recession (2007) period. Similarly, the results are same for recession and post-recession periods of the open-ended mutual fund schemes of Birla Sunlife Mutual Fund Company. From the above it may be said that there is no difference among the three periods in respect of persistence of return performance. However, the persistence of return performance on the basis of a single year may not be justified. Most of the time, the past daily observation of return performance may not be a predictor of future return performance of that particular year. Unfortunately, the events are same in this study. Therefore, the daily observations of all the years have been considered. It has been found from the table that the beta values of the lagged variables of six open-ended mutual fund schemes have been found statistically

significant and the remaining schemes failed from the above happenings. The past return performance of six open-ended mutual fund schemes have reflected their consistency or persistence in return performances of all the periods as well as in future. The names of the schemes are Birla India Opportunities fund-plan B (Growth), Birla Infrastructure fund-plan A (Dividend), Birla Infrastructure fund-plan B (Growth), Birla Mid cap fund-plan A (Div), Birla Sunlife Basic industries fund-plan A (Dividend) and Birla Sunlife Equity fund-plan A (Dividend).

TABLE 5: CONSISTENCY OF RETURN PERFORMANCE

Sl.No	Scheme Name	β	t	α	T
1	Birla Dividend yield plus-plan A (D)	-0.055	-0.307	0.829	0.638
2	Birla Dividend yield plus-plan B (G)	0.123	0.686	1.413	0.995
3	Birla Index fund-plan A (Dividend)	0.170	0.981	-0.033	-0.019
4	Birla Index fund-plan B (Growth)	0.228	1.308	0.661	0.426
5	Birla India generation next fund-dividend option	0.005	0.030	-0.322	-0.263
6	Birla India generation next fund-growth option	0.094	0.532	0.656	0.427
7	Birla India opportunity Fund-plan A (D)	0.109	0.617	-0.364	-0.258
8	Birla India opportunity Fund-plan B (G)	0.422	2.608**	-0.127	-0.090
9	Birla infrastructure fund-plan A (D)	0.389	2.363**	0.292	0.194
10	Birla infrastructure fund-plan B (G)	0.380	2.293**	0.553	0.381
11	Birla midcap fund-plan A (Dividend)	0.450	2.811**	0.223	0.149
12	Birla midcap fund-plan B (Growth)	0.295	1.724	1.090	0.620
13	Birla MNC fund-plan A (Dividend)	0.219	1.250	0.418	0.355
14	Birla MNC fund-plan B (Growth)	0.303	1.766	0.558	0.473
15	Birla Sunlife buy India Fund-plan A (D)	0.149	0.843	0.489	0.392
16	Birla Sunlife buy India Fund-plan B (G)	0.245	1.417	0.662	0.472
17	Birla Sunlife basic India fund plan A (D)	0.468	2.941**	0.065	0.048
18	Birla Sunlife basic India fund plan B (G)	0.111	0.625	1.285	0.663
19	Birla Sunlife equity fund-plan A (D)	0.340	2.001**	-0.058	-0.044
20	Birla Sunlife equity fund-plan B (G)	0.311	1.808	0.652	0.459
21	Birla Sunlife frontline equity fund-plan A (D)	0.229	1.323	0.251	0.180
22	Birla Sunlife frontline equity fund-plan B (G)	0.220	1.249	1.083	0.792
23	Birla sunlife new millennium fund-plan A (D)	0.126	0.712	-0.688	-0.541
24	Birla sunlife new millennium fund-plan B (G)	0.183	1.046	-0.315	-0.253
25	Birla Top100-Growth Option	0.118	0.659	0.796	0.554

Source: www.amfiindia.com, www.bseindia.org, www.rbi.org.in

** 5% level of significance.

Again, the persistence of NAV performance of the selected mutual fund schemes has been examined in this study. First of all, year-wise persistence of NAV performance of each mutual fund scheme has been examined. It has been observed from the analysis that all the open-ended schemes of Birla Sunlife Mutual Fund Company have shown a good persistence in NAV performance in pre-recession period (2007). Similarly, all the open-ended mutual fund schemes have revealed a satisfactory persistence in NAV performance in post-recession (2009) period that is same as above. It is a year-wise examination of persistence of NAV performance of the open-ended mutual fund schemes of Birla Sunlife Mutual Fund Company. But, when an investor goes for investment in the open-ended mutual fund schemes of Birla Sunlife Mutual Fund Company, will obviously examine historical NAV performance. The investor should not consider of a particular year for the examination of NAV performance. The investor must consider a series of years. Hence, the persistence of NAV performance of the open-ended mutual fund schemes of Birla Sunlife Mutual Fund Company has been presented in table six (Tab.6). It has been observed from the table that the beta (β) values of the lagged variables (nav_{t-1}) of all the open-ended mutual fund schemes of Birla Sunlife Mutual Fund Company are positive and statistically significant. From this favourable picture, it may be said that the investor can invest in other scheme of Birla Sunlife Mutual Fund Company on the basis of past performance.

TABLE 6: PERSISTENCE OF NAV PERFORMANCE

Sl.No	Scheme Name	β	t	ei	D-W (d)
1	Birla Dividend yield plus-plan A (D)	0.822	9.829**	0.8344	2.115
2	Birla Dividend yield plus-plan B (G)	0.815	10.834**	4.1878	1.924
3	Birla Index fund-plan A (Dividend)	0.871	9.506**	1.9209	1.547
4	Birla Index fund-plan B (Growth)	0.876	10.902**	4.1952	1.578
5	Birla India generati next fund-dividend option	0.927	13.753**	1.1143	1.928
6	Birla India generatio next fund-growth option	0.890	11.815**	1.2699	1.791
7	Birla India opportunity Fund-plan A (D)	0.970	18.563**	1.4717	1.656
8	Birla India opportunity Fund-plan B (G)	0.948	15.756**	3.6783	1.475
9	Birla infrastructure fund-plan A (D)	0.926	14.450**	1.2652	1.378
10	Birla infrastructure fund-plan B (G)	0.909	14.050**	1.2552	1.334
11	Birla midcap fund-plan A (Dividend)	0.933	15.533**	2.2414	1.124
12	Birla midcap fund-plan B (Growth)	0.890	13.173**	7.2816	1.473
13	Birla MNC fund-plan A (Dividend)	0.894	13.383**	3.8263	1.570
14	Birla MNC fund-plan B (Growth)	0.872	13.930**	7.7416	1.495
15	Birla Sunlife buy India Fund-plan A (D)	0.876	11.601**	1.4083	1.789
16	Birla Sunlife buy India Fund-plan B (G)	0.859	11.311**	2.3488	2.037
17	Birla Sunlife basic India fund plan A (D)	0.922	13.732**	3.0084	1.308
18	Birla Sunlife basic India fund plan B (G)	0.847	9.712**	8.6494	1.927
19	Birla Sunlife equity fund-plan A (D)	0.925	13.336**	5.6381	1.445
20	Birla Sunlife equity fund-plan B (G)	0.906	12.966**	17.6087	1.521
21	Birla Sunlife frontline equity fund-plan A (D)	0.902	13.060**	1.7255	1.578
22	Birla Sunlife frontline equity fund-plan B (G)	0.883	12.760**	4.5277	1.627
23	Birla sunlife new millennium fund-plan A (D)	0.977	19.742**	1.0971	2.076
24	Birla sunlife new millennium fund-plan B (G)	0.967	17.834**	1.2901	1.941
25	Birla Top100-Growth Option	0.855	10.593**	1.4257	1.683

Source: www.amfiindia.com, www.bseindia.org, www.rbi.org.in

** 5% level of significance.

Finally, the formulated hypotheses have been tested at 5% level of significance. The first hypothesis has been formulated as under:

Sample 1 (pre-Recession Period; 2007)

$$\bar{x}_1 = 3.3496$$

$$\sigma_{s1} = 6.2881$$

$$n_1 = 25$$

Here, the calculated 'z' value is found to be 3.1478. As, H_a is one sided, therefore, one tailed test has been applied that is $R:z > 1.96$.The observed value of 'z' is 3.1478 that falls in the acceptance region at 5% level of significance. So, H_0 has been rejected at 5% level. From here, it may be said that the return performance of the open-ended growth schemes of Birla Sunlife Mutual Fund Company in pre-recession period is higher than the recession period.

Similarly the second test has been conducted as under:

Sample 2 (Recession Period; 2008)

$$\bar{x}_2 = -5.9823$$

$$\sigma_{s1} = 8.5352$$

$$n_2 = 25$$

Sample 1 (pre-Recession Period; 2009)

$$\bar{x}_1 = 5.0991$$

$$\sigma_{s1} = 3.5934$$

$$n_1 = 25$$

Sample 2 (Recession Period; 2008)

$$\bar{x}_2 = -5.9823$$

$$\sigma_{s1} = 8.5352$$

$$n_2 = 25$$

Here, the calculated 'z' value is found to be 4.5695. As, H_a is one sided, therefore, one tailed test has been applied that is $R:z > 1.96$.The observed value of 'z' is 4.5695 that falls in the acceptance region at 5% level of significance. So, H_0 has been rejected at 5% level. From here, it may be said that the return performance of the open-ended growth schemes of Birla Sunlife Mutual Fund Company at post-recession period is higher than the recession period.**FINDINGS**

The findings of the study are given below:

1. According to the Sharpe ratio 13 schemes out of 25 have out-performed the market index. Similarly, in Treynor ratio, 12 schemes have crossed the market index in pre-recession period.
2. Only four schemes have provided statistically significant stock-selection performance on pre-recession period (2007).
3. At the time of recession the computed Sharpe and Treynor ratios are found to be negative.
4. According to the Sharpe and Treynor ratios nine schemes have out-performed the market index during the recession period.
5. The statistically stock-selection performance is found to be negative in recession period.
6. In post-recession period all the schemes have out-performed the market index as per Sharpe ratio.
7. According to the Treynor ratio three schemes have crossed the market index.
8. All the schemes have offered statistically significant Jensen alpha in post-recession period.
9. The average return is highest in post-recession period. Similarly, the diversifiable risk is maximum in recession period.
10. The market-timing performance in recession period is statistically insignificant. However, in pre-recession period only one scheme has offered statistically significant market-timing ability. Again, the statistically significant market-timing performance is absent in post-recession period.
11. Here, the schemes have failed to maintain consistency in return in three periods (pre, post and the recession periods).
12. The consistency in NAV performance is satisfactory in pre and post recession periods.
13. The statistically significant return performance in pre and post recession periods are higher than the recession period.

RECOMMENDATIONS/SUGGESTIONS

The present study is related with the mutual fund performance of a particular growth type of open-ended mutual fund schemes of Birla Sunlife Mutual Fund Company in pre, post and the recession periods. Actually, the investors go for mutual fund investment with the expectation of earning a rate which is higher than the risk-free rate with a lower degree of expected risk. Therefore, the mutual fund managers take all the responsibilities of the invested capital on behalf of the investors. But, the market condition cannot be controllable because it is totally volatile. The managers can take some measures (selectivity, market-timing, diversification etc) from its effect for the protection on behalf of investors. The investors have no knowledge about capital market. Therefore, they keep trust on the managers. We have found that the return provided by the schemes is satisfactory in pre and post recession periods but unsatisfactory in the recession period. But, this effect is temporary not permanent. Therefore, the investors invest in mutual fund for a long period of time for capital appreciation and steady consistency in return and along with this the mutual fund managers apply their secret skills like stock-selection ability, correct market-timing, proper diversification and so on by which the managers can meet up investors expectation and managers will get higher financial benefits and prestige in the society. Therefore, they will try to achieve those opportunities.

CONCLUSIONS

After brief analysis of result the study has reached to the conclusion. According to the results different conclusions have been made in this regard. It may be concluded from table one that in pre-recession period all the schemes have positive Sharpe ratios as well as positive Treynor ratios. In addition to these, only four schemes have superior stock-selection ability and one scheme has superior market-timing ability in pre-recession (2007) period. Similarly, in recession period (2008) the Sharpe ratios as well as the Treynor ratios of all the open-ended schemes of Birla Sunlife Mutual Fund Company have found to be negative and also inferior stock-selection ability has been observed. It may be concluded that in recession period the risk premiums of all the schemes are negative because of down market movement as a result, the Sharpe ratios as well as the Treynor ratios have turned into negative and that's why there was no evidence of superior market-timing ability. It has been observed from the post-recession (2009) period that the Sharpe ratios of all the schemes are found to be positive but the Treynor ratios of eleven schemes are found to be positive and the remaining are not. It has been found that the positive market-timing performers of post-recession period are higher than the pre and recession periods, one scheme has statistically significant market-timing ability. Finally, it may be concluded that the consistency of NAV performance of pre, post and recession periods have no significant differences. In a nutshell, it may be concluded that the results are quite same in pre and post recession periods. But, in recession period the results are different from the above periods. The result is same only in case of persistence in NAV performance. Therefore, it may be concluded that in case of mutual fund investment in India the investors' will not be drastically losers. So, there is no reason of loss in mutual fund investment. It may be argued that the recession period is the golden time for mutual fund investment but the investment decision should be taken carefully because the mutual fund investment is subject to market risk, there is no guarantee of return and the past performance may or may not be occurred in future.

SCOPE FOR FURTHER RESEARCH

There is a lot of possibility for the upgrading in the research for the appraisal of the mutual fund performances. The study is limited to a particular type of open-ended mutual fund schemes (growth) of a selected private mutual fund company (Birla Sunlife mutual fund Company). In the same way the performance of all types of schemes of different companies could be possible not only recession periods but also throughout the years. Various multi-criteria decision models can be applied for the evaluation of mutual fund performances. Here three factor, four factor and Fama's decomposition models can be applied for evaluation of overall performances of the mutual fund schemes.

REFERENCES

1. Choudhary., (2007), "The components of investment performance of fund managers: Evidence from Indian capital market" *Abhigyan*, pp.16-27.
2. El Khouri and Ritab (1993), "Risk-return relationship: Evidence from Amman stock exchange" *Yarmouk University, The Middle East business and economic review*, 5:2.
3. Fama (1972), "Components of investments performance" *The Journal of Finance*, Vol. XXVII, No.3, pp.551-567.
4. Filippas N.D., and Christine, Psoma., (2001), "Equity mutual fund managers performance in Greece", *Journal of managerial finance*, Vol.27, No.6, pp.68-74.
5. G.Artikis. (2004), "Bond mutual fund managers' performance in Greece", *Journal of managerial finance*, Vol.30, No.10, pp. 1-6.
6. Henrikson and Merton (1981), "On market-timing and investment performance-II, statistical procedures for evaluating forecasting skills" *The Journal of Business*, pp.513-533.
7. Jensen (1968), "The performance of mutual funds in the period 1945-1964" *The Journal of Finance*, Vol.23, pp.389-416.
8. Jordan., Jorgensen., and Smolira., (Winter 2003/2004), "The performance of mutual funds that close to new investors", *The journal of investment consulting*, Vol.6. No.2.
9. Santos., Tusi.,Costa., and Silva.,(2005)"Evaluating Brazilian mutual funds with stochastic frontiers", www.economicsbulletin.com/volume13/EB-05M20002A.pdf.
10. Shah and Hijaji (Winter 2005), "Performance evaluation of mutual funds in Pakistan" *The Pakistan Development Report*, 44: 4 part II, pp.863-876.
11. Sharpe (1966), "Mutual fund Performance Evaluation", *The Journal of Business*, Vol.39, pp.119-138.
12. Thanou (2008), "Mutual fund evaluation during up and down market conditions: The case of Greek equity mutual funds" *International Research journal of Finance and economics*, Vol.13, pp. 84-93.
13. Treynor (1965), "How to rate management of investment funds" *Harvard Business Review*, Vol.43 (1), pp. 63-75.
14. Treynor and Mazuy (1966), "Can mutual fund outguess the market" *Harvard Business Review*, pp.131-136.
15. Y.Bellow (2009), "The performance of U.S. Domestic equity mutual funds during recent recessions" *Global journal of Finance & Banking*, Vol.3, No.3, pp. 1-7.

PERSONALITY AS A MODERATOR OF QUALITY OF WORK LIFE AND JOB ATTITUDE**SUSAN, V.****RESEARCH SCHOLAR****DEPARTMENT OF PSYCHOLOGY****UNIVERSITY OF CALICUT****CALICUT****JAYAN, C.****PROFESSOR****DEPARTMENT OF PSYCHOLOGY****UNIVERSITY OF CALICUT****CALICUT****ABSTRACT**

A comprehensive taxonomy of personality traits, the Big Five Factors describes personality as dimensions of individual differences in tendencies to show consistent patterns of thoughts, feelings, and actions in a wide variety of culture. Personality does have a significant role in work behavior and work life. Exploring the present investigation, the objective of the study is to find out the moderating effect of Personality on Quality of Work Life and Job Attitude. Empirical verification was done with a sample of 430 law enforcement officers. Tools used were Five Factor Personality Inventory (Neelima, and Kumari Bhagavathy, 2003), Job Attitude scale (Jayan, 2004), and Quality of Work Life Questionnaire (Jayan, Susan, Reena and Rekha, 2010). Data were subjected to descriptive statistics, and moderate regression analysis. Result indicates that Conscientiousness (Personality) moderates QWL and Job Attitude. This study is a fruitful basis to examine the dispositional source of Personality and Quality of Work Life on Job Attitudes among Civil Police Officers.

KEYWORDS

Personality, Quality of Work Life, Job Attitude, Moderating effect, Law Enforcement Officers.

INTRODUCTION

India is facing multifarious challenges more so due to its geographical dimension, multi-lingual, multi-cultural and multi-ethnic characters like any other developing country. India is also a home to almost all the religions of the world. Religious fundamentalism is growing along with the competitive third millennium globalised scenario which is also coming to its excellence of products and services. This is complicating the problem of the governance and putting demanding entrusted task of maintenance of law and order therefore, challenges that officer's face is become daunting. Ministry of Home Affairs, Government of India, is taking various initiatives to make Indian Police responsive to these challenges and streamline its working by ushering in police reforms as per the directives of the Hon'ble Supreme Court of India.

Society everywhere aspires for 'peace', 'prosperity' and 'progress' perennially, even against all odds. People and various organizations of Civil Society have similar rising expectations from Police, who, at best, promise to deliver status-quo and mediocrity driven services. The law enforcement officers are often treated as a distinct subset of the population apart from the average citizen, by asset of their function and special powers to maintain order and enforce law. The policemen's role contains two principal variables, danger and authority which are interpreted in the light of a "constant" pressure to appear efficient.

Police with 19th century governing Act and 20th century outlook could hardly face 21st century challenges. Indian military suffers from a lack of experts on important issues pertaining to area studies, terrorist groups, counterinsurgency, doctrinal development, strategic studies and even military history. It also includes several psychological and physical issues in terms of each officer. Existing problems comprises the working conditions, pay, work load, infrastructure of the stations, social stigma, relationship with superiors, work timings, and high political pressures.

Work environment can always influence and shape perceptions and interpretations of events and situations. Understanding the relationship between ones environment, cognition and behavioral responses to that environment can lead to an understanding of that individual's personality. A collection of emotional thoughts and behavioral patterns unique to a person that is consistent overtime is referred as Personality. The field of personality is at the crossroads of most areas of psychology and is a field of great breath.

Traditionally, the essence of the trait approach has been the assumption that behavior is primarily determined by stable generalized traits- basic qualities of the person that express themselves in many contexts. Guided by these assumptions, many investigators have search vigorously for these traits. Within the past 20 years, consensus has emerged that a five factor model of personality, often termed Big Five can be used to describe the most salient aspects of personality. The five factor (Extraversion, Agreeableness, Conscientiousness, Neuroticism and Openness to Experience) structure has generalized across measures, cultures and sources of ratings (Mc Crae & John, 1992).

In the study of work and personality, Kohn and Schoolar, (1983), suggest that specific conditions of work are likely to have significant impacts on the individual. The degree to which members of a work organization are able to satisfy important personal need through their experiences in the organization is Quality of Work Life. Quality of Work Life is an umbrella term which includes many concepts. QWL aim's at achieving the effective work environment that meets with the organizational and personal needs and values that promote health, well being, job security, working conditions, supervision, relationship with superiors and subordinates, Job Satisfaction, competency development and balance between work and non-work life. It also emphasize that the good feeling perceived from the interaction between the individuals and the work environment results in increased QWL. Increased QWL can influence ones attitude towards their job. Job related attitude play a role in shaping the work behaviors of members in an organization. Job attitude includes Job commitment, Job involvement and Job satisfaction.

REVIEW OF LITERATURE

Research is a systematic and objective analysis and recording of controlled observations which may lead to the development of generalizations, principles or theories, resulting in prediction and possibly have ultimate control of events. Research is a point of view, an attitude of inquiry or a frame of mind. It is not a mere theorem but rather an attempt to elicit facts and to face them once they have been assembled. Based on the previous research studies, review of the present investigation is devoted to the development of the problem statement or the object of inquiry. The review is utilized to retrain a direct relevancy to the study.

Several studies linking the Big five to police performance have been meta-analyzed and empirically studied (Barrick and Mount, 1991; Cortina et al., 1992; Twersky-Glasner, 2005; Pienaar, Rothmann and Van De Vijver, 2006; Abrahamsen, 2006; Sanders, 2008; Abrahamsen and Strype, 2009). Police officers isolate their feelings and perceive expression of emotion as a weakness, and they are pragmatic and action oriented.

Relationship between personality and Quality of Work Life (QWL) was studied by Kaushik and Tonk (2008) in the colleges and universities in Haryana. Five dimensions of personality and eight dimensions of QWL were measured on 200 randomly selected teachers, using NEO-Five Factor Inventory (NEO-FFI) and QWL Scale. Correlational analysis was carried out. Three dimensions of personality are positively correlated with the QWL. Extroversion is positively related to opportunities to use and develop human capacity. Agreeableness is positively related to social integration in the work force. Conscientiousness is positively related to opportunities to use and develop human capacity, social integration in the work force and constitutionalism in the work organization.

Organ and Lingl (1995) argued that Conscientiousness should be related to job satisfaction because it represents a general work involvement tendency and thus leads to a greater likelihood of obtaining satisfying work rewards, both formal (e.g., pay, promotions) and informal (e.g., recognition, respect, feelings of personal accomplishment). Indirectly, the subjective well-being literature also suggests a positive relationship between Conscientiousness and job satisfaction (DeNeve & Cooper, 1998).

A variety of job and organizational factors can contribute to QWL (Carayon & Smith, 2000). Jansen et al. (1999) used the Hackman and Oldham job diagnostic model to determine the relationship between intrinsic work motivations, burnout and turnover intentions among nurses. They found that intrinsic work motivation is primarily determined by elements of the job that make the work challenging and worthwhile. Meta-analysis study also found a strong relationship between job satisfaction and QWL among nurses (Blegen, 1993). Job attitude and QWL has been investigated by several researchers (Crosby and Stephen 1987; Hartline and Forrell 1996; Tett and Meyer 1993; Parasuraman 1987; Bitner, Booms, and Tetreault 1990; Yee et al. 2008).

Studies directly relating with moderating effect along with the variables under study are hardly reported. To improve and have a better understanding of Personality on Quality of Work Life and Job Attitudes among Law Enforcement officers, the present investigation is aimed to study the moderating effect of these variables.

NEED/IMPORTANCE OF THE STUDY

For Police to stand to a more lofty and romantic reputation, it is essential that it works with a Vision, as is the need felt universally. Vision has powerful influence as indicated by former President of India, APJ Abdul Kalam: "VISION IGNITES NATION". Hence, there is a need to devote resources and strengthen state police forces to do the mission in order to meet the vision.

STATEMENT OF THE PROBLEM

With the above mentioned need the present study is entitled as "Personality (Conscientiousness) as a Moderator of Quality of Work Life and Job Attitude"

OBJECTIVE

To study Personality (Conscientiousness) as the moderator of Quality of Work Life and Job Attitudes among Law Enforcement Officers.

HYPOTHESIS

Personality (Conscientiousness) can moderate Quality of Work Life and Job Attitudes among Law Enforcement Officers.

RESEARCH METHODOLOGY

PARTICIPANTS

Most of the researches among law enforcement officers have been examined in large departments and policemen of higher grades thus far. For the present investigation, the sample comprised of 430 civil police officers from all districts in Kerala.

MEASURES

Five Factor Personality Inventory: The test consists of 80 statements pertaining to the five dimensions, namely, extroversion, agreeableness, conscientiousness, neuroticism and openness to experience which are divided into 5 sections A, B, C, D and E respectively. For each of the items in the inventory the scores range from 1 to 5. The reliability (Guttman's split half method) of the Five Factor Personality Inventory is .459. The validity of Five Factor personality Inventory ranges from .150 to .874. (Neelima and Kumari Bhagavathy, 2003).

Quality of Work Life Questionnaire: The scale consists of a total number of 83 items on fourteen different variables which are positively stated and were to be answered with five response categories. The reliability of the test has been established by the method of Cronbach alpha and the alpha coefficient obtained is .872 and the test re-test method was also found to be significant and varied from 0.323 to 0.989. The criterion validity was found to be 0.360 (Jayan, Reena, Susan, and Rekha, 2010).

Job Attitude Scale: This scale consist of three domains of job attitude which includes Job Commitment, Job Involvement and Job Satisfaction (Jayan, 2004). Each domain is rated using five point scales. The reliability of the test has been established by the method of Cronbach alpha and the alpha coefficient obtained is 0.842. The split-half reliability of each domain varies from 0.73 to 0.89 and the test-retest reliability is also found to be significant and varied from 0.63 to 0.73 respectively. Criterion validity and predictor validity of each domain were established.

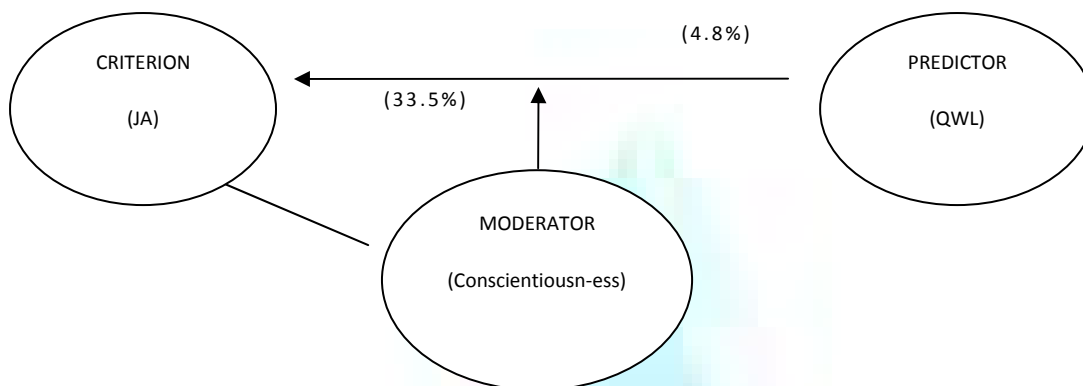
PROCEDURE

Randomly selected officers were met personally and were given the two tests along with the personal data sheet. They were requested to read all the statements carefully and answer them honestly.

RESULT AND DISCUSSION

Step-wise regression analysis was done to determine the efficacy of predictor variables on the criterion variable. As a result, it was found that among the five factors of personality, Conscientiousness best predicted Job Attitude. Therefore, further analysis was done only taking the personality factor Conscientiousness among the five factors of personality.

In the present study Conscientiousness is the moderating variables on the relationship between QWL (IV) and Job Attitude (DV). The model of the study is presented as below:



The hierarchical regression was done in three steps.

- (a). To find the predictive effect of QWL (independent variable) on Job attitude.
 - (b). To assess the predictive effect of Conscientiousness (predictor variable) on Job attitude.
 - (c). The interaction between Conscientiousness (predictor variable) and QWL (independent variable) on Job attitude was assessed to find the moderating effect.
- As shown in table: 1, in the first step (X1) the R square shows that 4.8% of Job Attitude can be predicted by QWL alone. In the second step (X2) it was seen that Conscientiousness alone did not show any efficient predictive effect on Job Attitude, hence did not enter the regression table. In the third step (X3), the combined effect of Conscientiousness and QWL on Job attitude was assessed. From the R square value at this step, it is clear that 33.5% of job attitude can be accounted by the combined effect of Conscientiousness and QWL and the interaction effect of Conscientiousness on QWL and job attitude relationship. This means that there is a moderating effect by Conscientiousness on QWL and job attitude relationship.

TABLE 1: ANALYSIS OF MODERATE REGRESSION OF CONSCIENTIOUSNESS AND QWL ON JOB ATTITUDE
Dependent variable: Job Attitude

Variables entered into equation	R square	R square change	F	F-change	Significance of F
QWL (X1)	0.048	0.048	21.525	21.525***	0.000
QWL x CON (X3)	0.335	0.288	107.773	184.778***	0.000

***p<0.001 level

To find out the significance in the differences in the R square values for each of the combinations shown in the above steps, the F values were found out and the change in the F values were also calculated as shown in table: 1. It was found that there was a significant interaction between QWL on Job Attitude (F=21.525, significant at 0.001 level) as in the first step. In the third step (X3), when the interaction effect of Conscientiousness on QWL and job attitude was entered, there was a significant increment in the value of R square (F=184.778, significant at 0.001 level). This means that, that there is a significant change in the existing relationship between QWL and Job Attitude because of the moderating effect of personality (conscientiousness).

Today’s organizations are becoming more aware of the personality factor which adds its flavor to all what an individual possess and does function as a subjective factor in the organizational outcomes. Based on the above findings, few supporting studies are discussed.

The antecedents and consequences of job attitudes (i.e., job satisfaction, job involvement, and organizational commitment) have been of great interest to behavioral scientists for much of the last century (Dipboye, Smith & Howell, 1994). Practitioners and researchers have gone to great lengths to understand and influence employee attitudes because of their relationships with important employee and organizational outcomes.

Chu (2002), investigated the impact of individual characteristics on the way emotional labor is performed; it investigates the relationships among the different ways of enacting emotional labor and their consequences, and addresses the question of whether organizational characteristics and job characteristics have buffering effects on the perceived consequences of emotional labor, which are emotional exhaustion and job satisfaction. The proposed moderators (job autonomy and social support) were not found to moderate the relations between emotional labor and its consequences.

Madhu (2007), investigated middle level managers on their Emotional Intelligence, Personality, Job Attitude and Job Performance. Results indicated that personality had a moderating effect on job attitude –performance relationship. To manage the effects of job satisfaction and turnover relationship, the moderating effect of job role centrality and life satisfaction was studied by Amah (2009). Life satisfaction and role centrality moderated the relationship, such that participants, who were low in life satisfaction and role centrality, had greater tendency to exit the organization even at high levels of job satisfaction.

The investigators Uygun & Kilic (2009), studied the level of organizational commitment and the job involvement of the personnel at Central Organization of Ministry of Health in Turkey. 210 subjects, selected randomly, were distributed the questionnaire forms. Of the questionnaires, 180 of them (86%) returned and 168 of them were regarded valid and acceptable and analyzed. A moderate positive correlation was found out between organizational commitment and job involvement (r=0.44).

Malek, Mearns, and Flin (2010), examines the relationship among sources of stress, coping strategy, job satisfaction and psychological well-being and to examines the roles of coping behavior as the moderator variable. Overall coping behavior has a significant effect as a moderating variable between sources of stress and psychological health for Malaysian fire fighters.

FINDINGS

The analysis of the present investigation has also clearly indicated that Conscientiousness do moderate QWL and Job Attitude thus, supporting the formulated hypothesis.

CONCLUSION

Conscientiousness is positively related to opportunities to use and develop human capacity, social integration in the work force and constitutionalism in the work organization. Whatever is the police culture, culture shield, police personality or the Medias contribution in shaping police personality of officers', studies clearly indicates that among the Big Five Factors Conscientiousness is a fruitful basis to examine the dispositional source of Quality of Work Life among Civil Police Officers.

SUGGESTION

The present study will be helpful in the selection strategies, recurrent training, operational and administrative practices also promotional criteria.

SCOPE FOR FURTHER RESEARCH

Future studies should attempt to integrate alternative frameworks that may explain the relationships of traits with QWL with Job Attitude.

REFERENCES

1. Abrahamsen,S. (2006).Police Personality and the relationship between personality and preferences for conflict resolution tactics. Oslo :PHS Forskning
2. Abrahamsen, S., and Strype, J. (2010). "Are they all the same? Norwegian police officers' personality characteristics and tactics of conflict resolution". *Policing and Society*,20, (1), 99-123. DOI: 10.1080/10439460903377303.
3. Amah, O. E. (2009). "Job Satisfaction and Turnover Intention Relationship: The Moderating Effect of Job Role Centrality and Life Satisfaction". *Research and Practice in Human Resource Management*, 17(1), 24-35.
4. Baron, R.M., and Kenny, D.A. (1986). "The moderator –mediator variable distinction in social psychological research: conceptual, strategic and statistical considerations". *Journal of Personality and Social Sciences*, 51, 1173-1182.
5. Barrick, M. R., and Mount, M. K. (1991). "The Big Five personality dimensions and job performance: A Meta-Analysis". *Personnel Psychology*, 44, 1-26.
6. Bitner, M. J., Booms, B. H. and Tetreault, M. S. (1990). "The service encounter: Diagnosing favourable and unfavourable incidents". *Journal of Marketing* 54, 71-84.
7. Blegen., M.(1993). "Nurses' job satisfaction: a meta-analysis of related variables". *Nurs Res*, 42:36-41.
8. Carayon, P., and Smith, M. J. (2000). "Work organization and ergonomics". *Applied Ergonomics*, 31, 649-662.
9. Chaplin, W.F. (1991). "The next generation in moderation research in personality psychology". *Journal of Personality*, 59, 143-178.
10. Chu, Kay Hei-Lin. (2002). The Effects of Emotional Labor on Employee Work Outcomes. Published PhD dissertation in Hospitality and Tourism Management, Faculty of the Virginia Polytechnic Institute and State University, Virginia.
11. Cortina, J.M., Doherty, M.L., Schmitt, N., Kaufman, G., and Smith, R.G. (1992). "The 'Big Five' personality factors in the IPI and MMPI: predictors of police performance", 45, 1, 119-140.
12. Crosby, L. A. and Stephen, N. (1987). "Effects of relationship marketing on satisfaction, retention, and prices in the life insurance industry". *Journal of Marketing Research* 24, 404-411.
13. DeNeve, K. M., and Cooper, H. (1998). "The happy personality: A meta-analysis of 137 personality traits and subjective well-being". *Psychological Bulletin*, 124, 197–229.
14. Dipboye, R. L., Smith, C. S., and Howell, W. C. (1994). *Understanding industrial and organizational psychology: An integrated approach*. New York: Harcourt Brace College Publishers.
15. Hartline, M. D. and Forrel, O. C. (1996). "The management of customer-contact service employees: An empirical investigation". *Journal of Marketing* 60, 52-70.
16. Janssen, P. M., de Jonge, J., and Bakker, A. B. (1999). "Specific determinants of intrinsic work motivation, burnout and turnover intention: a study among nurses". *Journal of Advanced Nursing*, 29(6), 1360-1369.
17. Jayan, C. (2004). Job Attitude Scale. Unpublished PhD Dissertation. Thenhipalam: Department of Psychology, University of Calicut.
18. Jayan,C., Reena,G., Susan,V., and Rekha,B. R. (2010). Unpublished PhD dissertation. Thenhipalam: Department of Psychology, University of Calicut.
19. Judge, C.M., McClelland, G.H., and Culhane, S.E. (1995). "Data analysis: Continuing issues in the everyday analysis psychological data". *Annual Review of Psychology*, 46, 433-465.
20. Kaushik, K., and Tonk, M.S. (2008). "Personality and Quality of Work Life". *ICFAI Journal of Organizational Behavior*.
21. Kohn, M.L., and Schoolar, C. (1981). "Job conditions and Personality: A Longitudinal Assessment of their Reciprocal Effects". In *Factor Analysis and Measurement In Sociological Researches: A Multi-Dimensional Perspectives*, eds, D.J. Jackson, E.F.Borgatta, Beverly Hills, CA: Sage Publications.
22. Madhu, K.B., (2007). "Emotional intelligence and Personality as Moderators of Job Attitude and Job Behaviour". Unpublished PhD Dissertation. Thenhipalam: Department of Psychology, University of Calicut.
23. Malek, M.D.A., Mearns, K., Fliin, R.(2010). "Stress and Psychological Well-being in UK and Malaysian Fire Fighters". *Cross Cultural Management*, 17,(1), 50-61
24. Neelima and Bhagavathy, K.(2006). "Analytical study of Asthma in relation to Personality, Life Satisfaction and selected background variables". Unpublished PhD Dissertation, University of Kerala.
25. Organ, D.W. and Lingl, A. (1995). "Personality, satisfaction, and organizational citizenship behavior". *Journal of Social Psychology*, 135, 339 – 350.
26. Parasuraman, A. (1987). "Customer-oriented cooperate cultures are crucial to services marketing success". *Journal of Services Marketing* 1, 39-46.
27. Pienaar,J.,Rothmann,S.,and Vijver, F. J. R. (2006). "Occupational stress, personality traits, coping strategies, and suicide ideation in the South African police service". *Criminal Justice and Behavior*, 33, (3), 1-19. DOI: 10.1177/0093854806288708.
28. Sanders,B. (2008). "Using personality traits to predict police officer performance". *Policing: An International Journal of Police Strategies & Management*, 31 (1), 129 – 147.
29. Tett, R. P. and Meyer, J. P. (1993). "Job satisfaction, organizational commitment, turnover intention, and turnover". *Personnel Psychology* 46, 259-293.
30. Twersky-Glasner, A. (2005). "Police Personality: What Is It and Why Are They Like That?". *Journal of Police and Criminal Psychology*, Volume 20, (1).
31. Uygur, A., and Kilic, C. (2009). "A Study into Organizational Commitment and Job Involvement: An Application towards the Personnel in the Central Organization for Ministry of Health in Turkey". *Ozean Journal of Applied Sciences* 2(1), 113-125.
32. Yee, R. W. Y., Yeung, A. C. L., and Cheng, T. C. E. (2008). "The Impact of Employee Satisfaction on Quality and Profitability in High-Contact Service Industries". *Journal of Operations Management* 26, 651-668.

ROLE OF EDUCATION IN PROMOTING SOCIAL INCLUSION: AN ANALYSIS OF THE WORKING OF MID DAY MEAL

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ABSTRACT

Efforts to eradicate illiteracy existed even in the pre independence days. Many provincial heads of the states and social reformers themselves took interest to address the issue of mass illiteracy. However, as their efforts were quite sporadic and lacked continuity, their impact largely remained localized, that petered out with the passage of time. The tryst against illiteracy took a far more ambitious form after Independence and many new and innovative initiatives were tried out in the subsequent ensuing plans. However, their impact has been a mixed one. It could at best be called a saga of success and failures, triumph and disappointments and integration and marginalisation. Concern over the status of development and anxious to stem out the marginalization of a sizeable section of the society, particularly the vulnerable section, the government in the year 2001 launched a very ambitious educational programme called Sarva Siksha Abhiyam (SSA). The ensuing exercise attempts to study the performance of Mid Day Meal (MDM) which forms a very crucial and significant component of SSA. It examines the extent to which it has succeeded in ensuring social inclusion of the people in general and deprived section of the society. The study has been carried out in ten districts of Uttar Pradesh and covers 1010 schools out of which sixty nine percent were primary and remaining about thirty one upper primary. Stratified random sampling was used to select the sample schools which were located both in the urban as well as rural areas.

KEYWORDS

Social Inclusion, MDM, SSA, marginalized section.

INTRODUCTION

The decades of planned experience has brought home several useful lessons. The first and foremost being that by merely attaining high rate of growth, even on a sustained basis, would not spell all-round prosperity if it fails to induce, motivate and galvanize the people at large to participate in the process of development on the contrary, it may promote regional disparities and dissepamous tendencies across board that ultimately prove detrimental to the stability, prosperity and tranquility of the country which is a pre-requisite condition for growth and development. The other and more important lesson has been that without developing the capacity of the people, their participation may not be feasible.

The concept of 'social inclusion' or inclusive growth came in vogue when it was being increasingly realized that the development programmes that had been launched in various subsequent plans, failed to reach out to the people at large and were found to be totally inept to address the critical issues for which they had been conceived on one hand and also led to mis appropriation of resources on the other. The lack of transparency into the functioning of these programmes further fuelled suspicious about the institutions and motives of the programme functionaries and also isolated a large section of people, who looked at them with great contempt and disdain.

Therefore, the concept of social inclusion would only become realistic if it succeeds in motivating and luring the people to participate in the programmes/schemes in a big way. In other words, it strongly advocates for decentralization of planning where the people at the grass root level are given adequate space to air their views and contribute to the process of planning- a bottom up approach and not the opposite one, which has remained in practice for quite long.

Further, it also dawned upon the planners that the most appropriate and reliable tool for capacity building of the people could only be through education. The plausible reason being that amongst its other contemporary sources, only education has the capability to transgress, influence, and mould the human capabilities from a very low levels to unprecedented heights, from being an unknown and unproductive class to becoming a highly competitive unit and from being a raw and uncultivated class to becoming a highly refined value added product (Pant, 2005). All this clearly highlights the need and role of education in the new perspectives.

Efforts to eradicate illiteracy could be traced back even to pre-independence days when the provincial heads of some of the states like Mysore, Travancore, Coimbatore etc. themselves took great interest in promoting literacy among masses. Similarly, many social reformers like Tagore, Gandhi, Rajgopalachari, Raja Ram Mohan Roy to name some also took deep interest to address the issue of illiteracy among masses. However, as their efforts lacked continuity, and were undertaken with limited resources, their impact largely remained localised that petered out with the passage of time (Rawal, 1998).

After independence, the tryst against illiteracy took a far more ambitious form and many ambitious and innovative programmes were launched in subsequent plan periods. The impact of these programmes remained a mixed one. It could, at best, be summarized as the saga of success and failures, triumph and disappointments, and convergence or integration and marginalization. The success, triumph and integration were achieved in the form of manifold increase in plan allocation of resources, number of schools, number of teachers, the state of physical infrastructure, enrolment levels of students and overall increase in the literacy levels; however, the disappointments, failures and marginalization's were witnessed largely in the form of high level of drop outs of students both at the primary and upper primary levels dilution in the quality of education, increasing marginalization of disadvantaged section of the society and females (NSSO 52nd round data, Kaul 2002; Visaria, et.al. 1993).

Unfortunately, these anomalies did not remain confined to region and gender specific domains but have spread across caste and regional boundaries as well concerned over these issues, the government constituted commission and sub-committees in various plan periods to review the overall working and performance this sector and also against appropriate interventions. Based on the recommendations, of these expert committees the nation kept launching programme after programme and today our country, perhaps, is one of the few nations that has an educational programme for every segment of the society be they infant, child, adult, physically disabled or mentally challenged (Pant, 2009: Ibid).

These endeavours succeeded positively in some of the educational parameters at the macro-level; however, the micro-level scenario in many states (identified as BIMARU) remained quite depressing and disappointing. Concern over these developments, government ultimately came up with a very ambitious programme called Sarva Siksha Abhiyan (SSA) in 2001. Under SSA, the entire gamut of educational interventions that starts with early childhood care and carries through the elementary and post elementary phase has been perceived holistically (MHRD, 2003).

MID-DAY MEAL: THE BACKGROUND

Mid Day Meal (MDM), which has now emerged to be an important and integral component of SSA, primarily envisages to address two critical issues that have been afflicting the performance of elementary education for quite long enhancement in the enrolment, retention and attendance of students in the school and simultaneously aiming to improve the nutritional levels among the school going children. It has now emerged as one of the largest school feeding programme reaching out to about 12 crore children in about 13 lakh schools/EGS centres across the country.

MDM has had a long history in India. In 1925, for the first time, it was introduced for the disadvantaged children in Madras Municipal Corporation. By the mid 1980s, three states namely Gujarat, Kerala and Tamil Nadu and the Union Territory of Pondicherry had universalized cooked mid day meal programme through their own resources for children studying at the primary level (NP-NSE, 2006).

The programme received impetus in the year 1995, when National Programme of Nutritional support to Primary Education (NS-NSPE) was launched as a centrally sponsored scheme initially for 2408 blocks of the country and by 1997-98 it was extended to all blocks of the country. The scheme was further extended in 2002 to cover not only the children in government primary schools, government aided and local body schools but also to children studying in ECS and AIE centres. Since 2007-08, MDM has also been extended to cover children in upper primary classes in 3427 educationally backward blocks (EBBs). The scheme has undergone several amendments and modifications in subsequent years to ensure balanced and nutrition did to the children.

Since MDM is a component of SSA, it naturally inherits all its basic features and promotes public private partnership (PPP) model that envisages participation of level bodies in the overall functioning of the programme. The ensuing study covers the performance of MDM in the following ten districts of Uttar Pradesh viz. Sitapur, CSM Nagar, Kanauj, Lalitpur, Mahoba, Aligarh, Sharanpur, Basti, Chandauli and Rampur.

OBJECTIVES

As has been stated earlier also MDM primarily address the issues of enhancing enrolment, retention and attendance of students in the elementary and upper primary schools besides focusing on nutritional requirements of the children. However, as MDM is also a crucial component of SSA, which has also been identified as the flagship programmes of the government whose major objective is to promote "social inclusion" through an array of social interventions that enhances access, awareness, convergence, participation gender-sensitization and empowerment etc.

Therefore the ensuing exercise attempts to study whatever MDM has succeeded in its endeavour to promote social inclusion. More specifically, it focuses on awareness, participation, gender sensitization and awareness and convergence with other programmes.

RESEARCH DESIGN

The study has been carried out in ten districts of U.P. A total of 100 schools from each of the sample district have been selected out of which 70 were primary and remaining 30 from upper primary category. Thus, the total sample contained 1000 school of which the ratio of primary and upper primary was 7:3. Further, care has also been taken to select the schools from district blocks in both the rural and urban areas. Thus, the selection of schools has been made on the basis of stratified random sampling technique.

Further, as MDM programme operates on public-private partnership mode, views of other key players like parents, teachers, members of VEC, officials of FCI etc. have been solicited. More precisely, the methodology adopted has been summarized below:

RESEARCH DESIGN FOR THE STUDY

Sl. No.	Particulars	Number	
1	Districts	10	
2	Blocks	1/3 of total blocks (of which 2 blocks would be distant blocks) and 1/3 of total urban wards (of which 2 wards would be distant wards)	
3	Schools	Primary	700 @ 70 schools per district
		Upper Primary	300 @ 30 schools per district
		Total	1000 @ 100 schools per district
4	Students	Primary	2800 @ 4 students per school
		Upper Primary	1200 @ 4 students per school
		Total	4000 @ 4 students per school
5	Parents	4000 @ 4 parents per school	
6	Teachers	1000 @ one teacher per school	
7	Cook	1000 @ one cook per school	
8	MTA/PTA	1000 @ one member per school	
9	VEC	1000 @ one member per school	

It has already been stated that the study covers a total of 1010 schools, however, the classification, on the basis of their management reveals an over-whelming 97 per cent of the schools were from government domain whereas the proportion of private aided schools was hardly about 3 percent. Further, the students profile also reveals homogeneity in the socio-economic background. The main castes dominating the student's community were that of SCs, OBC, and Minorities (Table 1).

TABLE 1: DISTRICT AND MANAGEMENT WISE NUMBER OF SAMPLE SCHOOLS

Sl. No.	Name of District	No. of Sampled Blocks	No. of Sampled Schools								
			Government			Private Aided			Total Sample		
			PS	UPS	Total	PS	UPS	Total	PS	UPS	Total
1	Sitapur	09	70	27	97	-	04	04	70	31	101
2	CSM Nagar	05	72	29	101	-	01	01	72	30	102
3	Kannauj	04	70	29	99	-	03	03	70	32	102
4	Mahoba	04	70	27	97	-	04	04	70	31	101
5	Aligarh	05	70	29	99	-	01	01	70	30	100
6	Basti	05	70	26	96	-	04	04	70	30	100
7	Chandauli	05	70	25	95	-	06	06	70	31	101
8	Lalitpur	03	70	32	102	-	-	-	70	32	102
9	Shravasti	02	71	29	100	-	01	01	71	30	101
10	Rampur	03	69	25	94	01	05	06	70	30	100
Total		45	702	278	980	01	29	30	703	307	1010

Source: Field Survey, 2011.

RESULT & DISCUSSION

The concept of social inclusion can get support only if the programme has an element of transparency into its overall functioning. This feature not only encourages, motivates and sensitizes the key stake holders but also enhances their level of participation into the programme. The element of transparency has been studied on the basis of following parameters:

- Whether MDM was being displayed prominently on the schools walls for general public, as per the guidelines,
- Whether the sample schools were following the menu displayed on the display, board,
- To what extent MDM has become functional.

The analysis shows that about 96 percent of the sample schools were displaying MDM and another about 91 percent were also following the menu of MDM. The inter-district study shows that in majority of the districts, the sample schools performance was quite satisfactory however, there were some districts like Aligarh (22 percents and Basti (18 percent) where the performance in some of the schools required special attention (Table 2 & 3).

TABLE 2: DISPLAY OF THE MENU OF MID DAY MEAL ON THE SCHOOL'S WALL

Sl. No.	Name of District	Displayed			Not Displayed			Total Sample		
		PS	UPS	Total	PS	UPS	Total	PS	UPS	Total
1	Sitapur	70	30	100	-	01	01	70	31	101
2	CSM Nagar	72	30	102	-	-	-	72	30	102
3	Kannauj	68	31	99	02	01	03	70	32	102
4	Mahoba	70	31	101	-	-	-	70	31	101
5	Aligarh	70	29	99	-	01	01	70	30	100
6	Basti	63	26	89	07	04	11	70	30	100
7	Chandauli	69	28	97	01	03	04	70	31	101
8	Lalitpur	67	32	99	03	-	03	70	32	102
9	Shravasti	69	30	99	02	-	02	71	30	101
10	Rampur	59	27	86	11	03	14	70	30	100
Total		677	294	971	26	13	39	703	307	1010

Source: Field Survey, 2011.

TABLE 3: MID DAY MEAL ACCORDING TO MENU

Sl. No.	Name of District	According to Menu			Not According to Menu			Total Sample		
		PS	UPS	Total	PS	UPS	Total	PS	UPS	Total
1	Sitapur	69	30	99	01	01	02	70	31	101
2	CSM Nagar	52	18	70	07	05	12	59	23	82
3	Kannauj	66	32	98	02	-	02	68	32	100
4	Mahoba	67	30	97	01	-	01	68	30	98
5	Aligarh	53	25	78	17	05	22	70	30	100
6	Basti	52	25	77	13	04	17	65	29	94
7	Chandauli	64	26	90	01	03	04	65	29	94
8	Lalitpur	65	29	94	04	02	06	69	31	100
9	Shravasti	54	22	76	-	-	-	54	22	76
10	Rampur	53	26	79	16	03	19	69	29	98
Total		595	263	858	62	23	85	657	286	943

Source: Field Survey, 2011.

Likewise for studying the functionality of the programme, attempt has been made to study how much regularity was being maintained in the distribution of MDM. The analysis shows that MDM was being served in about 93 percent of the school, though there were still about 7 percent of the schools, where regularity was not ensured. The study also shows that the level of functionality of the programme was not uniform in all sample districts and there were two districts viz. Shravasti and CSM Nagar (Amethi) where there were still about 24 percent and 20 percent of the schools where the programme faced difficulty in ensuring regularity. However, in the remaining of the district, the programme's performance was quite heartening (Table 4).

TABLE 4: REGULARITY IN DISTRIBUTION OF MID DAY MEAL

Sl. No.	Name of District	MDM being Served on daily basis			MDM being Not Served on daily basis			Total Sample		
		PS	UPS	Total	PS	UPS	Total	PS	UPS	Total
1	Sitapur	70	31	101	-	-	-	70	31	101
2	CSM Nagar	59	23	82	13	07	20	72	30	102
3	Kannauj	68	32	100	02	-	02	70	32	102
4	Mahoba	68	30	98	02	01	03	70	31	101
5	Aligarh	70	30	100	-	-	-	70	30	100
6	Basti	65	29	94	05	01	06	70	30	100
7	Chandauli	65	29	94	05	02	07	70	31	101
8	Lalitpur	69	31	100	01	01	02	70	32	102
9	Shravasti	54	22	76	17	08	25	71	30	101
10	Rampur	69	29	98	01	01	02	70	30	100
Total		657	286	943	46	21	67	703	307	1010

Source: Field Survey, 2011.

The programme of MDM has often being criticized on the basis of poor quality and less quality of food served under its banner. Accordingly, an attempt was made to study the same and views were solicited from the students and other stake holder (Parents, teachers, members of VEC etc.) The study shows that in over 96 percent of the sample schools, both the quantity provided was termed as either good or satisfactory and even adequate. However, at the inter-district level, there were quite a few schools in district like Chandauli (5 percent) Shravasti (8 percent), Kanauj (4 percent) where the programme was having problem on quality and quantity aspect. Similarly on ensuring quantity, in an overwhelming districts (about 96 percent), the schools performance was highly satisfactory whereas in the remaining the programme faced rough weather. The two district where it faced problems were Lalitpur (11 percents and Aligarh 17 percent). Thus, it could be said that, by and large, the performance of the programme was reasonably sound.

GENDER-SENSITISATION & EMPOWERMENT

Gender-sensitisation and empowerment can only be achieved if the programme encourages social inclusion. In MDM the concept of gender-sensitisation has been studied/observed through the manner in which the children are made to set both in the classrooms as well as while taking MDM meal. Further, as it has been stated earlier that the three major castes that overwhelmingly dominated the students profile were the SC, OBC and Minorities. The proportion of General Caste was quite minimal. The analysis shows that over 94 percent of the children have been taking MDM only substantiates our belief that the programme, to a large extent, has succeeded in promoting gender-sensitiation which is a vital component for achieving social inclusion.

Since MDM is to be run on PPP mode, the programme has accordingly made space for the private players for participation. In this context, the community, has also been assigned the task of supervising the school activities in school management, at the time of MDM distribution. The analysis of supervision pattern shows that in over 85 percent of the sample schools, the level of community participation was either good or quite satisfactory. The level of community participation, at the inter-district level, has not been uniform. However, it can be argued that MDM has also been able to induce, motivate and sensitise the community into school level activities which heralds good for social inclusion. The study also shows that in about 15 percent district the community participation was weak and not good. The two districts that lagged behind were Basti & Shrawasti where over 56 percent and 29 percent of the sample schools had poor level of participation (Table 5).

TABLE 5: COMMUNITY PARTICIPATION OF PARENTS/VECS/PANCHAYATS/URBAN BODIES IN SUPERVISION/MONITORING OF MID DAY MEAL PROGRAMME

Sl. No.	Name of District	Good			Satisfactory			Not Good			Total Sample		
		PS	UPS	Total	PS	UPS	Total	PS	UPS	Total	PS	UPS	Total
1	Sitapur	09	02	11	50	27	77	11	02	13	70	31	101
2	CSM Nagar	08	04	12	62	22	84	02	04	06	72	30	102
3	Kannauj	-	01	01	69	31	100	01	-	01	70	32	102
4	Mahoba	02	02	04	66	27	93	02	02	04	70	31	101
5	Aligarh	02	04	06	63	24	87	05	02	07	70	30	100
6	Basti	-	-	-	34	10	44	36	20	56	70	30	100
7	Chandauli	05	02	07	56	23	81	09	06	15	70	31	101
8	Lalitpur	-	02	02	63	27	90	07	03	10	70	32	102
9	Shravasti	03	03	06	51	15	66	17	12	29	71	30	101
10	Rampur	-	02	02	62	26	88	08	02	10	70	30	100
Total		29	22	51	576	232	810	98	53	151	703	307	1010

Source: Field Survey, 2011.

However, the monitoring aspect of government departments appeared to be relatively weaker as hardly about 68 percent of the schools had been motivated and supervised with wide range of variation at the inter-district level (Table 6).

TABLE 6: MONITORING AND EVALUATION BY STATE/DISTRICT/BLOCK LEVEL OFFICIALS

Sl. No.	Name of District	Education Department			Task Force/Other Department			Total Sample		
		PS	UPS	Total	PS	UPS	Total	PS	UPS	Total
1	Sitapur	45	15	60	04	03	07	70	31	101
2	CSM Nagar	37	16	53	05	02	07	72	30	102
3	Kannauj	47	22	69	02	02	04	70	32	102
4	Mahoba	47	18	65	01	-	01	70	31	101
5	Aligarh	57	23	80	09	02	11	70	30	100
6	Basti	42	21	63	04	-	04	70	30	100
7	Chandauli	53	25	78	06	04	10	70	31	101
8	Lalitpur	21	08	29	30	13	43	70	32	102
9	Shravasti	20	12	32	02	03	05	71	30	101
10	Rampur	42	18	60	07	03	10	70	30	100
Total		411	178	589	70	32	102	703	307	1010

Source: Field Survey, 2011.

Likewise, the study also highlights participation of parents in supervising the cooking of MDM was weak as hardly 61 percent of the parents visited the schools. The two districts which highest incidence of parents not reporting to supervise the cooking of MDM were Lalitpur (54 percent) and Chandauli (51 percent) respectively.

The analysis also sought to study the perception of parents, students and teachers to understand to what extent MDM has succeeded in promoting the concept of social inclusion. The study shows that an overwhelming (93 percent) of the parents feel that MDM has succeeded in enhancing the interest of children towards schools and school related activities which may be take-as a precursor towards social inegration.

The other dimension of public participation that the study highlights is that complaint against the quality and quantity of food served under MDM. However, the incidence of complaint has been quite marginal (12 percent) for quality and 9 percent for quantity. All this shows that the people have become vocal which augurs well for social integration (Table 7 & 8).

TABLE 7: PERCEPTION OF THE PARENTS ABOUT COMPLAIN FOR QUALITY OF MID DAY MEAL

Sl. No.	Name of District	Head Teacher			Assistant Teacher			Gram Pradhan			Other Officials			Total Sampled Parents		
		PS	UPS	Total	PS	UPS	Total	PS	UPS	Total	PS	UPS	Total	PS	UPS	Total
1	Sitapur	07	02	09	04	01	05	-	-	-	-	01	01	280	124	404
2	CSM Nagar	-	03	03	02	-	02	-	-	-	-	-	-	288	120	408
3	Kannauj	63	34	97	26	14	40	10	06	16	-	-	-	280	128	408
4	Mahoba	10	05	15	03	01	04	-	-	-	01	-	01	280	124	404
5	Aligarh	32	31	63	03	-	03	04	02	06	01	-	01	280	120	400
6	Basti	12	04	16	04	-	04	04	-	04	-	-	-	280	120	400
7	Chandauli	07	03	10	05	-	05	-	-	-	-	-	-	280	124	404
8	Lalitpur	17	07	24	14	05	19	03	04	07	-	-	-	280	128	408
9	Shravasti	26	06	32	15	03	18	07	04	11	-	-	-	284	120	404
10	Rampur	13	05	18	22	05	27	14	02	16	01	-	01	280	120	400
Total		187	100	287	98	29	127	42	18	60	03	01	04	2812	1228	4040

Source: Field Survey, 2011.

TABLE 8: PERCEPTION OF THE PARENTS ABOUT COMPLAIN FOR QUANTITY OF MID DAY MEAL

Sl.No.	Name of District	Head Teacher			Assistant Teacher			Gram Pradhan			Other Officials			Total Sampled Parents		
		PS	UPS	Total	PS	UPS	Total	PS	UPS	Total						
1	Sitapur	02	-	02	-	03	03	-	-	-	-	-	-	280	124	404
2	CSM Nagar	-	03	03	02	-	02	-	-	-	-	01	01	288	120	408
3	Kannauj	34	24	58	14	11	25	01	01	02	-	-	-	280	128	408
4	Mahoba	10	05	15	03	01	04	-	-	-	01	-	01	280	124	404
5	Aligarh	32	15	47	04	-	04	04	01	05	-	-	-	280	120	400
6	Basti	-	04	04	-	-	-	-	-	-	-	-	-	280	120	400
7	Chandauli	05	-	05	06	-	06	02	-	02	-	-	-	280	124	404
8	Lalitpur	15	08	23	09	07	16	03	05	08	-	-	-	280	128	408
9	Shravasti	21	08	29	17	05	22	08	03	11	02	-	02	284	120	404
10	Rampur	14	05	19	19	06	25	12	03	15	-	-	-	280	120	400
Total		133	72	205	74	33	107	30	13	43	03	01	04	2812	1228	4040

Source: Field Survey, 2011.

The study also shows the programme has been able to effectively address the issue of gender discrimination. Except in one school of district Shravasti, no cases of gender-discrimination against students was reported in any of the sample school. Similarly the deployment of cooks from disadvantaged section, as per the guidelines of the programme, only substantiates their empowerment and gender-sensitisation.

SUGGESTIONS

The detail analysis of MDM programme in the ten sample districts provides a bag of mix experiences and outcomes. It could be said that it has succeeded in areas like providing or establishing the functionality of the programme, in the display of me, on quality and quantity of meals provided under the programme. Likewise, it could also be stated that it has also succeeded, to a large, extent in motivating the parents to participate through an array of activities like

supervision, making complaints to the concern authorities about the quality and quantity of food served under the programme. All this clearly establishes the active level of participation in the programme. Similarly, the issue of gender-sensitisation and empowerment too has been effectively taken up. All this clearly shows the positive fall out of the programme and its movement towards social integration and social inclusion.

The analysis also shows how MDM has positively influenced the perception of parents and children for school and its related activities. In promotion of good sanitary habits. These small both equally vital steps could go a long way in promoting the concept of social inclusion.

However, MDM has also not with disappointments in many other areas as well. In critical areas like providing health average to children, in the maintenance of health check up cards, distribution of micro-nutrients to children etc., it has not lined upto the expectations only reflects its inability to strike convergence with other line departments.

The study pleads not only sustaining these interventions but even applying it more rigourously and intensively in those areas where the outcome have not been encouraging. What needs to be understood that MDM, as a social intervention is being applied in what is called a traditionally hard or difficult state (one of the BIMARU) that has remained the cradle of feudal classes that practices caste based domination politics and other forms of draconian measures that virtually crushed the democratic processes and democratic transformation of powers. These interventions may, therefore, take a relatively longer time to fructify. However, it could be safely argued that MDM, as a programme, has succeeded to some extent in promoting the concept of social inclusion though a lot more needs to be done to sustain it.

REFERENCES

1. Kaul, Vineeta (2002), Early Childhood Care and Education in Govinda (ed) India Education Report, Oxford University Report, New Delhi.
2. MHRD (2008), Sarva Siksha Abhiyan Programme for Universal Elementary Education Programme for Implementation, Department of School Education and Literacy, New Delhi.
3. National Programme of Nutritional Support to Primary Education (2006) Mid Day Meal Scheme, Guidelines, Ministry of Human Resource Development, Department of School Education & Literacy, September.
4. Pant, S.K. (2005), Final Evaluation of Total Literacy Campaign in District Gumla, Project Report, G.B. Pant Social Science Institute.
5. Pant, S.K. (2009), Universalisation of Education through Adult Literacy Programme Some Emperical Evidences in Y.S> Sisodia (ed) India Development Scenario. Challenges and Prospects, Rawat Publication, Jaipur.
6. Pant S K (2010), External Evaluation of Mid Day meal Programme in Ten District of Uttar Pradesh, Project Report, sponsored by Mid Day Meal Authority, Lucknow
7. Rawal, G.B. (1998), The Gandhian Vision of Education, Journal of Peace Foundation, Vol. 20, No.2, New Delhi.
8. Tilak, B.C. Sandhyala (2002), Financing Elementary Education in R Govind (ed) India Development Report, Oxford University Press, New Delhi.
9. Visaria, et. al. (1993), Literacy & Primary Education in India 1980-81 to 1990-91. Differentials and Determinants, Journal of Educational Planning and Administration, Vol. III, No. I, New Delhi.

EMPIRICAL STUDY OF URBANISATION IN INDIA

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ABSTRACT

Urbanization is closely linked to modernization, industrialization, and the sociological process of rationalization. Urbanization can describe a specific condition at a set time, i.e. the proportion of total population or area in cities or towns, or the term can describe the increase of this proportion over time. So the term urbanization can represent the level of urban relative to overall population, or it can represent the rate at which the urban proportion is increasing. India has seen enormous growth of urban area in general and metropolitan centers in particular. Urban area during 1951-2001 has grown from 62.4 million to 285.3 million. India's population has crossed 1210.19 million as per census of 2011. Urban Population of India has grown from 285.3 million to 377.10 million in 2001 to 2011.

KEYWORDS

urbanization, urban area in India.

INTRODUCTION

Urbanization, urbanization or urban drift is the physical growth of urban areas as a result of global change or the increasing proportion of the total population becomes concentrated in towns. The United Nations projected that half of the world's population would live in urban areas at the end of 2008.^[2]

Kingsley Davis has explained urbanization as process (Davis, 1962) of switch from spread out pattern of human settlements to one of concentration in urban centers. It is a finite process-- a cycle through which a nation pass as they evolve from agrarian to industrial society (Davis and Golden, 1954)

Rapid urbanization is one of the most pressing issues facing the world today. There are wide roads, skyscrapers, modern supermarkets, luxuriant pedestrian streets and so on everywhere in metro and big cities. There are now 3.3 billion urban dwellers on the planet; by 2050 there will be 6.4 billion. By 2025, there will be 27 mega cities in the world, each with over 10 million people. But the fastest growth will take place in urban areas of developing countries particularly in smaller cities and towns in Asia and Africa. It is projected that in the next fifty years, two-thirds of humanity will be living in towns and cities. A major challenge is to minimize burgeoning poverty in cities, improve the urban poor's access to basic facilities such as shelter, clear water and proper sanitation system. In harmonious cities, citizens join hands and work together for common prosperity and development, carrying out the policies and programmes. It is expected that the proportion of India's population living in cities will rise from 29 % now to 55 % in 2050.

In 1800 only 2% of world's population lived in towns. In 1900, cities were home to 9% of planet's population. In 2008, more than half the world population, 3.3 billion people will be living in urban areas. According to the latest UNFPA Report on State of World Population 2007-Unleashing the potential of Urban Growth, by 2030, the urban population will rise to 5 billion or 60% of the world's population. The Asian, African and Latin American countries are the major regions, which would witness a major shift from rural to urban areas. This urbanization process is continuous and inevitable and should be considered as a positive development.

The Millennium Development Goals call for a significant improvement in the lives of at least 100 million slum dwellers by 2020. As of 2005, slightly more than one third of the urban population in developing regions lived in slum conditions. In sub-Saharan Africa, the proportion was over 60 percent, meaning that large investments will be necessary, for example to provide access to water, sanitation, durable housing or sufficient living space. But even in that region, and in others where deprivation is not as acute, simple, low-cost interventions could go a long way.

OBJECTIVE OF STUDY

This paper endeavors to illuminate on the process of urbanization in India with emphasis on level, tempo of urbanization and urban morphology using Indian Census data during 1901-2011. It will try to trace pattern of urbanization, urban problems and related policy issues

RESEARCH METHODOLOGY

Research methodology used in the present study is summarized as given below:

- (a) **Sources of Data:** This study involves the collection and critical examination of secondary data.
- (i) **Secondary data:** Further the data pertaining to urban and rural population etc. were collected from census of India, articles published in reputed journal, newspaper, National Housing Bank .
- (ii) **Pattern of Analysis:**

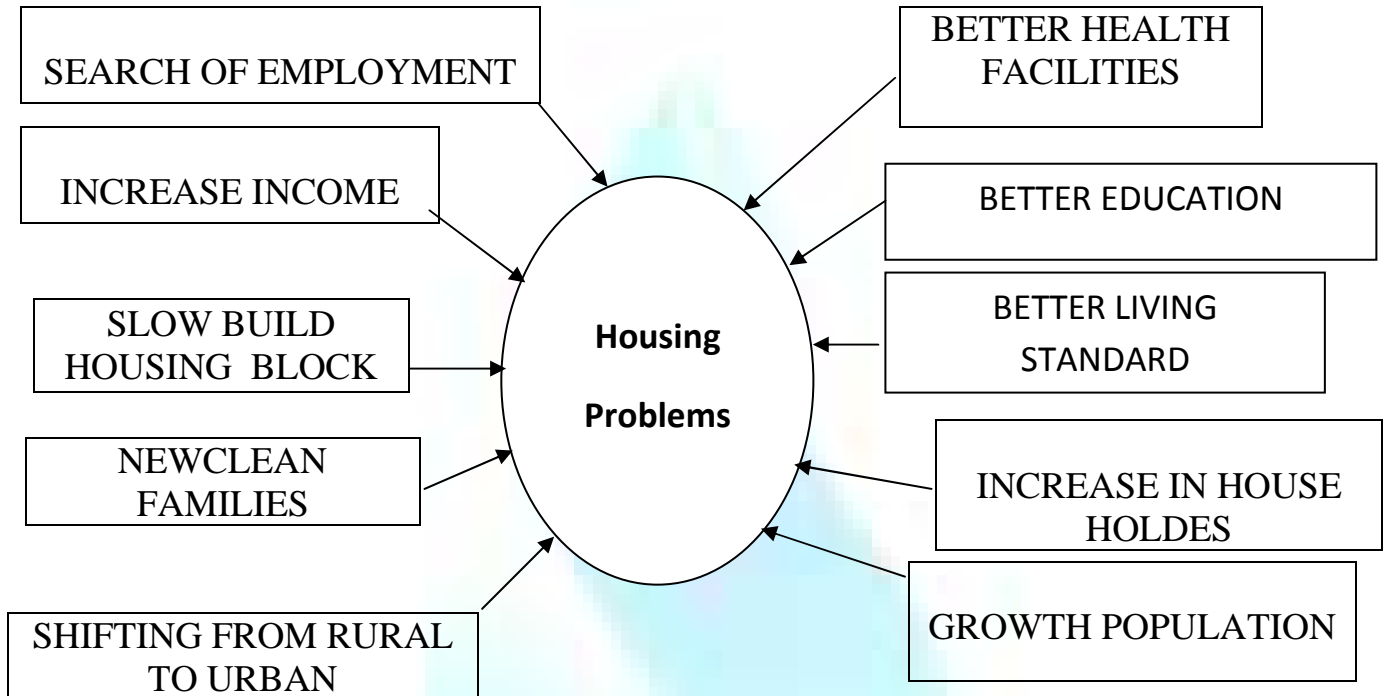
The collected data and information were processed and analyzed by using simple statistical tools like percentage, difference, formulas

PROBLEM OF URBANISATION

Problem of urbanization is manifestation of lopsided urbanization, faulty urban planning, and urbanization with poor economic base and without having functional categories.

Urbanization is closely linked to modernization, industrialization, and the sociological process of rationalization. Urbanization can describe a specific condition at a set time, i.e. the proportion of total population or area in cities or towns, or the term can describe the increase of this proportion over time. So the term urbanization can represent the level of urban relative to overall population, or it can represent the rate at which the urban proportion is increasing.

URBANISATION & HOUSING PROBLEMS



URBANIZATION IN INDIA IN 2011

TAMIL NADU	48.45%	HARYANA	34.79%
MAHARASTRA	45.24%	ASSAM	14.08%
GUJRAT	42.58%	BIHAR	11.30%
Karnataka	38.57%	HIMACHAL PRADESH	10.04%

URBANISATION IN FOREIGN COUNTRY

INDONESIA	41%	INDIA	32%
ASIA	40%	EUROPE	70%
AFRICA	34%	NORTH AMERICA	70%
CHINA	32%		

POPULATION GROWTH IN INDIA

TABLE -3: GROWTH OF URBAN AND RURAL POPULATION IN INDIA

Year	Total population In Million	Rural Population In Million	Urban Population In Million	Decal Growth in Population %		
				Total	Rural	Urban
1951	361.0	298.0 (82.5)	62.4 (17.28)	-	-	-
1961	439.2	360.3 (82.0)	78.9 (17.96)	21.7	20.9	26.4
1971	548.1	439.0 (80.1)	109.1 (19.9)	24.8	21.8	38.3
1981	683.3	523.9 (76.7)	159.4 (23.3)	24.7	19.3	46.1
1991	844.3	627.2 (74.3)	217.1 (25.7)	23.6	19.7	36.2
2001	1027.1	741.6 (72.02)	285.4 (27.8)	21.6	18.2	31.4

Source: Census of India.

People are living in Urban Areas: in India in 2011

Maharastra	= 5.08 Crore.	Tamil Nadu	= 3.49 Crore.
Uttar Pradesh	= 4.44 Crore	Haryana =	=0.88 Crore

Table -1 show that last six decades of post independence India has seen enormous growth pf urban area in general and metropolitan centers in particular. Urban area during 1951-2001 has grown from 62.4 million to 285.3 million .India's population has crossed 1210.19 million as per Census of 2011. Urban population of India is 377.10 million as per census of 2011 instead of 285.3 million as 2001 increased

Table-1 shows Currently the least urbanized regions in the world, with 39.9 per cent and 39.7 per cent of their populations living in cities in 2005, respectively, by 2030, both regions will become predominantly urban, Asia with 54.5 per cent of its population living in cities, and Africa with 53.5 per cent of its population urban. The urbanisation of India is taking place at a faster rate than in the rest of the world. By 2030, 40.76 per cent of India's population will be living in urban areas compared to about 32.16 per cent now in 2011. So says the United Nations' 'State of the World Population 2007' report.

VOLUME AND TREND OF URBANISATION IN INDIA

TABLE 2: POPULATION OF INDIA BY RESIDENCE (1901-2011)

Census	Number of Urban agglomerate /town	Total population	Urban population	Rural
1901	1827	238396327	25851873	212544454
1911	1825	252093390	25941633	226151757
1921	1949	251321213	28086167	223235046
1931	2072	278977238	33455989	245521249
1941	2250	318660580	44153297	274507283
1951	2843	361088090	62443709	298644381
1961	2363	439234771	78936603	360298168
1971	2590	598159652	109113977	489045675
1981	3378	683329097	159462547	523866550
1991	3768	844324222	217177625	627146597
2001	5161	1027015247	285354954	741660293
2011	7935	1210193422	377105760	833087662

Source: Census of India 2001-2011

India shares most characteristic features of urbanization in the developing countries. Number of urban agglomeration /town has grown from 1827 in 1901 to 7935 in 2011. Number of total population has increased from 23.84 cores in 1901 to 121.01 cores in 2011 whereas number of population residing in urban areas has increased from 2.58 cores in 1901 to 37.71 crore in 2001. Level of urbanization incased from 27.81% in 2001 census to 32.16% in 2011 census. (Table 2) This process of urbanization in India is shown in Fig 1. It reflects a gradual increasing trend of urbanization. India is at acceleration stage of the process of urbanization.

POPULATION PROJECTIONS FOR 2001-2025

TABLE-3: POPULATION PROJECTIONS FOR 2001-2025 IN INDIA (million)

Year	Total	Urban	Rural
2001	1027.30	285.30 (27.75%)	742.00 (72.25%)
2005	1091.78	316.33 (28.97%)	781.70 (71.03%)
2010	1178.52	360.38 (30.58%)	834.32 (69.42%)
2015	1272.16	410.57 (32.27%)	890.48 (67.63%)
2020	1373.23	467.74 (34.06%)	950.34 (65.94%)
2025	1482.34	532.87 (35.95%)	1014.41 (64.05%)

Source: Projection made by Human settlement Management Institute, New Delhi using

Semi-log regression analysis based on historical growth rate of census Population figure from 1901-2001.

Projected Urban population during 2001-2025(projected) will grown from 285.30 million (27.75%) takes to 532.87 million (35.95%) as against total population change from 1027.30 million to 1482.34 million. Decennial growth rate of population of last 2 and half decade will place at 13.96% for the urban areas as against 6.74% for the rural areas. Thus urban centres will emerged as critical areas so far as population concentration and growth of human settlements ar concerned.

The table-3 shows population synergy in India.

In 2005, the world's urban population was 3.17 billion out of a world total of 6.45 billion. Current trends predict that the number of urban dwellers will keep rising, reaching almost 5 billion by 2030 out of a world total of 8.1 billion. Between 2005 and 2030, the world's urban population is expected to grow at an average annual rate of 1.78 per cent, almost twice the growth rate of the world's total population. After 2015, as more and more people occupy cities, the population of rural settlements around the globe will begin to contract, decreasing at an average annual rate of -0.32 through 2030– a decrease of more than 155 million people over 15 years.

CHANGE RATE OF URBAN AND RURAL POPULATION

Table-4 shows the projected average annual rate of change of urban population will decline from 2.81% during 2000-05 to 2.25% during 2025-30 instead the average annual rate of change of rural population will decline from 0.82% during 200-05 to (-) 0.49% during 2025-30.

TABLE-4: AVERAGE ANNUAL RATE OF CHANGE OF URBAN AND RURAL POPULATION (2000-2030) in Percentage in India

Year	Urban	Rural
2000-05	2.81%	0.82%
2005-10	2.73%	0.43%
2010-15	2.70%	0.12%
2015-20	2.74%	(-) 0.09%
2020-25	2.52%	(-) 0.22%
2025-30	2.25%	(-) 0.49%

Source: United Nation (1999); World Urbanisation Prospects. The 1999 Revision

SUGGESTIONS TO REDUCE THE CONFLICT IN CITY MANAGEMENT

1. The marketing economy is developed by the free competition of all kinds of business realities. While we help enterprises form a scale to cope with the international competition, we can't ignore that the unit of family have slowed down the increasingly serious employment pressure. While developing the big-scale commercial service network, we cannot despise the complementarities of the small booths, which intersperse among every corner of the city. For the most of laid-off workers and unemployed people in the city, selling vegetables and fruits in a booth, which does not need much cost and skill, is a good way for them to make their living. For the low-income household register management system to build a large substantial dam to prevent the rural people immigrating into the large city.
2. To avoid the tendency of shifting from rural area (villages) to urban area, government should provide housing loan for rural areas at a cheaper rate and state government should make more social housing programmes like Indira Awas Yojana (IAY), Pradhan Mantri Gramin Awas Yojana for landless labour and artisans. There should be low cost housing techniques including existing local methods so as to bring down unit cost.
3. Small and medium towns, particularly in backward states, should get special assistance from the central / state government as their economic bases are not strong enough to generate adequate resources.
4. Household register, which is the core of the measure, is being weakened and will disappear in the market economy. The evidence is that thousands of farmers disregard restriction of the household register system and still immigrate into the city. e people who need to be helped in the city. AS PER VISION 2020 'Housing for All' 100 million housing units would of required

REFERENCES

1. Davies Kingsley and Golden H.H.(1954) : " Urbanisation and development in pre-Industrial Areas", Economic Development and Cultural Change, Vol.3 no 1
2. Economical, Social and Cultural Right International Treaty, 1997, P10-27
3. George Forrest, Cities of India, Published by E.P. Dutton,1903
4. Gopal Sabharwal, Ethnicity and Class: Social Divisions in an Indian City, Oxford University Press, 2006
5. Indu Banga, The City in Indian History: Urban Demography, Society, and Politics, Published by South Asia Books, 1991.
6. "Population Bulletin 2007/2008" (Press release). Milton Keynes intelligence Observatory. 10/03/2008. Retrieved 11/06/2008.
7. SHELTER, Special issue on Cities without Slums, Vol.4, No.3, Oct 2001
8. SHELTER, special issue on Millennium Development Goals and the City, Vol8, No2& 3, Oct 2005
9. The Associated Press (February 26, 2008). "UN says half the world's population will live in urban areas by end of 2008". International Herald Tribune.
10. The State of the Indian Cities 2001, HUDCO, New Delhi and UN-HABITAT
11. The State of the World's Cities, UN-HABITAT and Earthscan Publications Ltd., 2008
12. www.unhabitat.org
13. www.wuf4.com

AN EMPIRICAL STUDY ON RURAL CONSUMERS' PERCEPTION TOWARDS TRADE FAIR AS A MARKETING TOOL

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ABSTRACT

Trade Fair is one of the very essential tools of marketing communication. It is as old as our civilization. However, at present types and scale of trade fair have been changed. In all metro cities, small towns and semi urban places, the numbers and frequency of trade fair have increased dramatically. The present study attempt to study the rural consumers' overall perception about trade fair in terms its importance and relevance in their buying process. The study is based on primary data collected from rural consumers of selected villages of Anand district through structured questionnaire.

KEYWORDS

Perception, Rural Marketing, Trade Fair.

INTRODUCTION

The villages are the backbone or the soul of India. With more than two thirds of the Indian population living in rural areas, rural India reflects the very essence of Indian culture and tradition. A holistic development of India as a nation rests on a sustained and holistic development of rural India.

Consumer behavior is the process where the individual decides what, when, how and from whom to purchase goods and services. Consumer behavior studies how individuals, groups and organization select, buy, use dispose of goods, services, ideas or experiences to satisfy their needs and desire. The study of consumer behavior enables marketers to understand and predict consumer behavior in the market place in advance and it is concerned not only with what consumers buy but also with why, when, where, how and how often they buy it. Consumer research is the methodology which is used to study consumer behavior and it takes place at every phase of the consumption process during before and after the purchase. Consumer behavior is interdisciplinary approach that is based on concepts and theories about people that have been developed by scientists in diverse disciplines such as psychology, sociology, social psychology, cultural anthropology and economics. Consumer behavior has become an integral part of strategic and social responsibility. It should also be an integral component of every marketing decision embodied in a revised marketing and the social marketing concept. It helps marketers to fulfill the needs of their target markets in such a way that it develops a society.

The consumer purchases a variety of goods and services to satisfy his wants and he is always influenced in his purchasing activities by some considerations which lead him to select a particular commodity or a particular retail store in preference to others. So, consumer buying is more complex. Consumer purchases are likely to be influenced by physiological, psychological and sociological factors. The commodities and services are brought by the consumer to satisfy his basic needs, for comfort, pleasure, recreation and happiness. Every individual has physiological need such as hunger, shelter, thirst, etc., which have to be satisfied for survival. The psychological factors like status prestige and social factors like friends, neighbours, job and relatives influence their purchasing activities.

Right communication is the key to any successful marketing campaign. In rural markets, it is especially important to get the right tone and approach for the communication strategy. There are many sources through which rural customers gather information to take buying decision.

DEFINITION OF RURAL MARKET AND RURAL MARKETING

According to National Commission on Agriculture "Rural marketing is a process which starts with a decision to produce a salable farm commodity and it involves all the aspects of market system, and includes pre and post harvest operations i.e. assembling, grading, storage, transportation and distribution".

The Census defines urban India as - "All the places that fall within the administrative limits of a municipal corporation, municipality, cantonment board etc or have a population of at least 5,000 and have at least 75 per cent male working population in outside the primary sector and have a population density of at least 400 per square kilometer. Rural India, on the other hand, comprises all places that are not urban!"

RURAL MARKETING

Rural marketing involves the process of developing, pricing, promoting, distributing rural specific product and a service leading to exchange between rural and urban market which satisfies consumer demand and also achieves organizational objectives. It is a two-way marketing process wherein the transactions can be:

1. Urban to Rural: It involves the selling of products and services by urban marketers in rural areas. These include: Pesticides, FMCG Products, Consumer durables, etc.
2. Rural to Urban: Here, a rural producer (involved in agriculture) sells his produce in urban market. This may not be direct. There generally are middlemen, agencies, government co-operatives, etc who sell fruits, vegetables, grains, pulses and others.
3. Rural to rural: These include selling of agricultural tools, cattle, carts and others to another village in its proximity.

MARKETING COMMUNICATION TOOLS

A marketing person has many tools at his disposal for generating awareness and supporting the selling effort. While there are numerous marketing communication tools, there are also numerous mixes for these tools. The following is a list of some of the more common tools along with examples of their use and some considerations. One important note is remember that marketing communication tools do improve understanding your product or service, reinforcing your messages, supporting the sales cycle and generating awareness.

1. ADVERTISING

Advertising's main feature is increasing awareness. An example of an ad might be an enterprise promoting that it is number one in providing top quality lawn mowers. Ads also help promote your product or service and branding for your enterprise. Major advice regarding advertising is to very clear about its objective, who is the audience and how will you measure its effectiveness.

2. DIRECT MAIL OR EMAIL CAMPAIGNS

The primary purpose of mailings, direct or email is to generate leads, via some form of an offer or call to action. An example of a direct mail might be a message that addresses the need for additional revenues and implementing a marketing program that will result in additional revenues. Mailings can also be used for promoting any major communication messages. Like advertising, first make sure you know your objective and have a targeted audience and how you will measure the campaign. Word of caution, mailings does not usually replace the sales force (I am addressing business to business markets). But as stated, they provide leads or names of potential customers. The biggest mistakes most companies make are; the offer does not line up with the targeted audience, the offer is not compelling and a lack of a call to action. If you do not address these issues you are only "clicks" away from losing your potential customer.

3. SOCIAL MEDIA

Social Media's main purpose is providing "information" about your products, services, and enterprise, and other people's opinions about all three. As Bob has discussed in a number of articles, social media is not only growing at a rapid rate, it is becoming a resource for consumer/buyers to research the potential product or service way before your enterprise is even aware of the buyer's interest. Key advice here is to at least monitor these activities, respond to viewer's comments, especially if there is bad publicity. Common mistakes are not engaging in one form of these activities, becoming defensive about social remarks and not gathering this information for future products or services.

4. TRADE SHOWS, SEMINARS, WEBINARS

These tools can address many issues, but usually their primary objectives are leads and a product/service introduction or announcement. An example might be "Visit our booth and see the industry's fastest switch". Two of the biggest mistakes are not getting the leads out to the field in a timely manner and having a very strong message that is easy to understand. Exhibits or trade shows are hybrid forms of promotion between business-to-business advertising and personal selling. Trade shows provide opportunities for face-to-face contact with prospects, enable new companies to create a viable customer base in a short period of time, and allow small and midsize companies that may not be visited on a regular basis by salespeople to become familiar with suppliers and vendors. Because many trade shows generate media attention, they have also become popular venues for introducing new products and providing a stage for executives to gain visibility.

5. NEWSLETTERS, CATALOGS

Primary use is for conveying information, be it some form of an update or similar to the trade show, an announcement of a new product or service. Key for success for these is attention getting and true value proposition.

TRADE FAIR AS A MARKETING COMMUNICATION TOOLS

Throughout the ages, trade fairs have been recognized as one of the most efficient and powerful tools for effectively doing business. As a face-to-face meeting point, fairs and exhibitions are basically a target opportunity for achieving your trade objectives. They are a cost-effective means to reach your market audience - in one time and in one place.

Among the key advantages of tradeshow participation is:

1. CUSTOMER CONTACT

Tradeshows provide excellent venues for initiating contacts with new customers and developing new trade leads. Equally important they enable you to maintain and renew contacts with valued clients.

2. PRODUCT AND SERVICE LAUNCH PLATFORMS

Live presentations and Demonstrations of your products and services speak for themselves, accelerating the selling process and generating new sales.

3. MARKETING COMMUNICATIONS

Trade fairs focus media attention on your Company and products. Public relations efforts can be focused to raise the profile of your company image and brands. "Marketing communications are the means by which firms attempt to inform, persuade, and remind consumers - directly or indirectly - about the products and brands that they sell." Personal and no personal communication channels can be used for marketing communications. Within both of them there are many sub channels.

REVIEW OF LITERATURE

Ramasamy et al. (2005) reported that, the buying behaviour is vastly influenced by awareness and attitude towards the product. Commercial advertisements over television was said to be the most important source of information, followed by displays in retail outlets. Consumers do build opinion about a brand on the basis of which various product features play an important role in decision making process. A large number of respondents laid emphasis on quality and felt that price is an important factor while the others attached importance to image of manufacturer.

Kerin and Cron (1987) used an exploratory factor analytical approach and revealed that the seven trade show functions they identified represented two underlying dimensions corresponding to selling and non-selling roles of trade shows.

Dekimpe et al. (1997), Gopalakrishna and Lilien (1995) and Williams et al. (1993) included observational indicators in their performance measures. Seringhaus and Rosson (1998) included eleven different performance measures in their study, both composite measures and single observational indicators. The studies claim their measures are indicators of performance, but fail to legitimise those claims with a clear definition of the domain being measured or to provide evidence of validity. Consequently, models are developed and tested at the observational or measurement level rather than the theoretical level (i.e., frame the hypotheses at the observational level) and correspondence between the theory and observation is not demonstrated. The trade show literature therefore lacks a comprehensive understanding of the trade show performance construct as well as scales with adequate evidence of validity.

Looking to the limited previous studies available in the context of rural marketing in India, very specific studies on trade fair have been found. So it is really imperative to study the overall perception of rural consumers towards trade fair.

RESEARCH METHODOLOGY

The present study attempt to study the overall perception and buying practices of rural consumers. Primary data have been collected from the rural consumers. Following are basic objectives of the study.

1. To identify the reasons behinds visiting trade fair by rural consumers
2. To study the buying practices with respect to trade fair among rural consumers.
3. To know the overall perception of rural consumers about trade fair

Population of the study involves the total number of consumers who live in rural areas of Anand district rural. Primary data have been collected from 100 respondents from four villages of Anand district i.e. Mogri, Gana, Sarsa, Jitodiya. From each village 25 respondents have been selected purposively. Structure questionnaire was used with questions that are relevant and helpful to extract the opinions of customers about their perception towards trade fair. A questionnaire includes close ended questions with preset response category.

FINDINGS OF THE STUDY

- Majority of the rural consumer visited industrial fair, few of them visited craft fair and very few of them visited education fair and IT fair.
- More than fifty percent of the rural consumer visited trade fair to entertain themselves. The second preferred reason behind visiting fair was buying. The third reason to visit the trade fair depicted by rural consumers was getting information of products. So, though rural consumers visit trade for primarily to get entertainment, they also looking it as place of buying and getting information regarding products they wanted to buy.
- Eighty nine percent of the respondents said that they purchased one or other products from trade fair they visited. So it can be noted that though they went for entertainment at trade fair they also buy something from trade fair.
- Most of the rural consumer bought food products, kitchenware, and crockery items. Some of them also bought furniture, electronic products, footwear and clothes from trade fair. So it can be noted that mostly female oriented products are sold more from trade fair.
- Advertisement and word of mouth from friends were major two sources by which rural consumers persuaded to visit trade fair.
- Half of the respondents (50%) did spend more than 2 hours in trade fair. 39 percent of them did spend 1hour to 2 hours and rest (11%) did spend less than 1 hour.
- Most of the respondents (41.6%) did spend Rs. 100 to Rs.500 in trade fair and 28.1 percent did spend less than Rs.100. While respondents those who did spend Rs.500 to Rs.1000 were 20.2 percent and half of it spend more than Rs 1000 in trade fair.
- Mix response is found for the statement that there are schemes available in trade fair as 33 percent consumers just agreed and 14 percent consumers disagreed for this statement. Most of the consumers agreed that they get practical information about products and services from trade fair. But at the same time very less consumers perceived trade fair as a place for buying some products and services.
- Male consumer more positively perceived trade fair as essential tools of marketing, availability of schemes and place for buying something as in case of only these three statement female consumers significantly different in their views from male.
- Consumer of higher age more positively perceived trade fair as sources of information with availability of products and information as compared to young consumers. So young consumers do not perceived trade fair as source of information, buying and promotion schemes compared to old age consumers.
- There is no significant difference among the consumers of different educational based groups regarding their perception towards trade fair.

MARKETING IMPLICATION OF THE STUDY

As the main purpose of trade fair is to demonstrate the products and disseminate the maximum amount of information to consumers. In order to woo more number of rural consumers towards the trade fair, marketers should focus more on young consumers and female consumers. It is very important to first select the target rural consumers and conceptualize the position of trade fair position. As young consumers are not more positive about the trade fair as sources information, product availability and offering promotion schemes on other hand female consumers more positively perceived trade fair as source of information and place to buy products with promotional schemes. Trade fair not only provide platform to disseminate information but it also help to generate the sales revenue and opportunity to understand the need of consumers. So marketers should organize more number of customize trade fair especially customize for rural consumers by focusing on certain products categories and target consumers.

TABLE 1: FREQUENCY OF VISITING TRADE FAIR BY RURAL CONSUMERS

Frequency of visiting trade fair	Frequency	Percent
One time	47	47.0
Two times	37	37.0
Three times	12	12.0
More than three times	4	4.0
Total	100	100.0

TABLE 2: TYPE OF TRADE FAIR VISITED BY RURAL CONSUMER

Response	Frequency	Percent
	1	1.0
Bitra Fair	1	1.0
Craft	23	23.0
Education	1	1.0
Foodfair	2	2.0
IT	5	5.0
Photofair	1	1.0
Vidhyog	66	66.0
Total	100	100.0

TABLE 3: REASONS FOR VISITING TRADE FAIR (FREQUENCY (%) OF RANK)

Rank	Entertainment	Buying	Getting information of product	Know new Project	Making Business tie ups	For business relations	Getting better knowledge about the product
1	50.0	18.0	17.0	4.0	2.0	2.0	7.0
2	13.0	30.0	17.0	22.0	3.0	2.0	12.0
3	9.0	18.0	30.0	15.0	8.0	7.0	14.0
4	8.0	18.0	14.0	21.0	13.0	10.0	18.0
5	10.0	7.0	16.0	20.0	12.0	19.0	16.0
6	2.0	7.0	4.0	14.0	34.0	17.0	21.0
7	8.0	2.0	2.0	4.0	28.0	43.0	12.0
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0

TABLE 4: BUYING PRACTICES FROM TRADE FAIR

Response	Frequency	Percent
Yes	89	89.0
No	11	11.0
Total	100	100.0

TABLE 5: MOTIVATING FACTORS TO VISIT YOU AT TRADE FAIR

Factors	Frequency	Percent
Friends	40	40.0
Advertisement	43	43.0
Internet	13	13.0
If other than specify	4	4.0
Total	100	100.0

TABLE 6: RESPONSE FOR VISITING TRADE FAIR WITH WHOM

Response	Frequency	Percent
Friends	61	61.0
Spouse	11	11.0
Neighbor	27	27.0
Others	1	1.0
Total	100	100.0

TABLE 7: TIME SPEND BY RURAL CONSUMER IN TRADE FAIR

Time spend	Frequency	Percent
Less than 1 hour	11	11.0
1 hour to 2 hours	39	39.0
2 hours to 5 hours	48	48.0
More than 5 hours	2	2.0
Total	100	100.0

TABLE 8: MONEY SPEND BY RURAL CONSUMER IN TRADE FAIR

Money spend	Frequency	Percent
Less than Rs. 100	25	25.0
Rs. 100 to Rs. 500	37	37.0
Rs. 500 to Rs. 1000	18	18.0
More than Rs. 1000	9	9.0
Total	89	89.0
No response	11	11.0
Total	100	100.0

TABLE 9.1: PERCEPTION OF RURAL CONSUMER TOWARDS TRADE FAIR

Statements	Strongly Agreed	Agreed (%)	Neutral (%)	Disagreed (%)	Strongly Disagreed
I believe that products at trade fair is same as available in market	19.0	46.0	33.0	2.0	-
I get full information about products and services from trade fair	39.0	50.0	7.0	4.0	-
I believe it makes consumer aware about products / services	31.0	43.0	19.0	7.0	-
I believe that there are schemes available in trade fair on same products and services	20.0	33.0	31.0	14.0	2.0
I believe trade fair should organize for consumer	25.0	59.0	14.0	2.0	-
I believe consumer spent more money in trade fair	15.0	29.0	26.0	22.0	8.0
I believe it is one of the essential tools of marketing	38.0	45.0	16.0	1.0	-
I get practical information about products /services from trade fair	48.0	36.0	8.0	8.0	-

TABLE 9.2: GENDER WISE MEAN AND STANDARD DEVIATION OF CONSUMER PERCEPTION

Statements		N	Mean	Std. Deviation
I believe that products at trade fair is same as available in market	Male	57	3.95	.789
	Female	43	3.65	.686
	Total	100	3.82	.757
I get full information about products and services from trade fair.	Male	57	4.28	.774
	Female	43	4.19	.732
	Total	100	4.24	.754
I believe it makes consumer aware about products / services	Male	57	4.07	.799
	Female	43	3.86	.990
	Total	100	3.98	.887
I believe that there are schemes available in trade fair on same products and services.	Male	57	3.95	.915
	Female	43	3.02	.938
	Total	100	3.55	1.029
I believe trade fair should organize for consumer.	Male	57	4.05	.789
	Female	43	4.09	.526
	Total	100	4.07	.685
I believe consumer spent more money in trade fair.	Male	57	3.56	1.225
	Female	43	2.74	.954
	Total	100	3.21	1.183
I believe it is one of the essential tools of marketing.	Male	57	4.39	.726
	Female	43	3.95	.688
	Total	100	4.20	.739
I get practical information about products /services from trade fair.	Male	57	4.25	.931
	Female	43	4.23	.895
	Total	100	4.24	.911

TABLE: 10 GENDER WISE ANOVA OF CONSUMER PERCEPTION TOWARDS TRADE FAIR

Statements		Sum of Squares	df	Mean Square	F	Sig.
I believe that products at trade fair is same as available in market	Between Groups	2.150	1	2.150	3.859	.052
	Within Groups	54.610	98	.557		
	Total	56.760	99			
I get full information about products and services from trade fair	Between Groups	.220	1	.220	.384	.537
	Within Groups	56.020	98	.572		
	Total	56.240	99			
I believe it makes consumer aware about products / services.	Between Groups	1.078	1	1.078	1.374	.244
	Within Groups	76.882	98	.785		
	Total	77.960	99			
I believe that there are schemes available in trade fair on same products and services.	Between Groups	20.931	1	20.931	24.472	.000
	Within Groups	83.819	98	.855		
	Total	104.750	99			
I believe trade fair should organize for consumer.	Between Groups	.040	1	.040	.084	.772
	Within Groups	46.470	98	.474		
	Total	46.510	99			
I believe consumer spent more money in trade fair.	Between Groups	16.369	1	16.369	13.125	.000
	Within Groups	122.221	98	1.247		
	Total	138.590	99			
I believe it is one of the essential tools of marketing.	Between Groups	4.584	1	4.584	9.091	.003
	Within Groups	49.416	98	.504		
	Total	54.000	99			
I get practical information about products /services from trade fair.	Between Groups	.004	1	.004	.005	.944
	Within Groups	82.236	98	.839		
	Total	82.240	99			

TABLE 11: AGE WISE MEAN AND STANDARD DEVIATION OF CONSUMER PERCEPTION

Statements		N	Mean	Std. Dev.
I believe that products at trade fair is same as available in market	18 to 24 years	48	3.81	.816
	24 to 30 years	19	4.26	.653
	30 to 50 years	31	3.52	.570
	More than 50 years	2	4.50	.707
	Total	100	3.82	.757
I get full information about products and services from trade fair.	18 to 24 years	48	4.17	.859
	24 to 30 years	19	4.53	.612
	30 to 50 years	31	4.13	.619
	More than 50 years	2	5.00	.000
	Total	100	4.24	.754
I believe it makes consumer aware about products / services.	18 to 24 years	48	4.04	.824
	24 to 30 years	19	3.89	.937
	30 to 50 years	31	3.90	.978
	More than 50 years	2	4.50	.707
	Total	100	3.98	.887
I believe that there are schemes available in trade fair on same products and services.	18 to 24 years	48	3.52	1.052
	24 to 30 years	19	4.05	.848
	30 to 50 years	31	3.23	.990
	More than 50 years	2	4.50	.707
	Total	100	3.55	1.029
I believe trade fair should organize for consumer.	18 to 24 years	48	4.04	.713
	24 to 30 years	19	4.16	.602
	30 to 50 years	31	4.03	.706
	More than 50 years	2	4.50	.707
	Total	100	4.07	.685
I believe consumer spent more money in trade fair.	18 to 24 years	48	3.29	1.304
	24 to 30 years	19	3.63	.895
	30 to 50 years	31	2.81	1.078
	More than 50 years	2	3.50	.707
	Total	100	3.21	1.183
I believe it is one of the essential tools of marketing.	18 to 24 years	48	4.25	.812
	24 to 30 years	19	4.26	.653
	30 to 50 years	31	4.03	.657
	More than 50 years	2	5.00	.000
	Total	100	4.20	.739
I get practical information about products /services from trade fair.	18 to 24 years	48	3.96	1.010
	24 to 30 years	19	4.42	.838
	30 to 50 years	31	4.55	.675
	More than 50 years	2	4.50	.707
	Total	100	4.24	.911

TABLE 12: AGE WISE ANOVA OF CONSUMER PERCEPTION TOWARDS TRADE FAIR

Statements		Sum of Squares	df	Mean Square	F	Sig.
I believe that products at trade fair is same as available in market	Between Groups	7.521	3	2.507	4.888	.003
	Within Groups	49.239	96	.513		
	Total	56.760	99			
I get full information about products and services from trade fair.	Between Groups	3.353	3	1.118	2.029	.115
	Within Groups	52.887	96	.551		
	Total	56.240	99			
I believe it makes consumer aware about products / services.	Between Groups	1.044	3	.348	.434	.729
	Within Groups	76.916	96	.801		
	Total	77.960	99			
I believe that there are schemes available in trade fair on same products and services.	Between Groups	9.904	3	3.301	3.342	.022
	Within Groups	94.846	96	.988		
	Total	104.750	99			
I believe trade fair should organize for consumer.	Between Groups	.599	3	.200	.418	.741
	Within Groups	45.911	96	.478		
	Total	46.510	99			
I believe consumer spent more money in trade fair.	Between Groups	8.914	3	2.971	2.200	.093
	Within Groups	129.676	96	1.351		
	Total	138.590	99			
I believe it is one of the essential tools of marketing.	Between Groups	2.348	3	.783	1.455	.232
	Within Groups	51.652	96	.538		
	Total	54.000	99			
I get practical information about products /services from trade fair.	Between Groups	7.514	3	2.505	3.218	.026
	Within Groups	74.726	96	.778		
	Total	82.240	99			

TABLE 13: EDUCATION WISE MEAN AND STANDARD DEVIATION OF CONSUMER PERCEPTION

Statements		N	Mean	Std. Deviation
I believe that products at trade fair is same as available in market	Primary	13	3.77	.599
	HSC	25	3.80	.707
	Graduate	48	3.85	.772
	Post Graduate	14	3.79	.975
	Total	100	3.82	.757
I get full information about products and services from trade fair.	Primary	13	4.23	.599
	HSC	25	4.12	.600
	Graduate	48	4.19	.891
	Post Graduate	14	4.64	.497
	Total	100	4.24	.754
I believe it makes consumer aware about products / services.	Primary	13	3.85	.899
	HSC	25	4.00	.913
	Graduate	48	4.00	.923
	Post Graduate	14	4.00	.784
	Total	100	3.98	.887
I believe that there are schemes available in trade fair on same products and services.	Primary	13	3.54	.877
	HSC	25	3.48	1.085
	Graduate	48	3.56	1.050
	Post Graduate	14	3.64	1.082
	Total	100	3.55	1.029
I believe trade fair should organize for consumer.	Primary	13	3.92	.494
	HSC	25	4.04	.611
	Graduate	48	4.04	.771
	Post Graduate	14	4.36	.633
	Total	100	4.07	.685
I believe consumer spent more money in trade fair.	Primary	13	2.92	.862
	HSC	25	3.32	1.145
	Graduate	48	3.31	1.240
	Post Graduate	14	2.93	1.328
	Total	100	3.21	1.183
I believe it is one of the essential tools of marketing.	Primary	13	4.15	.555
	HSC	25	4.04	.735
	Graduate	48	4.33	.781
	Post Graduate	14	4.07	.730
	Total	100	4.20	.739
I get practical information about products /services from trade fair.	Primary	13	4.46	.877
	HSC	25	4.36	.569
	Graduate	48	4.06	1.060
	Post Graduate	14	4.43	.852
	Total	100	4.24	.911

TABLE 14: EDUCATION WISE ANOVA OF CONSUMER PERCEPTION TOWARDS TRADE FAIR

Statements		Sum of Squares	df	Mean Square	F	Sig.
I believe that products at trade fair is same as available in market	Between Groups	.116	3	.039	.066	.978
	Within Groups	56.644	96	.590		
	Total	56.760	99			
I get full information about products and services from trade fair.	Between Groups	2.766	3	.922	1.655	.182
	Within Groups	53.474	96	.557		
	Total	56.240	99			
I believe it makes consumer aware about products / services.	Between Groups	.268	3	.089	.110	.954
	Within Groups	77.692	96	.809		
	Total	77.960	99			
I believe that there are schemes available in trade fair on same products and services.	Between Groups	.252	3	.084	.077	.972
	Within Groups	104.498	96	1.089		
	Total	104.750	99			
I believe trade fair should organize for consumer.	Between Groups	1.496	3	.499	1.063	.368
	Within Groups	45.014	96	.469		
	Total	46.510	99			
I believe consumer spent more money in trade fair.	Between Groups	2.986	3	.995	.705	.552
	Within Groups	135.604	96	1.413		
	Total	138.590	99			
I believe it is one of the essential tools of marketing.	Between Groups	1.752	3	.584	1.073	.364
	Within Groups	52.248	96	.544		
	Total	54.000	99			
I get practical information about products /services from trade fair.	Between Groups	3.008	3	1.003	1.215	.309
	Within Groups	79.232	96	.825		
	Total	82.240	99			

REFERENCES

- Balaram Dogra, Karminder Ghuman "Rural Marketing Concept and Practices." Tata McGraw, Hill Education Private Limited, New Delhi, Chapter 1, page no-02.
- Clow, Kenneth E & Donald Baack. "Integrated Advertising Promotion and Marketing Communications", 3rd Edition, Upper Saddle River, 2007(6-7).
- Dekimpe, Marnik G., Pierre François, Srinath Gopalakrishna, Gary L. Lilien, and Christophe Van den Bulte. 1997. "Generalizing About Trade Show Effectiveness: A Cross-National Comparison." *Journal of Marketing* 61 (October): 55-64.
- Kerin, Roger A. and William L. Cron. 1987. "Assessing Trade Show Functions and Performance: An Exploratory Study." *Journal of Marketing* 51 (July): 87-94.
- Seringhaus, F.H. Rolf and Philip J. Rosson. 1998. "Management and Performance of International Trade Fair Exhibitors: Government Stands vs Independent Stands." *International Marketing Review* 15 (No. 5): 394-412.
- Singh, B. K. and Srivastava, S. (2008), "Consumer Decision Making-An Empirical Study", *Marketing Innovations for Reaching Consumers*, Wisdom Publications, 19-29.
- Williams, Jerome D., Srinath Gopalakrishna and Jonathan M. Cox. 1993. "Trade Show Guidelines for Smaller Firms," *Industrial Marketing Management* 22: 265-275.
- http://en.wikipedia.org/wiki/Marketing_communications
- <http://firealarmmarketing.com/2010/06/15/5-marketing-communication-tools/>
- <http://knol.google.com/k/marketing-communication-channels-and-promotion>
- <http://www.agd-exhibitions.net/whyexhibitions.html#1>
- <http://www.freepatentsonline.com/article/Indian-Journal-Economics-Business/225073249.html>

BUYING DECISIONS OF RURAL CONSUMERS WITH REFERENCE TO FAST MOVING CONSUMER GOODS

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ABSTRACT

The rural India offers a tremendous market potential. A mere one per cent increase in India's rural income translates to a mind-boggling Rs 10,000 crore of buying power. Nearly two-thirds of all middle-income households in the country are in rural India. And close to half of India's buying potential lies in its villages. Thus, for the country marketers, small and big, rural reach is on the rise and is fast becoming their most important route to growth. Realizing this, Corporate India is now investing a sizeable chunk of its marketing budget to target the rural consumers. Rural India accounts for more than 40 per cent consumption in major FMCG categories such as personal care, fabric care and hot beverages. There is also difference in the way thinking consumers. The rural consumer has fairly simple thinking as compared to the urban counterpart

KEYWORDS

Buying Decisions, Rural Consumers, Rural Market, Decision-making, Fast Moving Consumer Goods.

INTRODUCTION

In India, ever since independence, because of some obvious reasons, marketing acquired a largely urban bias. Hence, there was no attempt on the part of marketers to know the rural consumer and satisfy their needs. The indifferent attitude also due to the assumption that the rural people were poor and had no purchasing power to buy expensive branded products. Besides, such lack of transportation and communication links and limited reach of mass media were also responsible for neglect of the rural consumer by the business firms.

The green revolution in the seventies provided a much-needed boost to agriculture-based rural economy in the country. This made India as a self-sufficient economy in food production and also contributed towards horticulture gained momentum to supplement the land owner's income from crop farming. Infrastructural facilities in the forms of road links, electricity and communication networks also improved largely during the seventies and eighties. These positive developments led many firms to take interest in the rural markets and extend their penetration and reach to smaller towns and villages.

FAST MOVING CONSUMER GOODS (FMCG)

FMCG's growth story started following the deregulation of Indian economy in early 1990s which saw dismantling of the 'license raj', resulting in a spurt in new companies and entry of a number of foreign brands. With relatively lesser capital and technological requirements, a number of new brands emerged domestically as well while the relaxed foreign direct investment (FDI) conditions led to induction of many global players in the segment. Both these factors resulted in leading to rapid development of the FMCG market in India. Riding on a rapidly growing economy, increasing per-capita incomes, and rising trend of urbanization, the FMCG market in India is expected to further expand to Rs 1,80,000 crore by 2015.

Despite the strong presence of multinational company players, the unorganized sector has a significant presence in this industry. Availability of key raw materials, cheaper labour costs and presence across the entire value chain has provided Indian companies with a key competitive advantage in the twenty-first century. In most categories, the unorganized sector is almost as big if not bigger as the organized sector. Unorganized players offer higher margins to stockiest in order to gain market share.

At present, urban India accounts for 66 per cent of total FMCG consumption, with rural India accounting for the remaining 34 per cent. However, rural India accounts for more than 40 per cent consumption in major FMCG categories such as personal care, fabric care and hot beverages. In urban areas, home and personal care category, including skin care, household care and feminine hygiene will keep growing at relatively attractive rates. Table 1 shows growth of consumption in all India rural and all India Urban.

TABLE – 1: GROWTH OF FMCG IN RURAL AND URBAN INDIA (Figures in %)

Categories	All India Rural				All India Urban			
	Volume Growth		Value Growth		Volume Growth		Value Growth	
	2010 over 2009	2011 over 2010	2010 over 2009	2011 over 2010	2010 over 2009	2011 over 2010	2010 over 2009	2011 over 2010
Personal Care	3	4	8	9	4	3	10	10
Household Care	10	5	8	13	9	3	9	6
Food and Beverages	-4	12	-2	12	1	4	2	6

Source: Samidha Sharma. "Rural Consumption Drives FMCG Growth". The Times of India, Madurai Edition, January 13, 2012, p.18.

From Table 1 it is observed that the 'food and beverages' market witnessed a hectic growth in volume as well as in value in rural India during the year 2011. Further, the table reveals that there is also growth in value in 'household care' segment in rural India during the year but the growth in volume is decreased. From this it is concluded that the main reason for the drives in FMCG growth is rural consumption.

HOW CONSUMERS MAKE THEIR BUYING DECISIONS?

In today's competitive environment, marketers are faced with informed and highly complex consumers. The consumer is becoming more powerful and difficult to predict in their everyday purchase decisions. This has forced marketing to pay attention to specific research techniques aiding to the success of the performance of the organization. An ongoing need for information and examining buying behaviour is very important to the success of an organization.

Branding and Consumer Behaviour: An impulse trigger formed by well informed marketers allows consumers to quickly refer to their memory and make the purchase decision. This behaviour comes almost naturally in our everyday purchases due to certain set of rules predetermined in the consumer mindset. This occurs when a brand has created strong brand resonance amongst its target niche. The Consumer Based Brand Equity (CBBE) model from Strategic Brand Management by Keller suggests that for a brand to reach the Brand Loyalty stage it has to at least have some salience and points of parity to be able to compete in the market place however, it is essential that a brand distinguishes itself from the competition by having unique points of difference to be able to perform above and beyond the various choices available to the consumer in today's competitive market. This model illustrates and stresses the important of being the preferred brand in the mindset of the consumer since branding has played the key role in an environment which is saturated with hundreds of choices from a product or service stand point.

Consumers actively want to associate themselves with certain brands and this makes a large influence on their buying behaviour. The impulse customers may not care about brands as much unless influenced by other variable however, generally a planned purchase decision can be significantly influenced by different brands. Marketers create a lifestyle with these brands which triggers the consumer buying behaviour.

In these instances the prediction of behaviour becomes more important since for marketers to really understand the consumer and achieve specific results the study of consumer behaviour becomes vital in every organization. This could be done in different forms of quantitative research such as surveys or qualitative research such as detailed interviews or focus groups. These research techniques allow marketers to understand consumer and compete in the market place.

Technology in Consumer Behaviour: Due to the significant advancements in technology the consumers have become savvier with various tools available for extensive research before making purchasing decisions. These tools allow consumers to go on the web and do price comparisons and quickly find the cheapest possible deal or in other situations find the best possible value compared to the cost. However, these tools have also allowed marketers to indulge with customers and allow an interactive space such as the web as a communication medium. Marketers can now use the ability of sound and visual elements to create mood and settings that fit best with their target audience. Marketers are able to allow consumers to interact and create a custom preference based on each individual customer. This allows both parties to make the most out of the buying decision and buying trigger. This allows a two way communication between the parties.

Memory and Time: Planned purchases are very similar to impulse purchasing since they both may recall memory and make a buying decision. However, planned purchases may have a longer research cycle before they are made while an impulse may take just a few minutes before the product or service is purchased. This may be due to the fact that sometimes planned purchases require a much higher investment than an impulse buy. A consumer will probably not spend the same time for purchasing a chocolate bar as purchasing a motor vehicle or a big screen television.

Income and Consumer Behaviour: Income plays a significant role in consumer buying behaviour. One could safely assume that an individual with higher disposable income may spend a lot more than an individual with a tighter budget. Generally consumers that have a specific budget may be more involved in larger scale research before buying. Consumers with higher disposable income may have less risk versus someone with a smaller income may have to compromise before making a buying decision. The impulse trigger from marketers may directly target a certain income group due to its positive response towards that particular product or service. Consumers actively refer to memory and research either the long term memory generally in large investments or short term memory for impulse purchases. A favorable image about a product or service may be the key decision factor for a purchase decision if it's not entirely a necessity.

PREVIOUS STUDIES

The previous studies related to buying decisions are given below:

Sundar Pandian, P. (2005) in this article he highlighted that the rural market for FMCG products is growing much faster than the urban counterpart. He also pointed out the factors which are significant for the growth in the rural market potential. Constraints faced by the rural consumers are given him. In addition, the 4A approach such as availability, affordability, acceptability, and awareness are indicated by him. **Sanjeev Sanyal (2005)**, Director of Global Markets Research, Deutsche Bank, pointed out that the Indian household consumption basket is changing with rising incomes. However, the changes do not necessarily follow the patterns seen in other Asian countries. **Muraliselvam, K. (2007)** listed out the product profile of Hindustan Lever Limited and its brand name. In this article he also pointed out the various strengths, weaknesses, opportunities and threats (SWOT) of this company. **Lee, J.A. and J.J. Kacen (2008)** in their study examines factors thought to influence consumers' planned and impulse purchase decisions including subjective culture (individualist or collectivist consumers) and the presence of another person at the time of purchase. Data was collected in four countries – the USA, Australia, Singapore, and Malaysia. The results indicate that overall, consumers are differentially influenced by others in planned and impulse purchase situations, even after controlling for price. **Amanor-Boadu, V. (2009)** explained that although the challenges facing rural retailers have been attributed to competition and decreasing population, this paper defines the problem from rural consumers' perspective. It argues that consumers select shopping location on its shopping value, determined by its attractiveness and accessibility. The results indicate that locations closest to the consumer's residence offer the highest shopping value for groceries and other low-order goods. They also show that increasing gasoline prices favor local retailers. Rural retailers may use these results to implement differentiating strategies that increase their attractiveness, accessibility, and consequently their competitiveness. **Pradeep Kashyap (2010)**, President and CEO of MART (a rural marketing consultancy) in his article "Seven Big Thoughts for Rural Markets" stated that the way rural markets are growing, it won't be long before they start contributing substantially to profits of companies. A proactive approach is the best available tool. The seven big thoughts are – rural boom, reverse innovation, new price performance paradigm, innovative rural distribution, dedicated rural teams, inclusive marketing and new opportunities. **Ergin, E.A. (2010)** carried out a case of Turkish consumers on compulsive buying. The main goals of this study were to explore whether gender was a significant predictor of compulsive buying behavior and to determine the effect of two particular pre-dispositional factors (anxiety, depression) on compulsive buying. The primary data for this study was obtained from a questionnaire that was administered in the capital city of Ankara. A convenience sample of three hundred and fourteen respondents participated in the study. The empirical findings showed that there are marked differences in compulsive buying tendencies of Turkish women and men, and factors such as age and anxiety are strongly related to compulsive buying behavior. **Devadas, A. and H.L. Manohar (2011)** stated that in India, a sizeable number of persons migrate

from rural to urban in search of job opportunities, work, education, marriage and personal reasons. From the marketing perspective, migration leads to new market opportunities. And so, marketers have to come out with appropriate strategies to attract and retain migrants. In India a limited research studies has been done in this regard. The results reveal that the migrated consumers consider the following dimensions when shopping in the urban environment: they are shopping conscious, enjoy urban shopping environment, price and quality conscious, and compare different shops when buying. They want shopping to be recreational, price worthy, perfect and buyer oriented. They are unhappy with poor shopping environment, if any. These dimensions describe the factors to which the migrant rural consumers give importance in the urban shopping environment. **Samidha Sharma (2012)** in a news reported that noodles, macaronis and soft-drinks made rapid in roads into rural markets, driven growth the fast moving consumer goods (FMCG) industry – 10 per cent by volume and 12 per cent by value in the first ten months of 2011. **Ramalingam, L.P. (2012)** in a research investigation pointed out the attitude of rural consumers. In his investigation he found the level of attitude of rural consumers towards ISI Mark on white goods and also measured with the help of socio-economic variables. He measured 22 variables and each variable has been measured with mean score and standard deviation scores.

PROBLEM OF THE STUDY

Fast Moving Consumer Goods constitute a large part of consumers' budget in all countries. India is no exception to this. In recent days consumer India is at the point where there is a multiplicative effect of income growth, aspiration to consume and a changed consumption friendly ideology / social discourse across the income board, especially in rural India. Because of these factors, the FMCG market in India is expected to further expand to Rs 1,80,000 crore by 2015. Hence, the buying behaviour of rural consumers has become a hot topic for discussion, because rural India in recent days is enthusiastically consuming everything from shampoo to motor cycles and this is being considered as one of the significant topics of market analysis. Purchase decisions in Indian homes have become a collective process with women and teenage children playing a major role on product and brand choices. Decision making has become a joint process in the family, women is the initiator, and / or product evaluator, man the financier and child as an influencer to buy the goods.

There has been always a vast difference between the urban and rural markets for a long time. The kind of brand choices that an urban consumer enjoys is different from the choices available to the rural counterparts. The rural consumer usually has 2 to 3 brands to choose from whereas the urban consumer has multiple choices. There is a difference also in the way of they think. The rural consumer has fairly simple thinking as compared to the urban counterpart. Hence, it is interesting to study the buying decisions of rural consumers on Fast Moving Consumer Goods. The present study is an attempt to analyze the Buying Decisions of Rural Consumers with reference to Fast Moving Consumer Goods. This study would provide an analysis on the following aspects:

1. What is the socio-economic status of rural consumers?
2. What are the general buying decisions of rural consumers?

The response to the above questions will help the new marketers to plan for entry in rural segment and also useful for the existing companies in launching new brands.

OBJECTIVES OF THE STUDY

The main objectives of the study are –

1. To analyze the socio-economic conditions of rural consumers and
2. To assess the buying decisions of the rural consumers.

METHODOLOGY AND SAMPLING

Both the secondary and primary data were used for the study. Secondary data were collected from books, journals and websites. Primary data were gathered from sample survey. The area of investigation is Madurai district. It consists of seven taluks. Of the seven taluks, only two taluks have been considered as purely rural. The other taluks have the characteristics of both urban and semi-urban. Since the main objective of the study is to analyze the buying decisions of rural consumers, the taluks having the rural characteristics i.e. Peraiyur and Vadipatti has been chosen for area of investigation. Survey regarding the buying decisions of rural consumers was carried out in these two rural taluks. The Peraiyur taluk comprising Sedapatti and T. Kallupatti panchayat unions have 75 villages. The Vadipatti taluk has 77 villages with two panchayat unions namely Alanganallur and Vadipatti. A sample of 150 consumers from each taluk comprising a total of 300 consumers (i.e. respondents) has been taken for survey. Convenience sampling method was adopted for sampling.

RESULTS AND DISCUSSION

ANALYSIS OF SOCIO-ECONOMIC CONDITIONS OF RURAL CONSUMERS

This section deals with the socio economic conditions of sample rural consumers on the basis of taluk. The sample respondents' profile, like gender, age, marital status, level of education, occupation, family monthly income, family type, and family size are analyzed in this section based on the primary data. Percentile analysis has been applied for this purpose.

TABLE – 2: SOCIO-ECONOMIC FACTOR-WISE SAMPLE RESPONDENTS

Socio-Economic Factors	No. of Respondents		Total
	Peraiyur Taluk	Vadipatti Taluk	
Gender			
Male	113 (75.3%)	106 (70.7%)	219 (73.0%)
Female	37 (24.7%)	44 (29.3%)	81 (27.0%)
Age			
18 to 30 years	30 (20.0%)	25 (16.7%)	55 (18.3%)
31 to 45 years	56 (37.3%)	73 (48.7%)	129 (43.0%)
46 to 60 years	53 (35.3%)	46 (30.7%)	99 (33.0%)
Above 60 years	11 (7.3%)	6 (4.0%)	17 (5.7%)
Marital Status			
Married	127 (84.7%)	118 (78.7%)	245 (81.7%)
Unmarried	23 (15.3%)	32 (21.3%)	55 (18.3%)
Educational Status			
Illiterate	21 (14.0%)	35 (23.3%)	56 (18.7%)
Primary	43 (28.7%)	41 (27.3%)	84 (28.0%)
Secondary	29 (19.3%)	32 (21.3%)	61 (20.0%)
Higher Secondary	25 (16.7%)	23 (15.3%)	48 (16.0%)
Graduate	28 (18.7%)	16 (10.7%)	44 (14.7%)
Post-Graduate	4 (2.7%)	3 (2.0%)	7 (2.3%)
Occupational Status			
Private Employee	48 (32.0%)	17 (11.3%)	65 (21.7%)
Government Employee	21 (14%)	8 (5.3%)	29 (9.7%)
Business	12 (8.0%)	18 (12.0%)	30 (10.0%)
Agriculturist	14 (9.3%)	15 (10.0%)	29 (9.7%)
Casual Workers	46 (30.7%)	74 (49.3%)	120 (40.0%)
Others	9 (6.0%)	18 (12.0%)	27 (9.0%)
Family Monthly Income			
Less than Rs.5,000	20 (13.3%)	16 (10.7%)	36 (12.0%)
Rs.5,000 to Rs.10,000	99 (66.0%)	91 (60.7%)	190 (63.3%)
Rs.10,000 to Rs.15,000	9 (6.0%)	37 (24.7%)	46 (15.3%)
More than Rs.15,000	22 (14.7%)	6 (4.0%)	28 (9.3%)
Type of Family			
Joint	91 (60.7%)	99 (66.0%)	190 (63.3%)
Nuclear	59 (39.3%)	51 (34.0%)	110 (36.7%)
Size of Family			
Up to 4 members	36 (24.0%)	22 (14.7%)	58 (19.3%)
Above 4 members	114 (76.0%)	128 (85.3%)	242 (80.7%)
Total No. of Respondents	150 (100.0%)	150 (100.0%)	300 (100.0%)

It is observed from Table 2 that in the gender category, male constitute 75.3 per cent from Peraiyur taluk and 70.7 per cent from Vadipatti taluk. Female in the study are 24.7 per cent and 29.3 per cent respectively.

The age-wise classification shows that in Peraiyur taluk 37.3 per cent of the respondents are in the age group of 31 to 45 years, about 35 per cent are in the age group of 46 to 60 years, and 20 per cent are in '18 to 30 years' category. Only 7.3 per cent are in the age group of 'above 60 years'. In Vadipatti taluk 48.7 per cent of the respondents are in the age group of 31 to 45 years, 30.7 per cent are in the age group of 46 to 60 years, 16.7 per cent are in '18 to 30 years' group and the remaining 4.0 per cent are in the age group of 'above 60 years'. The general observation is that the maximum number of respondents falls in the age group of 31 to 45 with the sample size of 129 respondents constituting 43 per cent and 99 respondents (33%) fall in the age group of 46 to 60 are the major decision makers in this study.

According to marital status, 84.7 per cent of Peraiyur and 78.7 per cent of Vadipatti taluk respondents are married one. While comparing these two taluks, Peraiyur taluk consists of more married respondents.

Regarding education-wise, out of 300 sample respondents, a majority of 28 per cent education is 'primary level', following this 20 per cent fall in 'secondary level and 16 per cent come under 'higher secondary level'. The 'graduate' and 'post-graduate' respondents accounts only for 14.7 per cent and 2.3 per cent respectively. It is noted from the table that 18.7 per cent of respondents are illiterate. There is no major change in the educational status of respondents in taluk-wise except in 'graduate' level. In Peraiyur, 'graduate' accounts for 18.7 per cent whereas it is 10.7 per cent in Vadipatti taluk. Illiterates are more in Vadipatti taluk (23.3%) than in Peraiyur taluk (14%). From the above analysis it is concluded that school educated respondents are more than the college educated.

It is noted from Table 2 that in Peraiyur taluk 30 per cent of respondents are working as a private employee, following this casual workers (30.7%), government employee (14%), agriculturist (9.3%), business (8%) and others (6%) come in order. It is some what different in Vadipatti taluk. In Vadipatti taluk, 49.3 per cent of respondents are casual workers. Following this, 12 per cent each come under 'business' and 'others' category of occupation. Private employee accounts for 11.3 per cent and 'agriculturist' for 10 per cent. Only a minimum of 5.3 per cent come under 'government employee' category. Collectively, 40 per cent are casual workers, 21.7 per cent are private employee, and 10 per cent are business people. The occupation category such as government, agriculturist and others accounted for 9.7 per cent, 9.7 per cent and 9.0 per cent respectively. From this it is understood that casual workers are more in rural areas.

In the study, the major portion of respondents, i.e. 63.3 per cent, fall in the income group of 'Rs.5,000 to Rs.10,000', following this, 15.3 per cent belong to 'Rs.10,000 to Rs.15,000' category, and 12 per cent of respondents were in the income group of 'less than Rs.5,000'. Less than 10 per cent of respondents fall in

'more than Rs.15,000' monthly income category. It also point out that most of the Peraiyur taluk respondents' family monthly income is between Rs.5,000 and Rs.10,000. About 66 per cent of Vadipatti taluk respondents fall in this category whereas the Vadipatti taluks accounts for about 60.7 per cent. In Peraiyur taluk, 6 per cent of respondents fall in 'Rs.10,000 to Rs.15,000' income category whereas it is 24.7 per cent in Vadipatti taluk. But it is reversed in 'more than Rs.15,000' income category in both the taluks.

It is understood that more than one-third of sample respondents' family come under 'nuclear type' both in taluk-wise category as well as in overall category of respondents. The study also shows that 80.7 per cent of respondents fall in 'above 4 members' category and 19.3 per cent fall under 'up to 4 members' category. The researcher comes to a conclusion that in the study area, the 'above 4 members' category dominate more.

GENERAL BUYING DECISIONS OF RURAL CONSUMERS

In this section, the buying decisions of rural consumers towards Fast Moving Consumer Goods (FMCGs) in general are analyzed. It clearly state about the purchase of the fast moving consumer goods, period of purchase, sources through which the goods are known by the rural consumers, decision made before buying and how decisions are taken. Primary data have been extensively used and percentile and chi-square test have been adopted for analysis. All the sample respondents in the study unit, i.e. cent per cent, are buying the fast moving consumer goods.

PERIOD OF BUYING FAST MOVING CONSUMER GOODS

The period of buying may differ from one rural consumer to another. Hence, the period of buying of fast moving consumer goods has been analyzed and the result is presented in the Table 3

TABLE – 3: PERIOD OF BUYING FAST MOVING CONSUMER GOODS

Period of Buying	No. of Sample Respondents		Total
	Peraiyur Taluk	Vadipatti Taluk	
Below 3 years	23 (15.3%)	23 (15.3%)	46 (15.3%)
3 to 6 years	55 (36.7%)	52 (34.7%)	107 (35.7%)
6 to 9 years	62 (41.3%)	48 (32.0%)	110 (36.7%)
Above 9 years	10 (6.7%)	27 (18.0%)	37 (12.3%)
Total	150 (100.0%)	150 (100.0%)	300 (100.0%)

It is inferred from the Table 3 that the majority of respondents, say 36.7 per cent, are buying the fast moving consumer goods for a period of '6 to 9 years', 35.7 per cent between 3 and 6 years, 15.3 per cent for 'below 3 years' and the rest 12.3 per cent for 'more than 9 years'.

Regarding taluk-wise, 41.3 per cent of Peraiyur taluk respondents buy the fast moving consumer goods for a period of 6 to 9 years whereas it is 32 per cent in Vadipatti taluk. Most of the Vadipatti taluk respondents buy the fast moving consumer goods in between 3 and 6 years. Moreover, a huge percentage of Vadipatti taluk respondents (18%) are buying fast moving consumer goods for a longer period i.e. 'above 9 years'.

The researcher has made an attempt to ascertain whether there is any relationship exists between the period of buying of fast moving consumer goods and the taluk-wise sample respondents. Chi-square test has been applied to test the hypothesis. The following formula has been used for computing the chi-square value.

$$\text{Chi-square} = \sum \frac{(O - E)^2}{E}$$

Where,

O = Observed Frequency; E = Expected Frequency

Null Hypothesis (H₀): "There is no significant relationship between the period of buying of fast moving consumer goods and the taluk-wise sample respondents".

Alternative Hypothesis (H₁): "There is significant relationship between the period of buying of fast moving consumer goods and the taluk-wise sample respondents".

The calculated chi-square test reveals the following results:

Computed Chi-square Value : **9.68**

Table Value at 5% Level of Significance : **7.81**

Degree of Freedom : **3**

Hypothesis Result : **Rejected**

The computed chi-square value (9.677) is more than the table value (7.815) at 5 per cent level of significance. Hence, the null hypothesis is rejected. It means alternative hypothesis is accepted. So, it is concluded that "there is significant relationship between the period of buying of fast moving consumer goods and the taluk-wise sample respondents".

Moreover, the researcher has made an attempt to ascertain whether there is any significant relationship between the socio-economic factors and the period of buying of fast moving consumer goods and it is tested by using chi-square analysis.

SOCIO-ECONOMIC FACTORS AND THE PERIOD OF BUYING

In order to find out whether there is any association between the socio-economic factors and the period of buying of fast moving consumer goods, chi-square test has been applied. The socio-economic factors such as gender, age, marital status, educational status, family monthly income and family type have been taken for analysis. Taluk-wise analysis has been attempted and results are furnished in Tables. The chi-square analysis for Peraiyur taluk is given in Table 4 and for Table 5 shows the chi-square analysis of Vadipatti taluk.

The hypotheses framed for this purpose is given below:

Null Hypothesis: There is no association between the socio-economic factors of Peraiyur taluk consumers and the period of buying of fast moving consumer goods.

Alternative Hypothesis: There is no association between the socio-economic factors of Peraiyur taluk consumers and the period of buying of fast moving consumer goods.

TABLE – 4: SOCIO-ECONOMIC FACTORS AND THE PERIOD OF BUYING OF FAST MOVING CONSUMER GOODS – CHI-SQUARE ANALYSIS FOR PERAIYUR TALUK

Socio-Economic Factors	Computed Chi-square Value	Degree of Freedom	Result of Null Hypothesis
Gender	0.870	3	Accepted
Age	5.768	9	Accepted
Marital Status	1.324	3	Accepted
Educational Status	18.742	15	Accepted
Family Monthly Income	10.846	9	Accepted
Family Type	5.215	3	Accepted

Table 4 reveals the computed chi-square value for socio-economic factors. It is inferred that the computed chi-square value is less than five per cent critical value for the socio-economic factors, viz. gender, age, marital status, educational status, monthly income and family type. Hence, the null hypothesis is accepted. So, it is concluded that there is no association between the socio-economic factors of Peraiyur taluk consumers and the period of buying of fast moving consumer goods.

Table 5 exhibits the chi-square analysis in respect of Vadipatti taluk. The hypotheses framed are given below:

Null Hypothesis: There is no association between the socio-economic factors of Vadipatti taluk consumers and the period of buying of fast moving consumer goods.

Alternative Hypothesis: There is association between the socio-economic factors of Vadipatti taluk consumers and the period of buying of fast moving consumer goods.

TABLE – 5: SOCIO-ECONOMIC FACTORS AND THE PERIOD OF BUYING OF FAST MOVING CONSUMER GOODS – CHI-SQUARE ANALYSIS FOR VADIPATTITALUK

Socio-Economic Factors	Computed Chi-square Value	Degree of Freedom	Result of Null Hypothesis
Gender	2.176	3	Accepted
Age	21.696	9	Rejected
Marital Status	5.434	3	Accepted
Educational Status	23,385	15	Accepted
Family Monthly Income	5.362	9	Accepted
Family Type	1.803	3	Accepted

It is also understood from Table 5 that the calculated chi-square values are less than the table values except for the 'age' factor at five per cent level of significance. It means there is significant relationship exists between the age of Vadipatti taluk consumers and the period of buying of fast moving consumer goods. But in respect of other socio-economic factors such as gender, marital status, educational status, income and family type, there is no significant relationship exists between these factors and the period of buying.

KNOWLEDGE ABOUT FAST MOVING CONSUMER GOODS

Knowledge is necessary for buying each and every product. There are certain sources through which consumers can obtains knowledge. How the rural consumers get knowledge about the fast moving consumer goods has been attempted. The important source of knowledge may be family members, friends and relatives, neighbours, media, stores, agents and so on. Table 6 shows the source of knowledge for rural consumers.

TABLE – 6: SOURCE OF KNOWLEDGE FOR FAST MOVING CONSUMER GOODS

Source of Knowledge	Peraiyur Taluk		Vadipatti Taluk	
	No. of Respondents	Rank	No. of Respondents	Rank
Family Members	41	V	22	VI
Friends and Relatives	34	VI	44	IV
Neighbours	45	IV	37	V
Media	101	I	116	I
Shops / Stores	72	II	90	II
Salesmen / Agents	60	III	66	III

It is evident from Table 6 that the majority of consumers, both in Peraiyur and Vadipatti taluk, are obtained knowledge through the source 'media' for buying fast moving consumer goods. Hence, first rank has been placed to this source. Following this, the source 'shops/stores' secures the second place. The third place goes to the source 'salesmen/agents', through which the sample respondents have obtained knowledge. Regarding other source of knowledge, the ranks assigned are differed, i.e. the source 'neighbour' has been ranked as fourth by Peraiyur taluk respondents whereas it is ranked as fifth by the Vadipatti taluk respondents.

MAKING DECISIONS BEFORE BUYING FAST MOVING CONSUMER GOODS

An attempt is made by the researcher regarding decision making before buying fast moving consumer goods. In the sample survey, all the respondents are making decisions before buying the fast moving consumer goods. So, how decisions are carried by the sample respondents are attempted and the obtained opinions are presented in Table 7.

TABLE – 7: MODE OF DECISION MAKING

Mode	No. of Sample Respondents		Total
	Peraiyur Taluk	Vadipatti Taluk	
Solely	16 (10.7%)	15 (10.0%)	31 (10.3%)
Jointly	134 (89.3%)	135 (90.0%)	269 (89.7%)
Total	150 (100.0%)	150 (100.0%)	300 (100.0%)

It is evident from Table 7 that a vast majority of respondents, say 89.7 per cent, make decisions jointly before buying the fast moving consumer goods. But, 10.3 per cent make decisions solely. The overall analysis result is also reflected in each taluk.

Further, the researcher has applied chi-square test for identifying the relationship exists between the mode of decision making and the taluk-wise respondents. The computed chi-square value is 0.036 which is less than table value (i.e. 3.84) at five per cent level of significance. Hence, the researcher concluded that there is significant relationship exists between the mode of decision making and the taluk-wise respondents.

SOCIO-ECONOMIC FACTORS AND THE MODE OF DECISION MAKING

An attempt is also made to find out whether there is any association between the socio-economic factors and the mode of decision making. Chi-square test has been administered. The socio-economic factors such as gender, age, marital status, educational status, family monthly income and family type have been taken for analysis. The result of chi-square test is exhibited in Table 8

TABLE – 8: CHI-SQUARE ANALYSIS FOR SOCIO-ECONOMIC FACTORS AND THE MODE OF DECISION MAKING

Socio-Economic Factors	Peraiyur Taluk		Vadipatti Taluk	
	Computed Value	Result	Computed Value	Result
Gender	0.337	Accepted	0.129	Accepted
Age	1.800	Accepted	7.758	Accepted
Marital Status	1.138	Accepted	0.018	Accepted
Educational Status	7.501	Accepted	0.940	Accepted
Family Monthly Income	1.706	Accepted	1.952	Accepted
Family Type	2.148	Accepted	0.267	Accepted

From Table 8, it is understood that all the computed chi-square values are less than the table value at five per cent level of significance. Hence, it is presumed that "there is no significant relationship between the socio-economic factors and the mode of decision making".

FINDINGS

From the study, the following findings were found out:

1. The study constitutes around 25 per cent of female.
2. Respondents having the age group '31 to 45 years' dominate more in the study unit.
3. 48 per cent of respondents 'education is Primary and secondary level.
4. Casual workers account for 40 per cent in sample unit.
5. Around 63 per cent of family monthly income is between Rs.5,000 and rs.10,000.
6. The majority of family (80.7%) surveyed have more than four members.
7. Much variation is found in the period of buying the fast moving consumer goods in '6 to 9 years' and 'above 9 years' category.
8. The chi-square result shows that there is no association between the socio-economic factors of Peraiyur taluk and the period of buying of fast moving consumer goods. But in Vadipatti taluk, there is relationship between the age and period of buying.
9. It is found that the 'media' is the main source of knowledge for the rural consumers.
10. Joint decisions are carried out in decision making and there is no relationship exists between the socio-economic factors and the mode of decision making.

SUGGESTIONS

Based on the study, the following suggestions are offered for further improvement of FMCG market:

- The volume growth in all India rural witnessed in food and beverage products only. However, the household care products show a decline in volume both in rural as well as in urban India. In order to improve it, manufacturers should reduce price or offer free gifts to attract more consumers.
- Even though the rural people shifting to urban areas, there is no improvement in personal and household care products in all India urban. So, equal concentration should be provided by the manufacturers for rural and urban while marketing goods.

CONCLUSION

The Indian market has witnessed, tremendous social changes and trends, with women, to a great extent, being actively involved in the decision making process. Women, whether they are working or housewives have emerged as a potent for in the market place changing the way companies, design, position and sell their products. Although women may earn less than men, they are making buying decisions in their homes mostly.

REFERENCES

1. 4Ps Business and Marketing. Vol. V, Issue 3, Feb.12-25, 2010, pp.36-37.
2. Amanor-Boadu, V. "In Search of a Theory of Shopping Value: The Case of Rural Consumers". Review of Agricultural Economics. Vol. 31, Issue 3, Fall 2009, pp.589-603.
3. Devadas, A. and H.L. Manohar. "Shopping Behavior of Rural Consumer Migrated to Urban Area in the Indian Context - An Emerging Market". African Journal of Business Management. Vol. 5, Issue 6, March 18, 2011, pp.2276-2282.
4. Ergin, E.A. "Compulsive Buying Behavior Tendencies: The Case of Turkish Consumers". African Journal of Business Management. Vol. 4, Issue 3, March 2010, pp.333-338.
5. Keller, Kevin L. Strategic Brand Management. Prentice Hall, New Jersey, 2nd Edition, 2003, pp.76-77.
6. Lee, J.A. and J.J. Kacen. "Cultural influences on consumer satisfaction with impulse and planned purchase decisions". Journal of Business Research. Vol. 61, Issue, 3, March 2008, pp.265-272.
7. Muraliselvam, K. "Hindustan Lever Limited – A SWOT Analysis". Kisan World, Vol.34, No.12, Dec. 2007, pp.57-58.
8. Ramalingam, L.P. "Attitude of Rural Consumers towards ISI Mark on White Goods". Monthly Public Opinion Survey – The Indian Institute of Public Opinion. Vol. LVII, No.4, Issue 676, January 2012, pp.20-28.
9. Samidhs Sharma. "Rural Consumption drives FMCG Growth". The Times of India, January 13, 2012, p.18.
10. Sanjeev Sanyal. "Consumer Behaviour – Changing Profile". The Hindu Survey of Indian Industry 2005, pp.327-335.
11. Sundar Pandian, P. "Potential and Prospects of Indian Rural Market". Kisan World, Vol.32, No.5, May 2005, pp.31-32.

A STUDY OF BENEFICIARIES AVAILING CONSUMER LOAN IN NATIONALIZED BANKS

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ABSTRACT

Consumer Loan has been instrumental in raising the standard of living of the society. The consumer loan facility enables people to purchase in excess of their saving. Approaching to money lenders have become more expensive due to high interest rates and giving them securities. This study is aimed at analyzing the beneficiaries availing consumer loan in Nationalized banks. The present study is based on both primary and secondary data. The primary data is collected from field survey conducted in the Tuticorin district of Tamil Nadu.

KEYWORDS

consumer durables, consumer loans and personal loans.

INTRODUCTION

Commercial banks play an important role in overall economic development of a nation. It offers financial services related to deposits and advances to individual customers for personal consumption. Consumer finance has been acknowledged as a growth sector by bank. It has immense potential high profit margin and low default rate. With a liberal policy of RBI the percentage easily go up to four percent in one year (Rs 20,000 crores). The Reserve bank of India has come out with broad guidelines by framing fair practice code on lender liability to be implemented by all the bank to improve customer service irrespective of their domain status or area of loan specialized work. The attitude of customer is undergoing change whereby 70 percent of the customer prefers to buy good on credit finance through bank. During 2003-2004 Personal loan alone crossed Rs93, 416 crores in India of which Rs 6,256 crores were for consumer durables and Rs 87,170 crores for other retail loans. In order to reap more profit, the public sector bank need to compete with private sector bank especially in the consumer market. Consumer loans being the target market bankers should identify their needs and problems clearly so that they can frame their strategies well to succeed in the highly competitive environment. Consumer loan has been instrumental in raising the standard of living of society. Easily available loan is one of the reasons for the boom in Indian economy. The consumer loan facility enables people to purchase in excess of their own saving. Nowadays banks are providing loan for variety of purpose like loan for car, television, air condition, and furniture and so on. The advance is made up to 60 to 70 percent of the cost of the article to be purchased and in one chance linked to the salary of the borrower. The rate of interest charged may vary in different circumstances. For availing loan a borrower shall have to open a saving account or current account for the loan to be disbursed. Depending on the loan amount and repaying capacity, the loan amount is to be repaid within 36 months to 60 months which is extendable in specific cases. Approaching to money lender is has become more expensive due to high interest rates and giving securities. Taking loan from money lenders is not too safe and secure. Personal loan are repable in equal monthly installments that gives a hassle free service without the burden of huge amount. Personal loan is an unsecured loan and no collateral to secure the money. At present the bank are ready to give personal loan which can easily lure a customer. Bank are facilitating low income group like peon, driver, cleaner, watchman clerks by providing them consumer loan. Personal loans are available from Rs 20,000 to Rs 20 lakhs for any purpose depending on customers' requirement ranging from 12 months to 60 months with flexible repayment option.

CONCEPT OF CONSUMER OF LOAN

Consumer loan is a loan given for purchase of consumer durables like all wooden furniture, TV, Freezer, Car, Scooter, Personal computer, Cooking range and so on which are regarded as necessities of life today. Consumers of middle class who cannot afford for these durables can easily purchase them through bank loans and it improves the standard of living of the people.

Personal loans are sanctioned by banks to their customers to meet out their medical expenses, travel /tour expenses, income tax liability, expenses for family functions like marriage, thread ceremony, and other religious functions. The public bank, private bank and financial institutions use the term consumer loan and personal loan interchangeably. In the present study, the terms consumer loan as well as the personal loan have been used in the same meaning.

STATEMENT OF THE PROBLEM

In order to succeed in the present highly competitive market it is imperative that the banks should identify the right customer for consumer loans and frame suitable strategy for attracting and retaining them. Hence there arises a need to study on beneficiaries availing customer loan in nationalized bank.

OBJECTIVES OF THE STUDY

- To study the socio-economic conditions of the beneficiaries.
- To examine the sources through which customers come to know about consumer loans

- To examine reasons for selection of banks as consumer loan provider
- To study the problems faced by consumers in availing loan
- To offer suggestion based on the findings of the study for improving relationship of banks with customers.

METHODOLOGY

The study is intended to study the opinion of beneficiaries availing consumer loan in Nationalized Bank. The present study was carried out in urban area of Tuticorin district by selecting the customers of Canara bank and Bank of Baroda. A sample of 60 respondents was selected for gathering data and random sample method was taken. Both primary and secondary data were used for the study. Secondary data were collected from RBI reports, various journals and books. Primary data were collected using questionnaire. The purpose of analysis statistical and mathematical tools like percentage, scaling, ranking and t-test analysis using SPSS19.0 to have an insight into the responses collected.

HYPOTHESIS OF THE STUDY

Null Hypothesis-There exist no significant difference between male and female with regard to EMI, Amount of loan sanctioned, Processing time, Transparency in operation, Mode of repayment, Rate of interest, Processing charge and Hidden charge in availing consumer loan.

ANALYSIS AND DISCUSSIONS

Socio-economic profile of the beneficiaries, Sources of information, Problems in availing consumer loan. Opinion of the beneficiaries in availing consumer loan is discussed here.

SOCIO-ECONOMIC BACKGROUND OF THE BENEFICIARIES

The bank play predominant role in changing the socio – economic status of the people of the society. Every people of the society aspire to obtain good position and status with the help of loan availed by bank. Table (1) shows that 45 percent respondents are having the age group of 41-50 year, 71.7 percent respondents are married, 25 percent respondents belong to OC community, 61.7 percent respondents are male, about 36.7 percent of them are under graduate, Maximum respondents are employed in Government/Quasi Govt. (40%) and 40 percent of them are in the income group of above Rs.40000 and 36.7 percent of the beneficiaries are paying on 16% - 20% rate of interest on their borrowed amount.

SOURCES OF INFORMATION REGARDING LOAN

The customers who avail loan from banks come to know about the various schemes of consumer loan from different sources. The most important sources include Existing beneficiaries, TV/Internet, Personal contact, Bank employees, Friends/Relatives.

Table (2) indicates that out of 60 respondents 33.3 percent of the respondents have come to know their banks through Friends and relatives. 25 percent of them became aware through bank employees, 21.7 percent through existing beneficiaries, 11.7 percent of respondents know their banks through personal contact and 8.3 percent understand about the existence of the banks through the knowledge of TV/ internet.

PROBLEMS IN AVAILING LOAN

Problems encountered by the borrowers in availing consumer loan depend upon the behaviour of both bankers and borrowers. For the purpose of analysis customers were asked to rank the reasons by giving first rank for the most felt problem and the last rank for the least problem and Non parametric Test with K-Related samples was used to find out the mean rank. The lowest mean rank was given the first rank and the highest mean rank is given the last rank. The important problems faced by the beneficiaries is seen from Table (3) that the respondents have scored Guarantee certificate (Rank 1) followed Too much formalities (Rank 2) Intervention of intermediaries (Rank4) so on.

OPINION OF THE BENEFICIARIES IN AVAILING CONSUMER LOAN

The beneficiaries have different opinion regarding various parameters of consumer loan. The various parameters include EMI, Amount of loan sanctioned, Processing time, Transparency in operation, Mode of repayment, Rate of Interest, Processing charge and hidden charge. For the purpose of analysis, opinion of the respondents was analyzed in a five point scale such as Highly Satisfied, Satisfied, Moderate, Dissatisfied, Highly Dissatisfied and t-test was used.

Table (4) it is clear that the P values of EMI, Amount of loan sanctioned, Processing time, Transparency in operation, Mode of repayment, Rate of Interest, Processing charge and hidden charge are .227,.123,.460,.515,.257,.090,.286,.246 are not significant at 0.05 level of significance . Hence the null Hypothesis is accepted. This show that there is no significance difference between male and female opinion of availing consumer loan

TABLE – 1: DEMOGRAPHIC PROFILES OF THE RESPONDENTS

S. NO	Gender	No of Respondents	Percentage
1	Male	37	61.7
	Female	23	38.3
	Total	60	100
	Age	No of Respondents	Percentage
2	Below 30 Years	11	18.3
	31 – 40 Years	19	31.7
	41 – 50 Years	27	45.0
	Above 50 Years	3	5.0
	Total	60	100
3	Marital Status	No of Respondents	Percentage
	Married	43	71.7
	Unmarried	17	28.3
	Total	60	100
4	Community	No of Respondents	Percentage
	ST/SC	18	30.0
	MBC	8	13.3
	BC	19	31.7
	OC	15	25.0
	Total	60	100
5	Education Level	No of Respondents	Percentage
	No formal Education	5	8.3
	Higher Secondary Education	4	6.7
	Undergraduate	22	36.7
	Post – graduate	18	30.0
	Professional	11	18.3
	Total	60	100
6	Occupation	No of Respondents	Percentage
	Government/Quasi. Govt	24	40.0
	Private Sector	16	26.7
	Self employment/Own Business	13	21.7
	Professionals	5	8.3
	Agriculture	1	1.7
	Others (Please specify)	1	1.7
	Total	60	100
7	Income	No of Respondents	Percentage
	Below 10000	4	6.7
	10001-20000	20	33.3
	20001-30000	6	10
	30001-40000	6	10
	Above 40000	24	40
	Total	60	100
8	Rate of Interest	No of Respondents	Percentage
	Upto 10%	13	21.7
	11% - 15%	20	33.3
	16% - 20%	22	36.7
	Above 20%	5	8.3
	Total	60	100

TABLE – 2: SOURCES OF INFORMATION

Sources	No of Respondents	Percentage
Existing Beneficiaries	13	21.7
TV/Internet	5	8.3
Friends/Relatives	20	33.3
Bank Employees	15	25.0
Personal Contact	7	11.7
Total	60	100

TABLE – 3: PROBLEMS IN AVAILING LOAN

Particulars	Mean Rank	Rank
Getting loan applications	9.48	11
Delay in sanctioning	5.03	4
Lack of timely information	5.30	5
Delay in disbursement	6.40	7
Unsuitable repayment period	7.68	9
Lack of officials help	8.07	10
To much formalities	3.45	2
Difference in loan applied and sanctioned	7.28	8
Higher down payment	5.75	6
Guarantee certificate	3.25	1
Intervention of intermediaries	4.30	3

TABLE – 4: OPINION OF RESPONDENTS IN AVAILING CONSUMER LOAN

Particulars	Gender	N	Mean	S.D	T value	P value
E.M.I	Male	37	4.68	.669	1.222	0.227
	Female	23	4.87	.458		
Amount of loan sanctioned	Male	37	4.57	.728	1.567	0.123
	Female	23	4.83	.388		
Processing time	Male	37	4.32	1.082	-.744	.460
	Female	23	4.52	.846		
Transparency in operation	Male	37	4.46	.836	.656	.515
	Female	23	4.30	.874		
Mode of repayment	Male	37	4.05	1.153	1.145	.257
	Female	23	4.39	1.033		
Rate of interest	Male	37	5.00	.000	1.846	.070
	Female	23	4.91	.288		
Processing charge	Male	37	4.84	.501	1.077	.286
	Female	23	4.96	.209		
Hidden charge	Male	37	4.89	.393	1.171	.246
	Female	23	4.74	.619		

CONCLUSION

The analysis signifies that the nationalized bank facilitates majority of the government employee to improve social and economic position by availing consumer loan at low rate of interest. The study reveal include that majority of the respondent opined to avail consumer loan even though guarantee certificate was the foremost problem following too many formalities and intervention of intermediaries which were felt as the problem by the beneficiaries. Regarding the opinion of various factors such as E.M.I, Amount of loan sanctioned, processing time, Transparency in operation, Mode of repayment, rate of interest, processing charge, and hidden charge there exists no significance difference between the male and female beneficiaries. in availing consumer loan.

REFERENCES

1. Depall singh (2001), "Consumer Behaviour and Banking on Retail Product", Indian Journal of Marketing, June 2006, Vol: 36.
2. K. Anil Kumar and K. Praveeth, "Consumer Perception on Retail Banking" Southern Economist, September 1, 2010, vol.49, N: 9, pp: 23-26.
3. Saikrishna (2009), "Indian Retail banking" professional bankers, April, 2009, pp: 39-42.
4. Shubhra Gupta, Marketing of Banking Services, Indus Valley Publications, Jaipur, 2010.

CRUDE OIL PRICES VARIATIONS' ENCROACHMENT ON INDIAN STOCK MARKET [AN EMPIRICAL STUDY OF BSE]

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ABSTRACT

In the current scenario, one of the significant developments; affecting the global economy is the exceptional increase in the crude oil prices. Crude oil is an important raw material used for manufacturing many goods, so that an extraordinary increase in the price of oil is bound to warn the economy with inflationary tendencies. This paper has analyzed the performance or the reaction of the stock market towards the crude oil price change. For this purpose, this study has considered the Indian scenario by taking Bombay Stock Exchange as the financial parameter of country. In this study the researcher has established the relationship between stock market with the crude oil benchmark, MCX crude oil (Multi commodity exchange of India). The study further talked about the industry sensitivity to the oil prices changes by taking the different Sectoral indices of BSE. The study has been based on the daily % changes in oil prices and % changes in daily market returns as per the stock market indices from 2008-09 to 2010-11. For analysis different statistical tests have been applied by using SPSS and Minitab statistical software.

KEYWORDS

Correlation, Crude oil prices, Daily market returns, Regression, Sectoral indices, Stock Market.

JEL CLASSIFICATION

C13, C32, G1, G15.

INTRODUCTION

Now a days we are talking about economic changes worldwide and also the different parameters or variables which affect the economic or financial background of countries. In this context many researchers have been talked about macro and micro level factors viz; Growth rates, FII, Exchange rates etc. for this instance, the other factor which widely came in to existence in recent time, is Crude oil prices. In modern time global market integration is on peak by using financial, economical and industrial assistance. Therefore most of the technologies and raw material for production purpose of any product can be taken from different countries of their cost side and demand side based advantages.

Crude oil is one of the most stipulated required commodities worldwide. The unpredictability of crude oil prices drove many companies away and its affect the stock market also. India carries out its major crude oil requirements by importing it from oil producing nations. Now, India stands among top ten oil consuming nations. India fulfills its major crude oil requirements by importing it from oil producing nations. India meets more than 80% of its requirement by importing process. Therefore, any upward and downward motion of prices is closely tracked in the domestic market place. Crude Oil has been traded in throughout the world and there prices are behaving like any other commodity as fluctuating more during scarcity and excessiveness. Any fluctuation in crude oil affects the other industrial segments also. Higher crude oil price implies to the higher price of energy, which in turns negatively affects other trading practices that are directly or indirectly depends on it. There are numerous factors which influence the price movement of crude oil in throughout the world, like methods and technology using for increase the oil production, storing up of crude oil, changes introduced in tax policy, social and political issues, demand & supply etc.

LITERATURE REVIEW

The main reason for reviewing the different past studies is to get idea for understanding the situations and finding on the different grounds that can help the researcher to elaborate the finding with logical reasoning. David G McMillan (2009) explains analysis of financial market co-movement is an important issue for both policy makers and portfolio managers, for example, in terms of policy co-ordination and portfolio diversification. This paper presents evidence based on a data set of 33 daily international stock market indices. Gogineni Sridhar (2008) presented the comprehensive study of stock market reaction by the oil shock by direction and magnitude of prices. Miller J. Isaacc and Ronald A. Ratti (2008) have analyzed the long run relationship of oil prices and international stocks by using VECM. Balachard and Gaili (2007) find the small effect of oil price on macro economic variables in recent past. Kilian Lutz and Park Cheolbeom (2007) illustrated the response of aggregate U.S. real stock returns may differ greatly depending on whether the increase in the price of crude oil is driven by demand or supply shocks in the crude oil market. Matt Benjamin, Jacobsen Ben and Driesprong Gerben (2004) concluded that the investor in stock market under reacts to oil prices changes in short run.

NEED OF THE STUDY

In this new era of business, exchanges are crossing home country boundaries to enlarge their service areas and this has presented the picture of cross-border combination. Also, exchanges have started to offer cross-border dealing to make easy abroad investment options for investors. This not only increased the appeal of the exchange for investors but also attracts more quantity. There are many factors which affects the stock market behavior rapidly. The variation due to the different factors reflects its impact in the economy also. In the current scenario, one of the significant developments; affecting the global economy is the exceptional increase in the crude oil prices. Crude oil is an important raw material used for manufacturing many goods, so that an extraordinary increase in the price of oil is bound to warn the economy with inflationary tendencies.

STATEMENT OF PROBLEM

The subject of this research is the investigation of the influence of stock market in the regard of Crude oil prices as up to what extent this factor has the ability to make changes in ongoing trend of market in short run mainly.

OBJECTIVE OF STUDY

The study has been conducted with these views; (i) whether the changes in crude oil prices have an impact on the stock market returns, (ii) whether the sensitivity of industry returns can be affected by the crude oil price changes.

HYPOTHESES

By and large the change in the global crude oil prices has no significant impact on the stock Market behavior, as it is global issue.

RESEARCH METHODOLOGY

The following methodology has been used for the study:

- A. **SOURCES OF DATA:** For the fulfillment of the objectives the data has been collected from the different sources. The study has been based on secondary data. The study has been considered the BSE. For the purpose of the study, daily market returns of stock exchange as per the benchmark Sensex and Top 8 Sectoral indices of BSE ; (Oil and Gas, Bank and Financials, Power/ Utility, Telecom, I.T. / Technology, Health care, Automobiles, FMCG) and crude oil prices (spot rates) of MCX crude benchmark for India have been taken in to account.
- Information regarding the Sensex figures, BSE sectoral indices has been taken from the authentic and official website of Bombay Stock Exchange (www.bseindia.com). For gathering the data of different crude oil benchmarks as; MCX CRUDE (spot) the official website www.mcxindia.com has been used.
- B. **SAMPLE SIZE:** For the purpose of the study, the researchers have used the daily market and crude oil observations of selected benchmarks viz; Bombay Stock Exchange of India (BSE) & Multi Commodity Exchange of India (MCX).
- C. **PERIOD OF THE STUDY:** The study is an empirical study which has been carried out by using the daily market returns, daily industry returns of selected stock exchanges and also the daily crude oil prices (spot) of different crude benchmarks for three years from 2008-09 to 2010-11.
- D. **TOOLS:** To judge the impact of crude oil price changes on stock market and for assessing the sensitivity of industry returns to crude oil price changes, the study has been established the relationship between the market returns and oil prices. The study has taken the % changes in the figures of both variables. For this purpose correlation, regression and coefficient of determination have used through SPSS statistical software.

THE RESULTS AND DISCUSSION FOR THE FINDINGS OF EMPIRICAL STUDY

(a) RELATION BETWEEN OIL PRICE CHANGES AND STOCK MARKET RETURNS

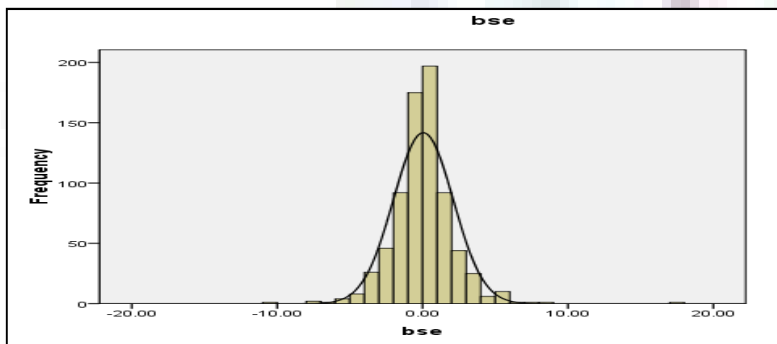
The first goal of the study is to assess the impact of crude oil prices changes on daily stock market returns of the selected stock market (BSE). Relation of changes in MCX crude with BSE market returns.

As a first step towards the exploring the effect of oil prices changes on market returns, the researcher estimates the regression for this

$$R_{St} = \alpha + \beta RO_t + \epsilon_t \dots\dots\dots (i)$$

Where, R_{St} is the daily market returns (BSE), RO_t is the oil price changes. The study included the MCX as the independent variables.

DESCRIPTIVE FOR BSE SENSEX



Series	BSE Sensex
Observation	733
Mean	.0496
St. deviation	2.061
Kurtosis	8.601
Skewness	.670
Minimum	-10.96
Maximum	17.34

RESULTS OF CORRELATION AND REGRESSION SPECIFICATION (I) FOR BSE SENSEX WITH MCX CRUDE OIL

BSE WITH MCX CRUDE	α	.047	(.535)
	β	.049	
	r	.061	(.102)
	r^2	.004	
	adjusted r^2	.002	

The results of descriptive shows that the mean of % changes in BSE returns is .0496 and the MCX Crude mean is .0489. St. Deviation for both the series is 2.061 and 2.565 respectively. The kurtosis and skewness presents the view of normality. Both have the relative normal leptokurtic distribution as the kurtosis is more than normal kurtosis; 8.601, 5.398 respectively.

For the analysis purpose the researcher used the degree of relationship (r), regression (β) and coefficient of determination (r²). The researcher assumed that there is no significant relationship between changes in oil prices and changes in stock market returns. The results have shown in the result specification table. For analysis the study includes the results of SPSS statistical software. The results also show the p value of t statistics in brackets. In case of BSE and MCX oil prices, there is very low positive relationship between the two variables; 0.061 and the p value for two tailed significance test is .102 which is not significant at 0.01, .005 levels. The beta coefficient and r² is .049 and .004, reflecting that only 0.4 % changes occurred in BSE Sensex daily returns are due to the changes in MCX daily oil prices. On this ground the researcher has accept the null hypothesis that there is no significant relationship or impact of MCX crude on BSE Sensex during the study period 2008-09 to 2010-11.

(b) SENSITIVITY OF INDUSTRY RETURNS TO OIL PRICE CHANGES

Next, the study examines the impact of oil price changes on the returns of individual sector. For this the study includes the top eight sectoral indexes for BSE. These sectoral indices are related to Oil & Gas (energy) sector, telecommunication, Power sectors, Automobiles, Banking & Finance sector, Health Care, FMCG or Consumer goods, Information technology sectors. In this the researcher used the BSE Sectoral Indices. For this, the regression estimate formed for each sector:

$$R_{it} = \alpha + \beta_1 RO_{it} + \beta_2 RS_{it} + \epsilon_{it} \dots\dots(ii)$$

Where, R_{it} is industry returns as per the sectoral indices, RO_{it} is oil price changes; RS_{it} is overall market returns changes. β₁ is the impact of changes in oil, β₂ is the changes in market returns.

RESULTS OF CORRELATION AND REGRESSION SPECIFICATION (II)

Sector	r	r ²	β	P
AUTO	.052	.142	.021	.400
HEALTH CARE	.085*	.120	.033	.022*
I.T.	.086*	.190	.050	.019*
POWER	.026	.235	.030	0.485
BANKING/FINANCE	-.002	.217	-0.031	0.485
OIL/GAS	.088*	.227	.053	.017*
TELECOMM	.044	.244	.011	.237
FMCG	-.045	.100	-.026	.493

* Significant at .05 level

In this sectoral analysis the researcher judged that in most of the sectors have the significant impacts of oil prices changes as per the degree of relationship and the t statistics. In this, sector wise indices have been correlated with different benchmarks of oil; as, BSE sector with MCX. Here, Oil gas, information tech and health care are those sectors which have significant impact of the crude oil prices in the stock market; BSE.

By this researcher present the view of market as there are much more other factors which have their impact on the market during the study period and those affect the market on the whole and on the sectoral practices ground. Most of the sectors react towards the oil price changes due to their cost factors and also by the estimated demand and supply of their products. As in auto, power, IT, energy sectors have the relative impact of these changes due to being the most efficient users of oil for their economic activities.

CONCLUSION

This paper presents the comprehensive view of stock market reaction to the crude oil prices changes on daily basis. The study provides the market overview of one of the top most importer countries of oil that is India (BSE); along with the crude oil benchmarks for India as MCX India crude. By this study, as per the first goal researcher conclude that the BSE returns are not more relatively affected by the oil prices during the period. As by the study period it also covers the time of recession, time of overcoming that defaults and also some other political imbalances also. As in case of BSE, MCX oil prices have not significantly affected. However the media and the other political changes and other issues of Indian market have overplayed their roles. By this the market seems to be much fluctuated but the one time impact of MCX oil has very low degree impact.

As per the second objective, the sectoral indexes have their relative significance with the oil prices on.05 level. But the industry has their dependence on cost side and supply side trend also. In nutshell, up to the some extent oil prices of country can affect the overall market and the different sectors also.

REFERNCES

- Balachand and J. Gaili (2007), "The macroeconomic effect of oil price shock: why are 2000s are so different from the 1970s?" National Bureau of Economic Research Working paper 13368, issued in September, 2007. Viewed on 27 July, 2011. <http://www.nber.org/papers/w13368>
- David G McMillan (2009), "Financial Co-Movement and Correlation: Evidence from 33 International Stock Market Indices", International Journal of Banking, Accounting and Finance 2009 - Vol. 1, No.3, pp. 215 - 241.
- Gogineni Sridhar (2008), "The stock market reaction to oil prices", University of Oklahoma. Working paper 30 April, 2008. Viewed on 25 July, 2011. http://papers.ssrn.com/sol3/papers.cfm?abstract_id=460500
- Kilian Lutz and Park Cheolbeom (2007), "The Impact of Oil Price Shocks on the U.S. Stock Market", CEPR Discussion Paper No. DP6166, March, 2007. Viewed on 25 July, 2011. <http://ideas.repec.org/p/cpr/ceprdp/6166.html>
- Kothari C.R., "Research Methodology (methods and Techniques)" 2nd ed., New Age International Publishers, 2004.
- Matt Benjamin, Jacobsen Ben and Driesprong Gerben (2004), "Stock markets and oil prices", Erasmus university Rotterdam. Working paper series, EFA Moscow Meetings Paper, 2004.
- Miller J. Isaacc and Ronald A. Ratti (2008), "Crude oil and stock market: stability, instability and Bubbles." Energy Economics, Elsevier, vol. 31(4), pages 559-568, July 2008.
- www.bseindia.com
- www.mcxindia.com
- http://www.inderscience.com/search/index.php?action=record&rec_id=22711

THE SPREAD OF SELF HELP GROUPS – BANK LINKAGE PROGRAMME IN INDIA

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ABSTRACT

Women's development is directly related to national development. The effective management and development of interest, skills and other potentialities are of paramount importance. Today, the concept of Self Help Groups (SHGs) catching up as the most viable means to empower women, especially at the grass root level. Women have shown extraordinary dynamism in organizing themselves in group activities for income generating, better bargaining power and improvement in the quality of life. The predominant micro finance programme namely SHG bank linkage programme has become a supplementary channel for providing financial services from formal financial institutions to excluded category of poor segments of population. This paper discusses about the Spread of Self Help Groups – Bank Linkage Programme in India in terms of Growth, Models, Agency as well as Regional Distribution and Concluded with Recovery performance of Bank loan to SHGs.

KEYWORDS

SHGs, women development, Regional Distribution of SHGs, Models of SHGs, Spread of SHGs.

INTRODUCTION

Millions of women in our hamlets know what unemployment means. Give them access to economic activities and they will have access to power and self-confidence to which they hitherto have been strangers". - Mahatma Gandhi

Women's development is directly related to national development. The effective management and development of interest, skills and other potentialities are of paramount importance. Today, the concept of Self Help Groups (SHGs) catching up as the most viable means to empower women, especially at the grass root level. Women have shown extraordinary dynamism in organizing themselves in group activities for income generating, better bargaining power and improvement in the quality of life.

One of the successful ways through which microfinance services are being provided to poor people is through Self-Help Groups. It all started with experiments of some non-government organizations (NGOs) working in south India during early 80s and has now come to be known as Self-Help Group approach to microfinance. With intervention of RBI, National Bank for Agriculture and Rural Development (NABARD), Small Industries Development Bank of India (SIDBI), Rashtriya Mahila Kosh (RMK) and other organizations. The predominant micro finance programme namely SHG bank linkage programme has become a supplementary channel for providing financial services from formal financial institutions to excluded category of poor segments of population.

SHGs are a voluntary association of persons with common interests, formed democratically without any political affiliations. They are small and homogenous groups of 15-30 members. The uniqueness of these groups lies in the fact that to a large extent they are self supporting, self governing organization and politicization. The process empowers the poor and enables them to control direction of own development by identifying their felt needs.

The SHG bank linkage programme launched by NABARD has emerged as the largest and most cost-effective micro finance innovations. The principal objective of the SHG Bank linkage programme is 'economic empowerment of rural poor by improving their access to the formal credit system through various credit innovations in a cost-effective and sustainable manner' besides promoting saving habits among the poor.

FEATURES OF SGH – BANK LINKAGE PROGRAMME

The following are the main features of SGHs – Bank Linkage Programme:

1. Supplementary credit delivery services for the unreached poor.
2. Create the habits of Savings.
3. Uplift the standard of living of the poor and promote the entrepreneurial development in rural areas.
4. On time repayment of loans to banks.
5. Reduction in transaction and monitoring costs of small lending for the banks as well as reach credit to the absolute poor.
6. Doorstep savings and credit facilities to the poor.
7. Exploitation of the untapped business potential in rural area.
8. To generate livelihood for poor women.
9. The group should be maintaining proper accounts and records.
10. Evidence of democratic setup in the group

OBJECTIVES OF THE PAPER

The main purpose of this paper is to examine the spread of The Self Help Groups – Bank Linkage Programme in India. The following are the specific objectives of the study.

1. To Analyses The Growth Of Self Help Groups – Bank Linkage Programme
2. To Evaluate Models of Micro Credit Mechanisms in SHG- Bank Linkage Programme
3. To Study The Agency-Wise SHGs -Bank Linkage Position
4. To Study The Regional Distribution Of SHG s- Bank Linkage Programme
5. To Study The Recovery Performance and Outstanding Of Bank Loans to SHGs

DATA SOURCES & METHODOLOGY

The data has been collected from the secondary sources comprises of published reports of Reports on Trend and Progress of Banking in India, various journals , magazines and information from the related websites. The collected data was classified, tabulated and analyzed in a systematic manner.

THE GROWTH OF SELF HELP GROUPS – BANK LINKAGE PROGRAMME

The linkage of SHGs to banks has been promoted by NABARD in 1990 in rural credit delivery system. A pilot project introduced in 1992, has become a SHG movement and 22,39,000 SHGs have been linked with the banks during 2005-06. The SHGs – Bank Linkage model not only concentrates on the delivery of microfinance services but also aims for women empowerment.

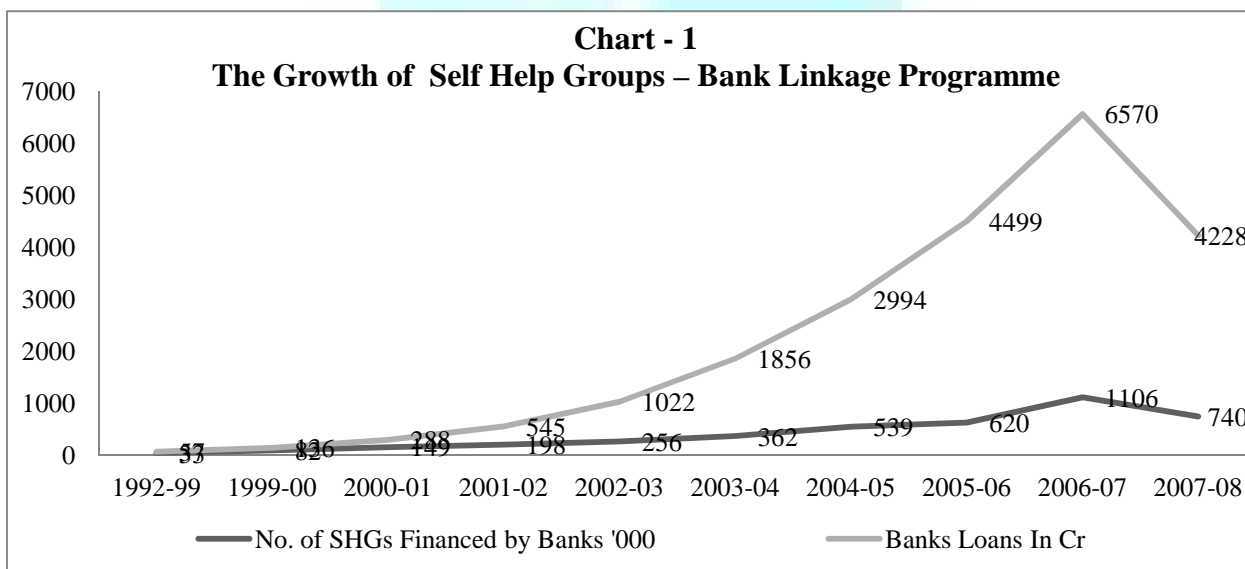
TABLE 1: SHG-BANK LINKAGE PROGRAMME (Amount in Rs. Crore)

Year	Total SHGs financed by banks (in '000)		Bank Loans	
	During the year	Cumulative	During the year	Cumulative
1992-99	33	33	57	57
1999-00	82 (147.9)	115 (247.9)	136 (138.1)	193 (238.1)
2000-01	149 (82.3)	264 (129.9)	288 (112.0)	481 (149.2)
2001-02	198 (32.6)	461 (74.9)	545 (89.0)	1,026 (113.4)
2002-03	256 (29.5)	717 (55.4)	1,022 (87.0)	2,049 (99.6)
2003-04	362 (41.4)	1,079 (50.4)	1,856 (81.0)	3,904 (90.6)
2004-05	539 (49.1)	1,618 (50.0)	2,994 (61.0)	6,898 (76.7)
2005-06	620 (15.0)	2,239 (38.3)	4,499 (50.3)	11,398 (65.2)
2006-07	1,106	–	6,570	–
2007-08 P	740	–	4,228	–

Source: RBI Trend and Progress 2007-08

P : Provisional

The highlights of overall progress of SHG Bank Linkage Programme are shown in the table I from 1992 to March 2008. The percentage of growth of SHGs, bank loans to SHGs and Refinance by NABARD has shown tremendous increases over the years; both in terms of the number of SHGs credit linked with banks as also the bank loans disbursed by SHGs. infact a significant growth on SHG, bank loans to SHG and refinance was exhibited during the year 1999-00.



The analysis of the data reveals that, the significant progress was made during the year that witnessed sustained expansion of the programme with credit linkage of 0.6 million new SHGs (during 2005-06) by the banking system, taking the cumulative number of such SHGs 2.2 million in the year 2005-06. The credit extended by the bank raised from Rs.4, 499 crore to Rs.6,570 crore during the year 2006-07 registering the growth rate of 46.03 percent. The cumulative bank loans disbursed to SHGs also witnessed a sharp increase from Rs. 57 crore in 1992-99 to Rs.481 crore in 2000-01 and further to Rs.11,398 crore in 2005-06. The correlation between the bank loan and number of SHGs financed by the bank also showed a positive correlation 0.987 .

It is revealed that, during the last two decades the huge growth has been registered during the year 2006-07 in terms of number of SHGs, bank loans to SHGs and refinance. This was due to government interest on alleviating the poverty from the gross root level.

The SBLP has made considerable progress since its inception in the early 1990s, both in terms of the member of SHGs credit linked with banks as also the banks loans disbursed by SHGs. At end-March 2008, a total of 3.6 million SHGs were having outstanding bank loan of Rs.17,000 crore were credit linked with the banks under the SBLP programme.

TABLE 2: CORRELATION

		No_SHG_fin_Banks	Bank Loan
No_SHG_fin_Banks	Pearson Correlation	1	.987(**)
	Sig. (2-tailed)		.000
	N	10	10
Bank Loan	Pearson Correlation	.987(**)	1
	Sig. (2-tailed)	.000	
	N	10	10

Source: Computed Data

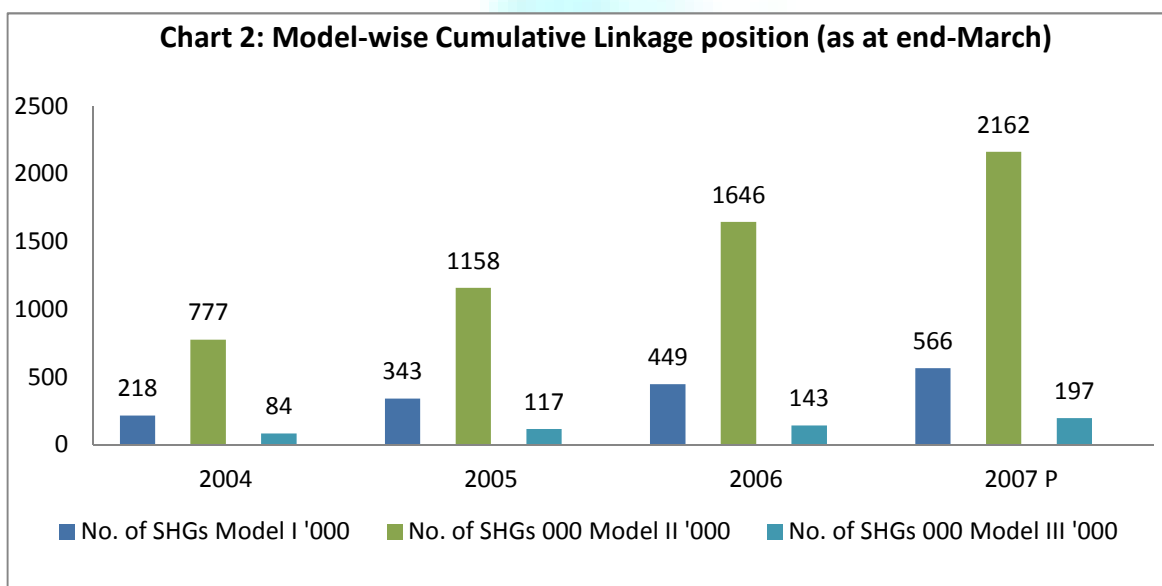
** Correlation is significant at the 0.01 level (2-tailed).

MODELS OF MICRO CREDIT MECHANISMS IN SHG- BANK LINKAGE PROGRAMME

There are three different models of linkage in delivery of micro credit mechanisms being followed in India, they are:

Model-I, The banks themselves assume the role of promoting the formation of SHGs and extending credit to them. Up to March 2007, 13.2 per cent of the total numbers of SHGs financed were in this category.

Model-II, The SHGs are formed and developed by the NGOs, and formal agencies but are directly financed by banks. This model continues to have a lion's share, with 81.1 per cent of SHGs financed up to March 2007, falling under this category.



Model-III, SHGs are financed by banks using NGOs and other agencies as financial intermediaries. In areas where formal banking system faces constraints, the NGOs are encouraged to approach suitable bank for bulk loan assistance. The share of cumulative number of SHGs linked under this model up to end-March 2007 continued to be relatively small it is only 5.7 percent.

In order to analyze the model-wise SHG- Bank linkage position in India the relevant data was presented in Table No.2.

TABLE 2: MODEL-WISE CUMULATIVE LINKAGE POSITION (AS AT END-MARCH)

Year	Model I – SHGs promoted, guided and financed by banks		Model II- SHGs promoted by NGOs/ Government agencies and financed by banks		Model III- SHGs promoted by NGOs and financed by banks using NGOs/ formal agencies as financial intermediaries	
	No. of SHGs ('000)	Bank loans (Rs. crore)	No. of SHGs ('000)	Bank loans (Rs. crore)	No. of SHGs ('000)	Bank loans (Rs. crore)
2004	218	550	777	3165	84	189
2005	343	1013	1158	5529	117	356
2006	449	1637	1646	9200	143	561
2007 P	566	2383	2162	14633	197	1024
CAGR	26.94	44.27	29.1542	46.64	23.75	52.57
Average	394	1396	1435.75	8132	135.3	532.5
STD	148.5	794.7	600.761	4995	47.72	361.3
Coefficient of Correlation	0.992**		0.993**		0.994**	

Source: 1) NABARD.2) RBI Trend and Progress

P : Provisional, Figures in parentheses are percentages to total,

** Correlation is significant at the 0.01 level (2-tailed).

Under the SHG-bank linkage programme models over the years, 81.1 percentage of SHG were financed by banks under model II, under model I only 13.2% of the SHG were financed by banks as on March 2007. Over the years the model II (The SHGs are formed and developed by the NGOs, and formal agencies but are directly financed by banks) both in terms of the number of SHGs and the bank loans disbursed to SHGs showed a significant growth rate compare to other models by exhibiting the Compound Annual Growth Rate (CAGR) and Average of 29.15 per cent and 1435.75 respectively.

AGENCY-WISE SHG -BANK LINKAGE POSITION

The SHG-Bank Linkage Programme has emerged as a major micro finance programme in the country. It is being implemented by commercial banks, RRBs and co-operative banks. The data relevant to the agency wise SHG -Bank Linkage Position was presented in table 3 for the year 2004-05 to 2007-08.

TABLE 3: AGENCY-WISE SHG -BANK LINKAGE POSITION (Amount in Rs. crore)

Agency	SHGs Credit Linked (in '000)				Bank Loan Disbursed			
	2004-05	2005-06	2006-07	2007-08P	2004-05	2005-06	2006-07	2007-08P
Commercial Banks	843 (52.1)	1,188 (53.1)	572 (52)	312 (42)	4,159	6,987	3,919 (60)	2,043 (48)
RRBs	564 (34.8)	740 (33.1)	381 (34)	241 (33)	2,100	3,322	2,053 (31)	1,599 (38)
Co-operative Banks	211 (13.0)	310 (13.9)	153 (14)	187 (25)	640	1,087	599 (09)	586 (14)
Total	1,618	2,239	1,106	740	6,898	11,398	6,570	4,228

Source: RBI Trend and Progress

P : Provisional data. Note : 1) Figures in parentheses are percentage shares in the respective total.

The table highlights that the commercial banks have maintain the share of distribution of micro finance to SHGs from 52.1 percent in the year 2004-05 to 52 percent in the year 2006-07. In terms of Agency-wise SHG -Bank Linkage Position, commercial banks continued to account for the largest share, both in terms of number of SHGs credit linked and bank loans disbursed, followed by regional rural banks and co-operative banks in all the years from 2004-05 to 2007-08. Among the commercial banks, public sector banks accounted for the largest share of loans disbursed to SHG sector (88.8 per cent) in 2006-07. Out of the total loans disbursed by the commercial banks, 86.9 per cent of the loans were disbursed exclusively to women SHGs.¹⁷

REGIONAL DISTRIBUTION OF SHG - BANK LINKAGE PROGRAMME

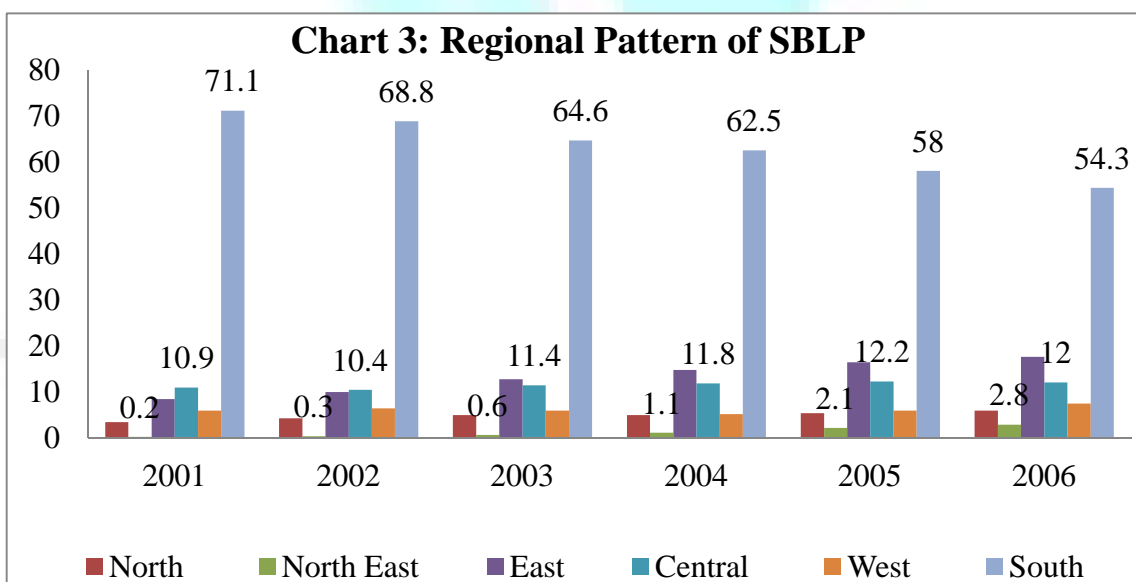
Regional Distribution of SHG - Bank Linkage Programme over the years was presented in the following table.

TABLE 4: REGIONAL PATTERN OF SBLP (AS AT END-MARCH) (Per cent to total)

Region	2001	2002	2003	2004	2005	2006
Northern	3.4	4.2	4.9	4.9	5.3	5.9
North-Eastern	0.2	0.3	0.6	1.1	2.1	2.8
Eastern	8.4	9.9	12.7	14.7	16.4	17.6
Central	10.9	10.4	11.4	11.8	12.2	12.0
Western	5.9	6.4	5.9	5.1	5.9	7.4
Southern	71.1	68.8	64.6	62.5	58.0	54.3
All-India	100.0	100.0	100.0	100.0	100.0	100.0

Source: NABARD.

From the table 4, it reveals that the region-wise pattern of SHGs linked to banks showed greater concentration in the southern region from 2001 to 2006 and very between 71.1 per cent to 54.3 percent. This may be due to the strong initiatives taken by the respective State Government; the SBLP gained more important movement in southern states like Andhra Pradesh, Tamilnadu and Kerala. However, the programme has also been shown a greater growth rate in eastern and north- eastern region by registering the CAGR of 20.31 per cent and 93.43 per cent respectively.



In order to reduce the imbalance in the regional distribution the NABARD has taken special efforts as resulted an increase in the number of SHGs credit linked in the non southern Indian states to 1.4 million as on March 3, 2007 as compared to 100 thousand as on march 31,2002¹⁸.

¹⁷ Report on Trend and Progress of Banking in India, 2007-08, p 211.

¹⁸ Report on Trend and Progress of Banking in India, 2007-08, p212.

RECOVERY PERFORMANCE AND OUTSTANDING OF BANK LOANS TO SHGs

The performance of Indian banking sector have been worsening due to non recovery of loan assets which reflected in the decline in productivity, liquidity, solvency, and profitability. So it is a challenge for the banks to manage their NPAs more effectively so that the character of loan assets changes from non-performing to performing. In comparison with other form of financing under micro financing, bank loans to SHGs showed a remarkable recovery performance. The Agency wise recovery performance of Bank loans to SHGs was presented in the following table.

TABLE 5: RECOVERY PERFORMANCE OF BANK LOANS TO SHGs (AS AT END-MARCH 2007) (No of banks)

Agency	Total No. of Reporting Banks	Recovery Performance of Bank Loans to SHGs			
		95 per cent and above	80-94 per cent	50-79 per cent	less than 50 per cent
Commercial Banks	36	11 (30.6)	15 (41.7)	10 (27.8)	0 (0.0)
Regional Rural Banks	73	20 (27.4)	35 (47.9)	13 (17.8)	5 (6.8)
Co-operative Banks	181	76 (42.0)	55 (30.4)	35 (19.3)	15 (8.3)
Total	290	10 (36.9)	105 (36.2)	58 (20.0)	20 (6.9)

Source: Report on Trend and Progress of Banking in India, 2007-08

The table 5, reveals that out of 290 reported banks 36.9 per cent of banks reported Recovery Performance of Bank Loans to SHGs of above 95 per cent under this programme, 36.2 per cent banks reported recovery in the range of 80-94 per cent and another 20 per cent banks reported recovery in the range of 50-79 per cent and only 6.9 per cent banks reported the recovery of SHGs Loans in the range of less than 50 percent. It should be noted that Individuals differences was found in the recovery rate between the Agency-wise recovery performances of Bank loans to SHGs during the year ended March 2007.

Under the SBLP, as on March 31, 2007, 2.9 million SHGs had outstanding bank loans of Rs.12,366 crore out of these 70.8 , 22.7 and 6.5 per cent are the share of loan outstanding in Commercial banks, Regional Rural banks and Cooperative Banks respectively. The recovery mechanism in cooperative and RRB was good in respect of recovery of loans to SHGs. But in case of distribution of loan to SHGs linkage programme commercial banks take a lead in comparison to other.

CONCLUSION

SHG - Bank Linkage Programme is an alternative formal credit delivery channel for the unreached poor. It creates a trust and confidence between the bankers and the poor and encourages the banking activity. The SHGs bank linkage programme is an innovation in the field of rural development plays a major role in transforming the rural economy by fulfilling the credit needs and helps the rural poor women to improve their economic status of each and every house hold in the rural area. Therefore special efforts should be taken by the States Governments to spread the SBLP throughout India to increase the number of SHGs credit linked programme and thereby reduce the regional imbalances in the distribution of micro finance.

REFERENCES

1. Abraham Punnoose, "Micro Finance Scenario of Kerala", *Sothern Economist*, Aug 2008, Vol.47, No.7.
2. Dheenadhayalan V, and Bharath M, "Micro Finance in India – An Overview", in "Micro Credit and Rural Development", Edited By Aranganathan T, Sundar K and Satheeskumar, Commerce Wing DDE, Annamalai University, Annamalaiagar, 2008. Pp.189-194.
3. Dheenadhayalan V, and Kandasamy S, "Micro Finance Sector in India – An Overview", in "Cooperatives and Micro Finance", Edited By Frank Ratnakumar V and Joel Edwinraj D, Serial Publications, New Delhi, 2009. Pp.10-16.
4. Puhazhendi, V. and K. C. Badatya, 2002, SHG Bank Linkage Programme for Rural Poor-An Impact Assessment, available on www.microfinancegateway.org
5. Puhazhendi, V. and K. J. S. Satyasai, 2000, *Microfinance for Rural People: An Impact Evaluation*, NABARD
6. RBI Annual Report 2006-07, Reserve Bank of India, Mumbai.
7. RBI Trend and Progress, 2006-07, Reserve Bank of India, Mumbai.
8. Reddy C S, Jennifer living stone, and Sandeep Manak, Institutionalizing support to Self Help Gruous, the APMAS Experience, *The ICFAI Journal Management Research*, Vol5. No.1 March 2006.
9. Report on Trend and Progress of Banking in India.
10. Sharma H O , Nahatkar B, and Minshra, (2006) impact of Micro Finance Through Self Help Groups on Rural Economy, *Indian Journal of Economics.*, Mumbai
11. Yadairi and Gangadhar Micro Finance: the Emerging Horizons, *The Management Accountant*, Nov 2008, Vol.43 No.11.

SUSTAINABLE DEVELOPMENT IN NORTHEAST INDIA

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ABSTRACT

Non-fulfillment of minimum necessary for the maintenance of merely physical efficiency and basic needs brings poverty in population. The requirement of minimum necessary differs in rural and urban areas and place by place on the globe. The failure of promotion of economic growth and population control perpetuated the cycle of poverty. The relation between poverty and human development (HD) is direct but negative. Both are two faces of a coin and hence they are mutually exclusive. Rapid growth of population, inequality in income and degradation of environment are the biggest challenge in Northeast (NE) India. This paper considers for the eradication of poverty by controlling the rapid growth of population, increasing the level of income and restoring the environment sustainability, which brings all round development in NE India.

KEYWORDS

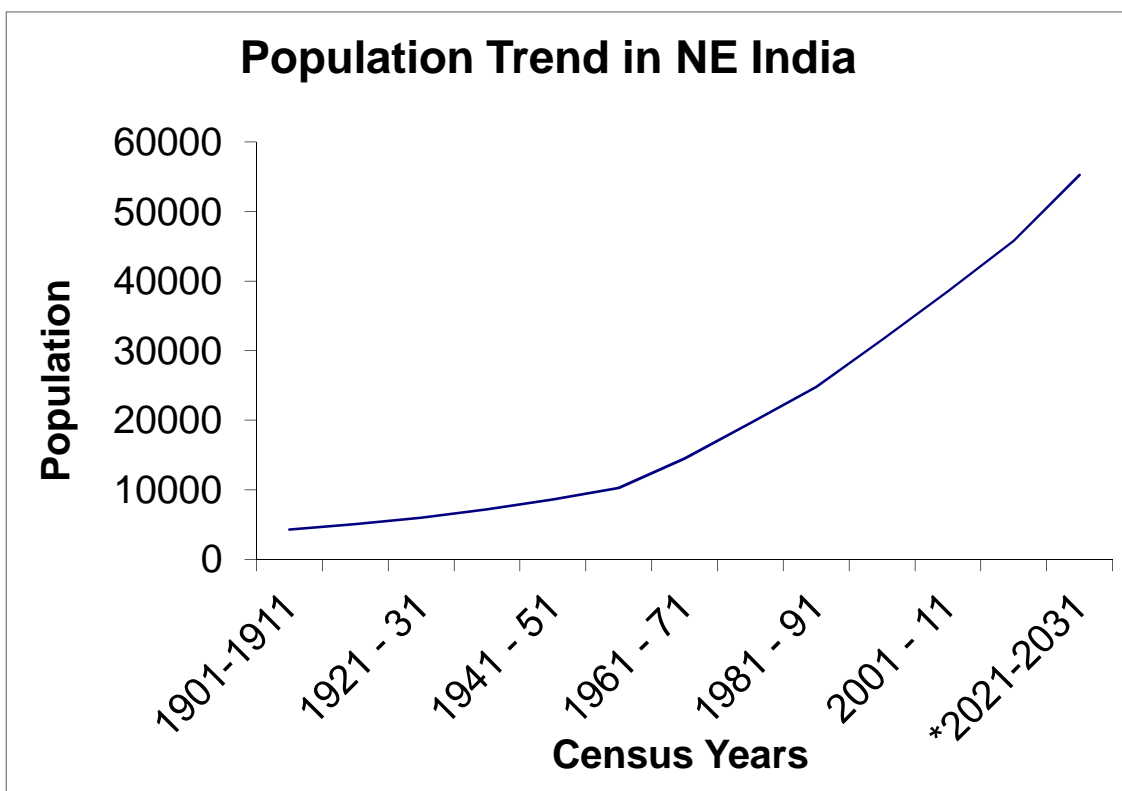
Population and Economic Growth, Anti-poverty Programmes and Policies, Environment Sustainability.

INTRODUCTION

As we know, poverty is the creation of social, political and others factors and its occurrence depends upon place, time and society. When a person's income is not sufficient to obtain minimum necessary for the maintenance of basic needs and merely physical efficiency, poverty then occurs. A person, who fails to obtain the minimum level of calories, falls below the poverty line. Rowntree (1901) defined families in poverty if their total earning is insufficient to meet the 'minimum necessities of merely physical efficiency' under income approach. The concept of poverty reflects failure in many dimensions of human life — unemployment, hunger, illness and health care, homelessness, powerlessness and victimization and social injustice. All of them add up to an assault of human dignity. Human Development Report 1997 recognizes poverty as multidimensional and poverty measures based on the income criterion do not capture deprivation of many kinds. It introduces three types of deprivation – in survival, in education and knowledge and in economic provisioning – as important dimensions of poverty.

NE India contains eight states namely Arunachal Pradesh, Assam, Manipur, Meghalaya, Mizoram, Nagaland, Sikkim and Tripura. Sikkim is recently included in NE India. Earlier NE Indian states are popularly known as 'Seven Sisters'. NE India is one such region that exhibits accelerated population growth – both natural (in terms of exponential growth) and artificial (illegal migrants from neighbouring countries) increases – after independence. The population of NE India was 6232 thousand in 1901, after independence it became 14662 thousand in 1951 and 39036.1 thousand in 2001. Population of NE will be 47829.2 thousand in 2011 (1.23 times of 2001 and 11 times of 1901 populations) and 70290.8 thousand in 2031 with an exponential growth. The population of NE will become 11 times in 110 years (from 1901 to 2011) and it will be due to exponential growth and illegal migrants from neighbouring countries. The annual rate of exponential growth in NE India based on 2011 census is higher than that of India's and also of world.

The two generalized land use patterns – one for the plain section and another for the hill section easily discerned. About 80 % of people of the region are directly or indirectly depend on agriculture. Agriculture forms the backbone of the region's economy. The NE region lags far behind the rest of India. Agriculture in the NE region is distinguished from agricultural sector in the rest of India in terms of its features, patterns and performance. Hilly areas of the region depend on rainwater for the irrigation. Jhum or shifting cultivation is a primitive form of agricultural practice in the region. As a result, the minimum requirement of food grain is lacking in this region. The present overall land-man ratio of the region is 0.68 ha, more than double the ratio of India as a whole (0.32 ha). The total cultivable area in NE is only 25 percent of its geographical area, compared to the national average of 59 % and its percentage of cultivable area utilized is only 59, compared to the national average of 73. Lack of irrigation in the hilly NE India has been a constraint to agricultural development. Brahmaputra is a paleo-river and braided river in NE India. Monsoons dominate the climate of India.



* Projected (2011-2021 & 2021-2031)

The winds carry moisture from the Indian Ocean and bring heavy rains from June to September. The monsoon winds blow from the northeast and carry little moisture. Despite the potential for destruction, people welcome the summer monsoons and farmers depend on the rains to irrigate their land in NE India. Additionally, waterpower generates India’s electricity, which is provided by the monsoon rains. Incessant rains due to the Northeast monsoon have inundated large tracts of low-lying areas, affect thousands of people and damage the public properties and crops in low-lying areas of this region.

Still, a large part of humanity lives in appalling poverty conditions. Overall, the share of the poor in the human population has never been so low. Of course, this depends crucially on the definition of poor. World Bank defines the poor in terms of absolute purchasing power. Kenny (2006) found that this may not well correspond to a subjective, socially and environmentally conditioned definition of poverty in the sense of deprivation. While a considerable share of the world population still lives in poverty, world income and wealth are very unequally distributed. A recent research by Davis et al. (2006) shows the extent of world inequality in the distribution of personal wealth. Milanovic (2006) suggests that income distributed less unequally than wealth, but still in a markedly unequal way.

POPULATION IN NE INDIA

India is having striking demographic diversity. Substantial differences are visible among states to achieve the basic demographic indicators like male-female, rural-urban, literate-illiterate, etc. India adds every 10 years to its population equivalent of 6 Canada’s, 3 France’s, 3 UK’s or 2.3 Germany’s. Table 1 illustrates overall situation of NE Indian states based on 2001 census and projected populations. It is matter of great surprise that population of Nagaland in 2031 will be almost 3.64 times that of 2001 census population and in 2051, it will be over 8 times that of 2001 census population at the present rate of population growth. Population of other states gives little higher growth in NE except Tripura. The least growth of population is observed in Tripura. The population-growth within states and NE as a whole is also higher. Central and Nagaland governments must do some needful steps to lower down rapid growth rate of population especially in Nagaland and NE as a whole.

TABLE 1: OVERALL SITUATION OF NE STATES

States	Population		% of population with India		Sex Ratio *		Population Density	
	2001	2011**	2001	2011**	2001	2011**	2001	2011**
Arunachal Pradesh	1091117	1372696	0.11	0.13	893	905	13	16
Assam	26638407	31612427	2.59	3.07	935	940	340	403
Manipur	2388634	3095416	0.23	0.3	974	995	97	139
Meghalaya	2306069	2985978	0.22	0.29	972	961	103	133
Mizoram	891058	1147402	0.09	0.11	935	951	40	52
Nagaland	1988636	3229511	0.19	0.31	900	925	120	195
Sikkim	540851	695963	0.05	0.07	875	873	76	78
Tripura	3191168	3689785	0.31	0.36	948	956	305	352
NE	39035582	47829178	3.78	4.65	937	943	148	182

* Female per 1000 male

** Projected

TABLE 2: PROJECTED POPULATION IN NE INDIA

States	2001	2011	2021	2031
Arunachal Pradesh	1091117	1372696	1691477	2084289
Assam	26638407	31612427	37070945	43471985
Manipur	2388634	3095416	3908241	4934506
Meghalaya	2306069	2985978	3767558	4753716
Mizoram	891058	1147402	1441217	1810269
Nagaland	1988636	3229511	4834029	7235720
Sikkim	540851	695963	895560	1152400
Tripura	3191168	3689785	4229379	4847883
North East	39035582	47829178	57838406	70290768

Based on Census population 1901 and 2001

The sex ratio in 2011 is predicted to be very good (above 900) in all NE states except Sikkim and in each state, an increasing trend is projected except in Meghalaya. Average sex ratio in 2011 will rise from 937 to 943, which is good sign of improvement in sex ratio within NE. Population density and percentage of population with India are estimated to increase in each case in 2011. Table 2 shows the projected populations of NE Indian states for 2011, 2021 and 2031. Goon and Chandra (1982) projected population using migration, fertility, mortality and sex-age composition. They advocated that this technique gives better estimates. But those factors are not applied in projecting population here.

Table 3 shows projected population of NE states from 2021 to 2041 based on census population of 2001 and 2011. Nagaland is not included in projection of population because 2011 census population shows negative population growth rate which is quite impossible for the state in these circumstances. 2011 Census population of Nagaland needs to be verified. The decennial growth rate in Nagaland was above 64 % as per 2001 census and what happened in another 10 years that population growth is reported negative. Projected population for Arunachal Pradesh, Assam, Manipur, Meghalaya, Mizoram, Sikkim and Tripura in 2041 is 2655868, 48222203, 4371321, 5727461, 1912830, 846026 and 5405092.

TABLE 3: PROJECTED POPULATION IN NE STATES

States	2011	2021	2031	2041
Arunachal Pradesh	1382611	1707999	2123307	2655868
Assam	31169272	36046903	41690914	48222203
Manipur	2721756	3187303	3732598	4371321
Meghalaya	2964007	3691694	4598187	5727461
Mizoram	1091014	1315172	1585859	1912830
Sikkim	607688	670514	7557634	846026
Tripura	3671032	4176163	4750971	5405092

Based on Census population 2001 and 2011

ENVIRONMENT SUSTAINABILITY

As we know jhum (or shifting) cultivation is popular for agricultural practice in NE. Table 4 shows situation of shifting cultivation in the region. People cut valuable and pre-matured trees and burn them with other smaller plants in the forest under shifting cultivation, which affects the environment. There is a need to stop this practice for the environmental sustainability. NE India is very rich in respect of forest resources. Time came to protect the trees and other plants in forests and all other places for better livelihood because trees are the best friends of human beings and they (trees) keep the environment healthier and balanced by observing harmful substances present in the air. They (trees) also keep away us from natural calamity such as floods, draughts, cloudbursts, etc. Continued deforestation in NE brings people in deprivation from valuable forest resources like wood products, food and medicines. That is why it is needed to plant more trees in NE India using the principle 'My Earth My Duty'. Table 5 illustrates about geographical area, recorded forest area and forest cover, which shows, the forest area is decreasing year by year in NE India.

TABLE 4: SHIFTING CULTIVATION IN NE INDIA

States	Annual Area under shifting cultivation (sq. kms)	Fellow Period (in yrs)	No. of Families Practicing Shifting Cultivation
Arunachal Pradesh	700	3 – 10	54000
Assam	696	2 – 10	58000
Manipur	900	4 – 7	70000
Meghalaya	530	5 – 7	52290
Mizoram	630	3 – 4	50000
Nagaland	190	5 – 8	116046
Tripura	223	5 – 9	43000
North East	3869	-	443336

Source: Basic Statistics of NER, 2006

TABLE 5: GEOGRAPHICAL AREA, RECORDED FOREST AREA & FOREST COVER (sq km)

States	Geographical Area	Recorded Forest	Forest Cover
Arunachal Pradesh	83743	51540	68019
Assam	78438	27018	27826
Manipur	22327	17418	17219
Meghalaya	22429	9496	16839
Mizoram	21081	16717	18430
Nagaland	16579	8629	13609
Sikkim	7096	5481	3262
Tripura	10486	6292	8093
All India	3287263	774740	678333

Source: Basic Statistics of NE, 2006

Flood and erosion are some other major problems facing NE India and in the last 50 years, erosion by the mighty river Brahmaputra has eaten away half of the river island Majuli, which is considered to be the home of Assamese culture. The old Dibrugarh town suffered major loss due to erosion and even at present, the people of the town are living forcefully in great apprehension. The Brahmaputra is eroding its banks, while; on the other hand, new islands form within the river. These islands reduced the water carrying capacity of the river and increased erosion. There is need for dredging the newly formed islands inside the Brahmaputra and other rivers to increase the water carrying capacity of the river. That is why all major rivers of this region should be interlinked with cemented banks gradually in phase-wise. At the same time, the State and Central governments have asked for suggestions from the experts from the European Union to deal with the problem and hoped that the experts would be able to suggest measures for permanent solution of the problems after a proper scientific study. Improvement of access to clean and safe water and sanitation is the most significant environment priority for the poor in NE India. Inadequate protection and conservation of environment bring substantial direct and indirect impacts on health and livelihoods by increasing the vulnerability of poor people throughout the NE. The most sufferers from environment health problems among poor are especially the women and children. Urban population suffers from faecal contamination of water and food due to poor or non-existence of excreta disposal systems. Most of the major rivers' water near cities and industrial areas became faecal contaminated and this brings various types of diseases in NE. Increasing demand of fresh water will be short due to high growth in population.

PROGRAMMES AND POLICIES

The government of India (GI) officially took a lead in April 1950 appointing a committee to formulate India's population policy. The committee recommended a programme for 'Family Limitation and Population Control Terms' considering a single goal to control population through reducing birth rate and then modified the programme entitled 'Family Planning Programme', which was basically motivational, educational and clinical services with a desire to space and limit family size. Thus India became the first nation in the world to start and implement the family planning programme through formulating its National Policy on population control. New government then changed the name of 'Family Planning Programme' to 'Family Welfare Programme'. The new policy put in rising minimum age at marriage of 18 years for girls and 21 years for boys, which came into operation in October 1978 and continuing till date.

Planned economic development requires data about various aspects of socio-economic conditions at different levels. Indicators of development related directly or indirectly to the size and structure of the population in NE. Another important requirement in the NE is educational planning, which needs enrolment projections for many of the investment decisions. For example, the number of children enrolled will decide opening or upgrading new schools and requirement of number of teachers in NE. None of these tasks accomplished efficiently unless the planner has an adequate idea of how many students will enter the system, how many will proceed through various grades and what number will graduate? This is ever more important keeping in view of the requirements of programmes like 'District Primary Education Programme' and 'Sarva Shiksha Abhiyan' that envisage developing plans in a decentralized mode with an emphasis on disaggregated target setting in NE.

Important anti-poverty programmes, which are in vogue in India, are MNAREGA, SwarnaJayanti Gram Swarozgar Yojana, Jawahar Gram Samridhi Yojana, Employment Assurance Scheme, National Social Assistant Programme (NSAP), Prime Minister Rozgar (employment) Yozana, Rural Employment Generation Programme, Pradhan Mantri Gramodaya Yozana, National Food for Work Programme, Anpurna, National Rural Employment Guarantee Act and incentives given for family planning sterilization. The main features of the three components of NSAP are National Old Age Pension Yojana, National Family Benefit Scheme and National Maternity Benefit Scheme. There is a need to enhance the amount of incentive for the family planning sterilization of male and female to control the rapid growth of population. Good impact of this is visible in rural areas. Practice of contraceptives should be encouraged through awareness. Education related programmes are District Primary Education Programme, Mid-day Meal Programme and Sarva Shiksha Abhiyan. UNDP India is a key partner of the Government of India on the job guarantee programme.

Land reforms are required for achieving redistributive justice and for attaining higher levels of agricultural production and income in rural areas. The successful implementation of land reforms is responsibility rests with concerned state government. Programmes and policies related to anti-poverty and anti-population growth are available in India and NE. Now there is need to implement those nicely without any discrimination and free from all sorts of corruptions. Maximum amount of such programmes and policies will go to the beneficiary of people for whom they (programmes and policies) are made.

ANALYSIS

The huge income inequality, many socio-cultural and economic factors, and unequal distribution of land, wealth and other resources bring the high poverty rate. Eradication of poverty is still one of the primary aims of economic and social policies in NE India. Thus, poverty requires its measurement for the formulation of anti-poverty programmes and policies. Removal of poverty has been one of the major objectives of NE Indian developmental strategy. Chakravarty & Majumder (2007) and Ravallion (1996) found that poverty is a multidimensional phenomenon and its analysis needs more dimensions than income. With the spread of irrigation, white and green revolutions, many job opportunities are possible in the agricultural sector. The industries, in both public and the private sector, did provide some jobs. Unable to find proper jobs in cities, many people started working as rickshaw pullers, taxi and auto drivers, vendors, construction workers, domestic servants etc. With irregular incomes, these people could not afford expensive housing. They started living in slums on the outskirts of the cities and the problems of poverty; largely a rural phenomenon also became the feature of the urban sector.

As per figures made available by the Planning Commission of India, the percentage of people living below the poverty line has declined from 51.3% in 1977-78 to 26.1% in 1999-2000. This indicates that schemes like Swarn Jayanti Gram Swarozgar Yojana, Jawahar Rozgar Yojana, Sampoorna Gramin Rozgar Yojana, Employment Assurance Scheme, Rural Landless Employment Guarantee Programme, MNAREGA, PMGSY and etcetera have had its impact. But the problem is that in NE India the rate of employment generation has failed to match the rate of population growth and more often than not, employment generation is

confused with poverty alleviation. Agriculture provides employment to more than sixty percent of all the states' population. But lack of proper irrigation facilities, ignorance on the part of the farmers about scientific cultivation techniques, over dependence on the monsoons and absence of proper storage facilities have hampered the growth of this sector and it is very well reflected in its meager contribution to the state domestic product. Other than the opportunities generated by the various government schemes, the growth in job opportunities in the government sector is nothing to write home about. In fact, this sector has totally failed to create job opportunities in sync with the rise in population.

TABLE 6: STATEWISE POVERTY RATIO

States	1973-74	1993-94	1999-2000
Arunachal Pradesh	51.93	39.35	33.47
Assam	51.21	40.86	36.09
Manipur	49.96	33.78	28.54
Meghalaya	50.32	25.66	19.47
Mizoram	50.32	25.66	19.47
Nagaland	50.81	37.92	32.67
Tripura	51.00	39.01	34.44
All India	54.88	35.97	26.10

Source: Basic Statistics of NER, 2006

There is requirement of special cares for projects or industries generating a minimum of 1000 regular employment. Table 6 shows poverty situation in NE India. Poverty ratio in all states except Meghalaya and Mizoram is greater than that of all India. Special care on poverty reduction is required to give in NE. Measurement of poverty can split into two interrelated items, viz. the identification of the poor and aggregation of the poverty characteristics of different people into one overall measure, or one ranking.

The world's trend in population growth is a major concern before all nations and their political leaders. Due to unhealthy population explosion, the natural resources are eroding and diluting all economical, political and social gains. The uneven and rapid increasing population demands the basic needs such as food, shelter, education, health, transport, work and fresh air. That is why it became very essential to study the growth rate of population under control for enjoying the reasonable standard of life. Jain (1998) suggested that broader public policies to affect human behavioural change have generally not been very successful in developing countries. He further suggested that this was often due to the absence of a charismatic leader who could generate public sympathy for unpopular causes. Bongaarts and Bruce (1999) advocated 'Well-designed population policies are broad in scope, socially desirable and ethically sound. They appeal to a variety of constituencies, including those seeking to eliminate discrimination against women and improve the lives of children and those seeking to reduce fertility and population growth. Mutually reinforcing investments in family planning, reproductive health and a range of socioeconomic measures operate beneficially at both the macro and micro levels: the same measures will slow population growth, increase productivity and improve individual health and welfare'. The recent rapid increase in human population over the past two centuries has raised concerns that humans are beginning to overpopulate the Earth and that the planet may not be able to sustain present or larger numbers of inhabitants.

Scholars, policy makers, academicians, educationists and religious leaders have been discussing about the relationship between population and development. This is true that the relationship between population and development is negative. If population will increase rapidly, the economic growth is affected and hence the development is also affected. Population is increasing exponentially but the production of food and other related resources is not increasing in that proportion and this exacerbates starvation in the population. An increasing population has negative implications for resources (including food) and economic growth. NE has high population growth rate and a good policy needed to bring down total fertility rate. The policy may be successful but population size would probably overshoot the desired limits before settling down at an acceptable level. High population growth rate leads to a young age distribution. This young people would lead to a large number of births. In NE India, the population problem is increasingly distressing, affecting more people increasingly crammed together, with greater consumption, desire and with newer and ever costlier resources. If net reproduction rate (NRR) is greater than unity, the population will grow positively and there is an increase in population. If NRR is equal to unity, then no population growth (negligible) obtained and the population will be stable. If NRR is less than unity, the population will grow negatively and there is a decrease in population. Thus, we have to maintain the NRR close to unity.

Life expectancy at birth for males and females increased to 55.3 years and 56.3 years respectively. Both male and female child mortality would decline by 60 %. Declining fertility and mortality produces a transition towards the ageing of the population. Maintain net migration around current levels for several decades. Use more reliable baseline data. This requires further investments in censuses, surveys, and vital registration. Update projections quickly as new information on current demographic trends becomes available. In 1952, India was the first country in the world to launch a national programme, emphasizing family planning to the extent necessary for reducing birth rates to stabilize the population at a level consistent with the requirement of national economy. After 1952, a similar drop in birth rates did however, not accompany sharp declines in death rates.

The National Population Policy (NPP) 2000 provides a policy framework for advancing goals and prioritizing strategies during the next decade, to meet the reproductive and child health needs of the people of India including NE and to achieve net replacement levels by 2015. It based upon the need to address issues of child survival, maternal health, and contraception, while increasing outreach and coverage of a comprehensive package of reproductive and child health services by government, industry and the voluntary non-government sector, working in partnership. The medium-term objective is to bring the total fertility rate to replacement levels by 2015, through vigorous implementation of inter sectoral operational strategies. The long-term objective is to achieve a stable population by 2045 at a level consistent with the requirements of sustainable economic growth, social development and environmental protection.

The complex socio-cultural determinants of women's health and nutrition have cumulative effects over a lifetime. Discriminatory childcare leads to malnutrition and impaired physical development of the girl child. The positive effect of good health and nutrition on the labour productivity of the poor well documented. To the extent that women over-represented among the poor, interventions for improving women's health and nutrition are critical for poverty reduction.

Programmes for safe motherhood, universal immunization, child survival and oral rehydration combined into an integrated reproductive and child health programme. Empowering women for improved health, education, working and nutrition is required in whole India including NE India. Infant mortality is a sensitive indicator of human development. High mortality and morbidity among infants and children below 5 years occurs because of inadequate care, asphyxia during birth, premature birth, low birth weight, acute respiratory infections, diarrhea, vaccine preventable diseases, malnutrition and deficiencies of nutrients, including vitamin A. Infant mortality rates should significantly decline in recent future. In both rural and urban areas there continue to be unmet needs for contraceptives, supplies and equipment for integrated service delivery, mobility of health providers and patients, and comprehensive information. It is important to strengthen, energize and make accountable the cutting edge of health infrastructure at the village, sub centre and primary health centre levels. This is also important to improve facilities for referral transportation, to encourage, strengthen local initiatives for ambulance services at village, and block levels,

to increase innovative social marketing schemes for affordable products and services and to improve advocacy in locally relevant and acceptable dialects. Future trends in population size, age structure, births and other demographic variables are of interest to a wide range of analysts, including policymakers, scientists and planners in industry and government.

Tribal population often has high levels of morbidity arising from poor nutrition, particularly in situations where they are involuntarily displaced or resettled. Frequently, they have low levels of literacy, coupled with high infant, child and maternal mortality. They remain under-served in the coverage of reproductive and child health services. These communities need special attention in terms of basic health and reproductive and child health services. Special needs of tribal groups, which need to address, include the provision of mobile clinics in NE. Information and counseling on infertility, regular supply of standardized medication will be included, and family welfare messages must be focused and disseminated everywhere including the remote corners of NE and in local dialects. This will ensure that the messages conveyed effectively. These need to be strengthened and their outreach widened with locally relevant and locally comprehensible media and messages. There is need to undertake a massive campaign on population related issues via academicians, artists, popular film stars, doctors, vaidyas, hakims, nurses, local midwives, women's organizations and youth organizations in NE.

Rapid growth of population exacerbates the poverty and lowers the per capita income and hence the corresponding reduction of human development index (HDI) and gender-related development index (GDI) is obtained. Poverty and a degraded environment are closely inter-related, especially where people depend for their livelihoods primarily on the natural resource base of their immediate environment. Restoring natural systems and improving natural resource management practices at the grassroots level are central to a strategy to eliminate poverty. Removal of poverty is therefore a prerequisite for the protection of the environment. Poverty magnifies problem of hunger and malnutrition. The problem further compounded by the inequitable access of the poor to the food that is available. It is therefore necessary to strengthen the public distribution system to overcome this inequity. While conventional economic development leads to the elimination of several traditional occupations, the process of sustainable development, guided by the need to protect and conserve the environment, leads to the creation of new jobs and of opportunities for the reorientation of traditional skills to new occupations.

Population ageing is primarily due to the result of decline in fertility and secondarily decline in mortality and age structure of population becomes older, with a growing number and proportion. The future population size and age-sex structure of any geographical area depend on three demographic components: fertility, mortality and net international migration. As no policies to increase the mortality of a population are socially desirable, there are, in theory, two possible ways of retarding or reversing demographic ageing. First, a reversal of declines of fertility would lead the age structure of the population back towards a younger one, thus slowing down the ageing process. However, the recent experience of low-fertility countries suggests that there is no reason to assume that their fertility will return anytime soon to the above-replacement level.

Women, while continuing to perform their traditional domestic roles are increasingly involved in earning livelihoods. In many poor households they are often the principal or the sole breadwinners. A major thrust at the policy level is necessary to ensure equity and justice for them. Literacy and a basic education are essential for enabling the poor to access the benefits offered by development initiatives and market opportunities. Basic education is therefore a precondition for sustainable development. The integration of agriculture with land and water management and with ecosystem conservation is essential for both environmental sustainability and agricultural production. There is need to establish well-defined and enforceable rights (including customary rights) and security to ensure equal access to land, water and other natural and biological resources. It should ensure that this applies, in particular, to indigenous communities, women and other disadvantaged groups living in poverty. The traditional approaches to natural resource management such as sacred groves and ponds, water harvesting and management systems, etc., should be revived by creating institutional mechanisms, which recapture the ecological wisdom and the spirit of community management inherent in those systems. On the other hand, for development to be locally appropriate and sustainable, it must be guided by local considerations, which lie in cultural diversity and traditions. Therefore, recognition at the policy level, of the significance of diversity, and the need to preserve it, is an important precondition for sustainable development. Gender parity and women's empowerment is central to obtain development goal. Some positive trend in gender equality is seen but there are still many areas of concern. About two-thirds of women in the developing world work in the informal sector or as unpaid workers in the home. Gender equality is a condition for inclusive, democratic, violence-free and sustainable development. Vijayapriya and Venmathi (2011) concluded that if both husband and wife work, they should share equally in the housework and childcare. They suggested for opening childcare facilities so that women can take jobs outside the home.

Human health in its broadest sense of physical, mental and spiritual well being is largely dependent on the access of the citizen to a healthy environment. For a healthy, productive and fulfilling life every individual should have the physical and economic access to a balanced diet, safe drinking water, clean air, sanitation, environmental hygiene, primary health care and education. Access to safe drinking water and a healthy environment should be a fundamental right of every citizen. Citizens of NE India continue to be vulnerable to a double burden of diseases. Traditional diseases such as malaria and cholera, caused by unsafe drinking water and lack of environmental hygiene, have not yet been controlled. In addition, people are now falling prey to modern diseases such as cancer, AIDS and swine flu and stress-related disorders. Basic health and educational facilities in NE India need to be strengthened. The role of public health services must give preventive health care equal emphasis as curative health care. People should be empowered through education and awareness to participate in managing preventive health care related to environmental sanitation and hygiene.

Mechanisms must be put in place to make available to NE India the latest technologies at reasonable cost. The paramount importance of education in effecting social change is recognized. Mainstream education must now realign to promote awareness, attitudes, concerns and skills that will lead to sustainable development in NE India. Basic education, which promotes functional literacy, livelihood skills and understanding of the immediate environment and values of responsible citizenship, is a precondition for sustainable development. Such education must be available to every child as a fundamental right without any discrimination based on economic class, geographical location or cultural identity in NE India. To enhance effectiveness of people's participation in local governance and representatives of community groups must be formed. Appropriate capacity building would enable them to undertake local development activities according to community priorities, monitor project implementation and manage community assets. Effective enforcement is lacking in respect of laws relevant to contemporary concerns and conducive to governance. This calls for a thorough review of laws, elimination of those, which are outmoded, and simplification of the procedures for implementing those, which are relevant. Agricultural and social scenarios need appropriate strategies for development of the NE region.

I alter the focus of the discussion by utilizing social development as the criterion for good government. The HDI used as the measure of social development. While per-capita GDP is correlated with (though does not directly measure) longevity and education, the HDI directly measures per-capita income, longevity and education. Further, while GDP measures productivity taken together, the HDI reflects the types of goods and services that constitute GDP. Wallace (2004) found that according to Amartya Sen, a major contributor to the HDI's development, the HDI is '...the most widely accepted measure of comparative international welfare'. Thus, unlike per-capita GDP, the HDI is able to distinguish between standard of living and income. For example, a country with a very high GDP per-capita such as Kuwait has a lower HDI rank because of a relatively lower level of educational attainment. Uruguay has roughly half the GDP per-capita of Kuwait but has a higher HDI rank. Some of the tribal areas suffer from problems like lack of health care facilities, adequate communication, educational institutions, etc. and poverty is a major problem in those areas. Because of lack of adequate development, these areas have become ideal hunting ground for the rebellious elements to flourish and they have been able to lure away youths into their fold.

Main industries in the region are tea-based, crude oil and natural gas, silk, bamboo and handicrafts. The region heavily forested and has plentiful rainfall. There are beautiful wildlife sanctuaries, tea-estates and mighty rivers like Brahmaputra. The region is home to one-horned rhinoceros, elephants and other endangered wildlife. For security reasons, including inter-tribal tensions, widespread insurgencies and disputed borders with neighbouring China, there are restrictions on foreigners visiting the area, hampering the development of the potentially profitable tourism industry.

Just as economic development has implications for the pace of population growth, so the latter has implications for the rate of economic development. A large population means that there is less to go around per person, so that per capita income is depressed. Negative and positive effects coexist between population growth and economic development. The simplest negative effect comes from the observation that population growth eats away at a given level of resources or income, leaving less per head to go around. The positive effect is that population growth creates economic necessity, which forces the adoption or creation of new ideas that expand carrying capacity.

To educate women has many advantages in the societies. The educated mothers are able to take better care of themselves and their families and children. Education also promotes better antenatal lifestyles and educated parents place greater emphasis on child quality than the child quantity. They prefer, in general, fewer but better educated, healthier and well-nourished children. The education reduces the number of children a couple has by encouraging contraception. It also minimizes the fear of adopting such new technologies and also makes individuals think and realize. Planning is a systematic attempt by the government to analyze the existing situation, sort out the requirements and choose the measures needed to accomplish the selected goals to transform the society deliberately. Singh (2011) gave an example that 'Bihar government has been implementing the programmes and policies available in nice way assuming as prime duty and as a result Bihar achieved annual growth rate of development above 11 % in the financial year 2008-09'. Government should have strong will-power and then implement the programmes and policies available in nice way considering as prime duty and free from all sort of corruptions and discriminations.

In view of wider concept of development, indicators of development now not confined to only per capita income. In addition to it, indicators like 'Gini coefficient of income distribution' and 'Percentage of population below poverty line' are used. The important dimensions of social development like literacy, infant mortality rate, expectation of life and composite indices like Physical Quality of Life (PQLI), HDI and GDI are used. NFHS 1992-93 report shows that total fertility rate reduced as the level of education increased in different religions and for total population.

During the summer monsoon months June-September, Brahmaputra River experiences severe flood, which occurs year after year cause deaths and destruction in the Assam valley and neighbouring areas. Floods are an evil so far as they cause the destruction of lives and properties but floods are potentials resources and blessings. The utilization of surplus floodwater may be for purposes of irrigation, power development, navigation, etc. Such type of utilization achieved comes under flood conservation for beneficial use and thereby eliminating the death and destruction. Rao (1975) suggests that the Brahmaputra has an annual average runoff of 510000 million m³ and a total length of about 2900 km, draining an area 580000² km in Tibet, India and Bangladesh and it occupies 8th rank in a list of 34 major rivers on the globe for their annual average runoff. The Brahmaputra basin is one of the largest river basins in NE India. The enormous water resources of it not fully utilized and usually most of its floodwater is being lost into the Bay of Bengal through Bangladesh after causing enormous damage in Assam and Bangladesh. This, of course, requires implementation of water projects in the entire region for developmental of the area.

NE region is rich in natural and human resources, both of which have not been effectively trapped. Ministry of Development of NE Region is seen as a catalyst in mobilizing focus and efforts in accelerating development in the region. Government of India had established a Ministry dedicated solely for the development of the NE. Allocation of budget yearly for NE is 10 % of total budget of India. This is the region of highest rainfall in India and Cherrapunji is a place in Meghalaya where highest rainfall is recorded in the world each year. Meghalaya is also called 'Abode of Cloud'. Dhar and Shobha (2000) discussed that during the summer monsoon months June - September, the Brahmaputra River experienced severe floods occurring year after year causing death and destruction in the Assam valley and neighbouring Bangladesh. Government should study well about it and then take positive steps to control the death and destruction in the region.

CONCLUDING REMARKS

Being human being and then academician it is our prime duty to improve quality of lives in the NE India for all. This is possible only by reducing the rate of population growth, increasing the per capita income, level of education, expectancy of life and health care, lowering the infant mortality rate, and eliminating discriminations and all sorts of corruptions and environmental pollutions from NE India. Government should make programmes and policies and then implement those policies seriously and nicely to combat the poverty from NE India.

An urge is required to have at most one girl child (with low fecundity) in each family and use of contraception for controlling the rapid growth of population. Encouragement by enhancing the amount of sterilization for both or either spouse in each family is required.

There is need to implement the existing programmes and policies related to anti-poverty and controlling population in nice way and with full will-power in NE India without any discrimination and corruption.

HCR for rural areas in NE India indicates us to take much care of people in the rural area to combat the poverty. Working for both the spouse in each household should promote for the betterment of their income and lives in the NE. Government should bring scheme so that each person gets work for minimum eight months in a year.

Government should also bring scheme to expand education for all, eliminate the environment pollutions, empower women and remove discrimination and corruption from society and restore social justice in NE. Educating women and adults has many advantages in the societies.

The Brahmaputra and all major rivers in this area should interlink with concrete banks as far as possible and practicable in phase manner. A good and scientific excreta disposal system is required in NE. No one should allow disposing faecal contamination in rivers, ponds, lakes or open air.

Special emphasis on tapping the tourism potential under 'Tourism Policy' and increasing the total cultivable area and percentage of cultivable area utilized is required to promote better livelihood in the NE region. Plantation of more trees in NE states should be promoted and law should be made to punish people who cut trees and forests.

All round development needs restoration of peace in NE region and technology needs to be recast for combating terrorism and internal and local miscreants. Positive and fruitful steps are required to stop illegal migrants from neighbouring countries in the NE region.

REFERENCES

1. Bongaarts, J. and Bruce, J. (1999), "Population Growth and Policy Options in the Developing World", Development Bulletin, No. 47 (January).
2. Chakravarty, S. R. and Majumder, A. (2007), "Measuring Human Poverty by Population and Factor Decomposable Indices", The Indian Economic Journal, 55 (1), 67-77.
3. Davies, J., Susanna, S., Anthony, S., and Edward, W. (2006), "The World Distribution of Household Wealth", at <http://www.weourselves.org/reports/widerwdhw-report-2006>.
4. Dhar, O. N. and Shobha, N. (2000), "A Study of Floods in the Brahmaputra Basin in India", International Journal of Climatology, 20 (7), 771 - 781.
5. Goon, A. M. and Chandra, N. K. (1982), "Projection India's Population to 2001 A. D.", The Manpower Journal, XVIII (2), 19 - 42.

6. Jain, A. (1998), "Do Population Policies Matter? Fertility and Politics in Egypt, India, Kenya and Mexico", Population Council, New York.
7. Kenny, C. (2006), "Were People in the Past Poor and Miserable?" KYKLOS, 59 (2), 275 - 306.
8. Milanovic, B. (2006), "Global Income Inequality: What It Is and Why It Matters?", DESA Working Paper No. 26, August 2006, at http://www.un.org/esa/desa/papers/2006/wp26_2006.pdf.
9. Rao, K. L. (1975), "India's Water Wealth", Orient Longmal, New Delhi.
10. Ravallion, M. (1996), "Issues in Measuring Modelling Poverty"; Economic Journal, 106 (438), 1338 - 43.
11. Rowntree, B. S. (1901), "Poverty: A Study of Town Life", Macmillan, London.
12. Singh, R. (2011), "Alleviation of Poverty in India", Journal of Social and Economic Policy, 8 (1), 43 - 53.
13. Vijayapriya, S. and Venmathi, A. (2011), "Gender Division of Labour and Its Impact on Household Work", Journal of Social and Economic Policy, 8 (1), 71 - 77.
14. Wallace, L. (2004), "People in Economics", Finance & Development, 41 (3), 4 - 5.



COMPOSITION OF NON-PERFORMING ASSETS: A COMPARATIVE STUDY OF NATIONALISED BANKS AND SBI AND ITS ASSOCIATES

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ABSTRACT

As the problem of mounting Non-Performing Assets is a burning issue for banks in India, the researcher made an attempt to study the major composition of Non-Performing Assets in India. The Non-Performing Assets is not only adversely affected to the profitability and strength of the banks but also affected to economy at large. Non-Performing Assets can be classified into three categories viz. priority sector, non-priority sector and other. The present study is focused on comparison of each element of composition in nationalized banks and SBI and its associates, using various accounting and statistical techniques.

KEYWORDS

Priority sector, Nationalized banks, Non-Performing Assets, Non-Priority sector, State Bank of India (SBI) and its associates.

INTRODUCTION

The bank plays an important role in the economy of a country by performing its the most important function known as credit creation. The bank creates credit in various forms such as loans and advances, cash credit; bank over draft etc. in this manner the bank creates money supply into the market. The banks give these loans and advances, cash credit, bank over draft to the individuals, firms, companies, government, etc. in this sense the bank plays role of a lender of money and all these parties play the role of borrower. Unfortunately the credit provided by the bank doesn't come back to the bank. This creates bad debts, which is known as Non-performing Assets (referred as NPAs) in the terminology of bank.

For the last a few years the NPA of banks is increasing tremendously. Several steps have been undertaken by the RBI and the government of India to curb the increasing NPA of Indian banks, but these steps have not been proved to be successful. Majority of banks are suffering from the problem of NPA. The increasing NPA worsens the efficiency of the bank and in turn the profitability decreases. Now a day the increasing NPA has become the burning issue in banking sector. This problem is more critical in nationalized banks than in the NBFCs. Both are performing the same function of credit creation, but due to certain reasons the NPA in NBFCs is found less than that in nationalized banks. The fact of NPA is also disclosed by 'CARE' in its' report, as per their survey the overall Gross NPAs of the banks as on 31st March, 2011 stood at Rs.91,410 crore, of which Rs,74,615 crore was on the books of public sector banks, which is approximately 81.63% of the total NPAs.

REVIEW OF LITERATURE

Banerjee, B. and Dan, A.K. (2006) observed that non-performing assets are one of the problem areas which require attention for improvement in the management of PSBs and their profitability. The present scenario shows that the NPAs of PSBs are increasing very speedily. These NPAs cost the economy in several ways. First, the government has to bail out banks with budgetary provisions periodically and ultimately taxpayers bear the cost. Secondly, money borrowed for investment, if not utilized properly, affects the creation of assets and the growth of economy is endangered. The author has suggested several strategic measures to control NPAs of PSBs.

Gupta, S. and Kumar, S. (2004) analyzed that redeeming features of banking sector reforms is the continuing fall in gross and net NPAs as a proportion of total assets for all bank groups except private sector banks. Huge backlog of NPAs needs resolution of the earliest as otherwise it can weaken the foundation of entire financial system.

Jatna, Renu (2009) reviewed that the root cause of increasing NPAs in public sector banks is malfunctioning of the banks. This malfunctioning led to the setting up of Narasimham Committee which, in fact, identified the NPA as one of the possible effects of the malfunctioning of PSBs. According to RBI report, 1999 it was stated that the reduction in NPA should be treated as a 'national priority'.

Krishnamurthi, C.V. (2000) states that the mounting NPAs is harmful for the public sector banks. It is seen that the gross NPAs of PSBs are rising very heavily. In banks the NPA curves vary between a gross of Rs.39,253 crores in 1992-'93 to Rs.45,653 crores in 1997-'98.

IMPORTANCE OF THE STUDY

As the NPA is burning issue for commercial banks in India, the present study will be helpful to understand the major composition of NPAs in Indian banks. Moreover, the study will also be helpful to compare the composition of nationalized banks and SBI and its associates. The study focuses on understanding of the situation of NPAs in nationalized banks of India and SBI and its' associates. This is helpful to understand how much critical the problem of NPA is in Indian banking sector? The researcher gives valuable suggestions to control the problem of NPAs in Indian banking sector.

OBJECTIVES OF THE STUDY

- 1) To understand the major composition of NPAs in Indian banks.
- 2) To compare the composition of nationalized banks with SBI and its associates.
- 3) To analyze the trend on various components of NPAs in Indian banks.

RESEARCH METHODOLOGY

The nature of present study is analytical and exploratory. The researcher has used secondary data, collected from the website of RBI, for the 10 years i.e. from 2001-02 to 2010-11. The present study is based on comparison of composition of NPAs in nationalized banks (19) and SBI and its associates (6) . To analyze the

data proportion (ratio of specific component to total NPAs) is used and further it is analysed with the help of F-test two samples for variances, using Microsoft Excel.

DATA COLLECTION

To conduct the present research, the researcher has collected required information from the RBI website, as it is authentic source to collect the information related to banking sector. The required data tabulated as below to facilitate the study:

TABLE – 1: A TABLE SHOWING COMPOSITION OF TOTAL NPAs

year	Nationalized Banks [Rs. in Crores]				SBI and its' Associates [Rs. in Crores]				
	As on 31 st March	Priority sector	Non-priority sector	Others	Total	Priority sector	Non-priority sector	Others	Total
2002		16,173	18,742	413	35,328	8,977	9,628	490	19,095
2003		16,886	18,402	561	35,849	8,053	8,379	526	16,958
2004		16,705	17,895	390	34,990	7,136	7,803	220	15,159
2005		16,381	16,225	283	32,888	7,017	7,624	168	14,808
2006		15,124	12,845	216	28,185	7,250	5,819	125	13,193
2007		15,779	9,965	302	26,046	7,175	5,193	188	12,556
2008		16,385	7,941	202	24,528	8,902	6,222	97	15,220
2009		15,871	10,001	297	26,169	8,447	9,250	177	17,874
2010		19,908	15,283	280	35,470	10,940	10,646	244	21,831
2011		25,678	16,957	273	42,907	15,567	12,567	6	28,140

Source: RBI websites

TABLE – 2: A TABLE SHOWING PROPORTION OF EACH ELEMENT OF COMPOSITION OF NPAs TO TOTAL NPAs

year	Nationalized Banks				SBI and its' Associates				
	As on 31 st March	Priority sector %	Non-priority sector %	Others %	Total %	Priority sector %	Non-priority sector %	Others %	Total %
2002		45.78	53.05	1.17	100	47.01	50.42	2.57	100
2003		47.10	51.33	1.57	100	47.49	49.41	3.10	100
2004		47.74	51.14	1.12	100	47.07	51.48	1.45	100
2005		49.81	49.33	0.86	100	47.39	51.48	1.13	100
2006		53.66	45.58	0.76	100	54.95	44.10	0.95	100
2007		60.58	38.26	1.16	100	57.14	41.36	1.50	100
2008		66.80	32.38	0.82	100	58.49	40.88	0.63	100
2009		60.65	38.22	1.13	100	47.26	51.75	0.99	100
2010		56.12	43.09	0.79	100	50.11	48.77	1.12	100
2011		59.84	39.52	0.64	100	55.32	44.66	0.02	100

Source: RBI websites and compiled from Table no. 1

ANALYSIS AND INTERPRETATION

1) COMPARISON OF PRIORITY SECTOR NPAs

Null hypothesis (H₀): There is no significant difference between proportion of priority sector NPAs to total NPAs in nationalized banks and that of SBI and its associates.

TABLE- 3: A TABLE SHOWING COMPARATIVE ANALYSIS OF PRIORITY SECTOR NPAs IN NATIONALIZED BANKS AND THAT OF SBI AND ITS' ASSOCIATES

Year	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Nationalized Banks (%)	45.78	47.1	47.74	49.81	53.66	60.58	66.8	60.65	56.12	59.84
SBI and its' Associates (%)	47.01	47.49	47.07	47.39	54.95	57.14	58.49	47.26	50.11	55.32

TABLE- 4: F-TEST TWO-SAMPLE FOR VARIANCES

	Variable 1	Variable 2
Mean	54.808	51.223
Variance	50.60755	22.11825
Observations	10	10
Df	9	9
F	2.288045	
P(F<=f) one-tail	0.116732	
F Critical one-tail	3.178893	

As the value of 'F' calculation is less than the critical value of 'F', the null hypothesis H₀ may be accepted. So, the researcher may state that there is no significant difference between proportion of priority sector NPAs to total NPAs in nationalized banks and that of SBI and its associates.

2) COMPARISON OF NON-PRIORITY SECTOR NPAs

Null hypothesis (H₀): There is no significant difference between proportion of non-priority sector NPAs to total NPAs in nationalized banks and that of SBI and its associates.

TABLE- 5: A TABLE SHOWING COMPARATIVE ANALYSIS OF NON-PRIORITY SECTOR NPAs IN NATIONALIZED BANKS AND THAT OF SBI AND ITS' ASSOCIATES

Year	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Nationalized Banks (%)	53.05	51.33	51.14	49.33	45.58	38.26	32.38	38.22	43.09	39.52
SBI and its' Associates (%)	50.42	49.41	51.48	51.48	44.10	41.36	40.88	51.75	48.77	44.66

TABLE- 6: F-TEST TWO-SAMPLE FOR VARIANCES

	Variable 1	Variable 2
Mean	44.19	47.431
Variance	48.82602	18.29252
Observations	10	10
Df	9	9
F	2.669179	
P(F<=f) one-tail	0.079879	
F Critical one-tail	3.178893	

As the value of 'F' calculation is less than the critical value of 'F', the null hypothesis H_0 may be accepted. So, the researcher may state that there is no significant difference between proportion of non-priority sector NPAs to total NPAs in nationalized banks and that of SBI and its associates.

3) COMPARISON OF OTHER NPAs

Null hypothesis (H_0): There is no significant difference between proportion of other NPAs to total NPAs in nationalized banks and that of SBI and its associates.

TABLE- 7: A TABLE SHOWING COMPARATIVE ANALYSIS OF OTHER NPAs IN NATIONALIZED BANKS AND THAT OF SBI AND ITS' ASSOCIATES

Year	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Nationalized Banks (%)	1.17	1.57	1.12	0.86	0.76	1.16	0.82	1.13	0.79	0.64
SBI and its' Associates (%)	2.57	3.10	1.45	1.13	0.95	1.50	0.63	0.99	1.12	0.02

TABLE- 8: F-TEST TWO-SAMPLE FOR VARIANCES

	Variable 1	Variable 2
Mean	1.002	1.346
Variance	0.077107	0.806827
Observations	10	10
Df	9	9
F	0.095568	
P(F<=f) one-tail	0.000875	
F Critical one-tail	0.314575	

As the value of 'F' calculation is less than the critical value of 'F', the null hypothesis H_0 may be accepted. So, the researcher may state that there is no significant difference between proportion of other sector NPAs to total NPAs in nationalized banks and that of SBI and its associates.

FINDINGS

The study showed that in Indian banking sector, the situation of NPAs shows the increasing trend. When we compared the NPAs of priority sector, non-priority sector and other sector of nationalized banks and SBI and its' associates, it was found that there is no significant difference in the NPAs of these sectors. The proportion of all components of NPAs in nationalized banks and SBI and its' associates shows similar situation.

SUGGESTIONS TO CURB NPAs

The problem of NPA is spreading like poison in Indian banking sector. It is harmful not only to the banks but also to the whole economy. It is highly required that some measures must be undertaken to curb the problem of NPAs. The researcher has given following suggestions to overcome the problem of NPAs.

- The bank should perform an in-depth investigation about the creditworthiness of the borrower .
- The bank must take regular follow up of the borrower after sanctioning the loan.
- The bank should form a special recovery cell to recover the outstanding amount of loan.
- The banks should establish an agency which is assigned the duty to investigate about the creditworthiness of the borrowers.
- The bank should start some schemes under which the defaulters are given a special interest discount if they make the prompt repayment of the outstanding amount.

CONCLUSION

From the analysis of all three composition i.e. priority sector, non-priority sector and other NPAs it is clear that the hypothesis for all 3 analytical part has been accepted. So, the researcher may state that there is no significant difference between various compositions of NPAs to total NPAs in nationalized banks and SBI and its associates. Further, the problem of mounting NPAs is severe for the economy; the regulatory agencies as well as the banks must take some remedial actions to solve the problem.

REFERENCES

1. Banerjee, B. and Dan, A.K. (2006), "Management of Non-performing Advances in the Public Sector Banks in India", New Trends in Corporate Reporting (Edited Book), RBSA Publishers, Jaipur, pp. 115-137
2. Cheema, Ajeet Singh (2012), "SARFAESI Act: Delaying Tactics Used by the Borrowers", Bank Quest, Vol. 83, no. 1, Jan.-March, 2012, pp. 43-51.
3. Desai, Vasant (2010), Bank Management, Himalaya Publishing House Pvt. Ltd., New Delhi
4. Gupta, S. and Kumar, S. (2004), "Dimensions and Prospectus of Non-performing Assets: Challenges Before the Banking Sector Reforms in the New Millennium", Edited Book Banking in the New Millennium, pp. 279-291.
5. Jatna, Renu (2009), "Impact of NPAs on Profitability of Banks", Indian Journal of Accounting, Vol. XXXIX, no. 2, June, 2009, pp. 21-27
6. Kothari, C.R. (2006), Research Methodology: Methods and Techniques, New Age International Publishers, New Delhi
7. Krishnamurthi, C.V. (2000), "Non-performing Assets- Banks and Financial Institutions: NPAs Plaguing National Economy", Southern Economist, Vol. 38, no. 5, July, 2000, pp. 19-20

A CRITICAL EVALUATION OF PERFORMANCE OF MNREGA

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ABSTRACT

MNERGA is the most ambitious project of the Government of India. The whole government mechanism is involved in its implementation. The vidarbha region is socially and economically backward. The successful implementation will lead to the up liftment of the people in this region. MNERGA can contribute towards the employment of people and improving infrastructure especially for agriculture. This paper focuses on MNERGA. The data is collected from few talukas of the Nagpur district so as to give universality to the conclusions. The paper concentrates on understanding the process of implementing the MNERGA. The beneficiaries associated with the MNERGA, the success of MNERGA in terms of income, no of days for which income is available, time of work, nature of work. The paper concludes with the recommendations which will facilitate better implementation of MNERGA.

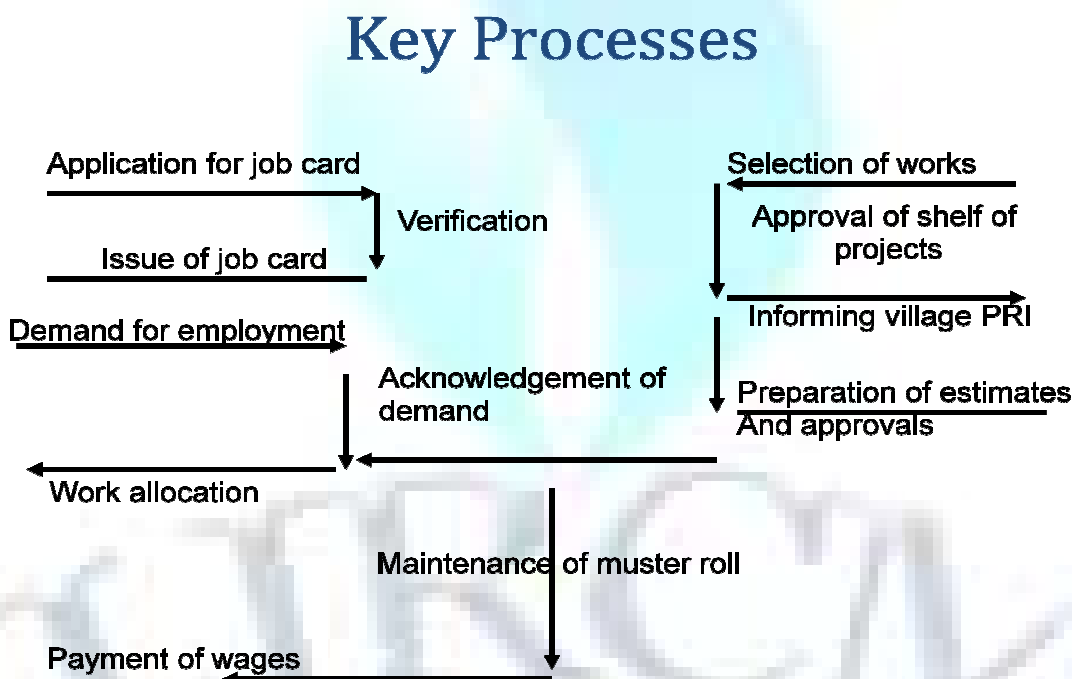
KEYWORDS

MNERGA, Problems in MNERGA.

INTRODUCTION

Mahatma Gandhi National Rural Employment Guarantee Act (MGNREGA) is an Indian job guarantee scheme, enacted by legislation on August 25, 2005. The scheme provides a legal guarantee for one hundred days of employment in every financial year to adult members of any rural household willing to do public work-related unskilled manual work at the statutory wages. This act was introduced with an aim of improving the purchasing power of the rural people, primarily semi or un-skilled work to people living in rural India, whether or not they are below poverty line.

FIGURE NO. 1: KEY PROCESS IN IMPLEMENTING MNERGA



Source: IMPLEMENTING NREGA, Ministry of rural development, New Delhi.

OBJECTIVES OF THE STUDY

- 1) To Study working of MNREGA in the available study area.
- 2) To find out the causes responsible for ineffective working of MNERGA.
- 3) To suggest the effective measures for better implementation of MNERGA.

PERIOD OF STUDY

1st June 2011 to 15th January 2012

LIMITATIONS

This research work is carried only in Nagpur District.

NEED OF STUDY

MNERGA is one of the most ambitious policies of the central government. The hierarchy working of MNERGA starts with the central Government, then state government and is implemented through local government viz ZP and gram panchyats. MNERGA started with an initial outlay of \$2.5bn (Rs 11300cr) in year 2006-07.

The funding has considerably been increased as shown in the table below:

Year	Total Outlay(TO)	Wage Expenditure(Percent of TO)
2006-07	\$2.5bn	66
2007-08	\$2.6bn	68
2008-09	\$6.6bn	67
2009-10	\$8.68bn	70
2010-11	\$8.91bn	71

Source:- en.wikipedia.org

With the ever increasing funding it becomes vital to study the effectiveness of working of MNERGA. The findings of the study will help in improving the implementations and functioning of the scheme. It will help to understand the weakness in the implementation of MNERGA.

STUDY AREA

This study is carried out in Nagpur district. The MNERGA works through gram panchyats. The population of Nagpur District according to 2011 census is 23003179. The density of population per square kilometre has increased from 411 in 2001 to 470 in 2011. In 2001, literacy rate for males was 90.18 percent and that of females was 77.42 percent. This number is improved significantly in last decade (2001-2011) and now the male literacy percentage stands at 93.76 and that of female stands at 85.07 percent. There are total 13 gram panchyats in Nagpur district. These grampanchyats along with the Zila parishad have a sole responsibility of implementing the MNERGA.

MNERGA IN NAGPUR DISTRICT

- Employment provided to households: 0.00797 Lakh
- Persons :- 1.28 Lakh
- SCs: - 0.53(41.52%)
- STs: - 0.23(17.98%)
- Women: - 0.48(37.15%)
- Others: - 0.52(40.5%)
- Total Fund :- Rs. 19.97 Crore
- Expenditure :- 1.44 Crore
- Total Works taken up : 61
- Works Completed : 3
- Works in Progress: 58

Source: - <http://www.nareaga.ac.in> dated 30/01/2012

RESEARCH METHODOLOGY

This research work is exploratory in nature. The data is collected by both the sources i.e. primary and secondary. Out of studied 13 talukas, the primary data was collected from 5 talukas as under

TABLE NO. 1: PRIMARY DATA

Talukas	Respondents
Nagpur (rural)	30
Hingna	30
Kamptee	30
Kalmeshwar	30
Katol	30
Total	150

Source: primary data

The selection of these respondents was made randomly. The questionnaire was constructed in local language i.e. Marathi. The secondary sources include books, websites etc. During the course of data collection the concentration was made on various critical points regarding MNERGA viz Scope Of Activities, Transparency, Time of Employment, Work Conducted, Awareness of the programme, Problems in implementation.

COLLECTION AND ANALYSIS OF DATA

TABLE NO. 2: PROFILE OF RESPONDENTS

Particulars		Number	Percentage
Gender	Male	110	73.33
	Female	40	26.67
Average age Respondents	20-30	25	17
	30-35	29	19
	35-40	68	45
	40-45	25	17
	45 & Above	03	02
Income level of respondents	0-2000	45	30
	2000-3000	29	19
	3000-4000	56	37
	4000-5000	15	10
	5000- and above	05	04

Source: Primary data

TABLE NO. 3: WORK SCHEDULE

Particulars		Number	Percentage
No. of days worked	0-20	29	20
	20-40	25	17
	40-60	81	54
	60-80	10	06
	80-100	05	03
Time of Employment	Jan- March	45	30
	April – June	29	19
	July-September	67	45
	October- December	09	06

Source: - Primary data

TABLE NO. 4: WORK CARRIED OUT THROUGH MNERGA

Particulars	Rural Activity	Flood control	Water conservation and Harvesting	Renovation of traditional water bodies	Drought proofing	Irrigation facilities to SC & ST	Irrigation canals	Land Development	Other work	Total
No. of Respondents	11	15	18	44	03	21	20	08	10	150

Source: - Primary data

TABLE NO. 5: FACILITIES AT WORK PLACE

Satisfied	YES	NO	Total
No. of Respondents	38	112	150

Source: - Primary data

The facilities at work place were found wanting, however when asked about the facilities at work place respondents gave the following response. Particularly the women respondents were not satisfied with the facilities they are having at work place.

TABLE NO. 6: AWARENESS OF PROGRAMME

Particulars	Concept of MNERGA	Employment generated	Wages	Benefits	Total
No. of Respondents	16	25	85	24	150

Source: - Primary data

Out of studied 150 respondents 16 respondents have an idea about the concept of MNERGA, 25 persons were aware about the fact that total 100 days of employment is available through MNERGA, 85 respondents were aware that the remuneration per day is 120 and 24 respondents were actually having the knowledge of MNERGA.

TABLE NO. 7: PROBLEMS REGARDING IMPLEMENTATION OF MNERGA

Particulars	Issues of Job card	Selection of work	Execution of work	Measurement of work done	Issues relating to the payment	Total
No. of Respondents	31	35	49	19	16	150

Source: - Primary data

TABLE NO. 8: OTHER PROBLEMS

Particulars	Transparency	Fake attendance	tampering records	Grievance redressal mechanisms	Social Audit	Total
No. of Respondents	21	55	49	10	15	150

Source: - Primary data

TABLE NO. 9: MIGRATION OF WORKERS

Particulars	YES	NO	Total
No. of Respondents	17	113	130

Source: - Primary data

DISCUSSION

- 1) The MNERGA in Nagpur District is giving employment to 1.28 lakh people.
- 2) The employment generation process is more concentrated in months of April to September. These periods are involved in agriculture production so the labours are keener to work in MNERGA, the big farmers on the other hand cannot pay the wages in excess Rs. 120 and if they pay these wage rates their budget is suffering.
- 3) There is favoritism in allotting job cards to the people. The people in local management committee are giving the employment to their supporters.
- 4) The administration people are not giving the extra wages if the place of work is beyond 5 kms of radius of people.
- 5) The basic facilities at the work place are not enough. The women workers are suffering the most.
- 6) Maximum respondents were not aware about the benefits of MNERGA, they were only aware of the wages they are receiving.
- 7) It was seen during the course of research that people have not availed employment for 100 days.
- 8) The problems like transparency, fake attendance, and special concession are prevailing in implementation of MNERGA.
- 9) The MNERGA has not stopped the migration of workers to main city Nagpur because of better wages and living conditions.

RECOMMENDATIONS

- 1) There is need of full time mechanism in implementation of MNERGA. This mechanism should be made available for each district.
- 2) The work should be monitored by proper civil engineers who certify the work, unless it is approved by him the work should not be treated as complete.
- 3) The proper training programme must be conducted through experts to all the personnel included in execution of MNERGA.
- 4) The effort must be there to create assets through MNERGA; right now we are just trying to maintain fixed assets.
- 5) In order to ensure transparency in the implementation of MNERGA works the Right to Information (RTI) should be used as effective weapon/check to curb malpractices/ corrupt tendencies.
- 6) The social audit must be conducted every now and then preferably once in a financial year.
- 7) There should be free toll number at head office of MNERGA at each district level, which should be printed on each job card. This toll number should address all the complaints against the officials. The necessary action must be taken within 24 hours of receiving the complaint.
- 8) There should be flexibility in MNERGA. It should be flexible according to the requirements of each district. For this purpose there must be proper coordination between local administration, state government and central government.
- 9) There is need of including various policies and practices of governments in the curriculum of the universities. The students should be made compulsory to complete internship on the implementation of the policies. This will create awareness about the policies of government and will result in minimizing the problems of implementation.
- 10) The work of MNERGA should be concentrated in non agriculture work days so that proper labour will be available for agriculture purpose.
- 11) The favoritism in allocation of job cards and work should be avoided.
- 12) The agriculture policies and MNERGA should be integrated so as to give efficient results.

CONCLUSION

Through this study, the researcher has tried to study the implementation of MNERGA one of the most ambitious project of the Government of India in Nagpur District. The need of full time proper mechanism in every aspect of implementation of MNERGA as shown in the figure at introduction (key process of implementation of NERGA) is necessary. There should be inter linkage of various policies of Government with MNERGA for proper implementation. For awareness of MNERGA it should be included in curriculum of universities along with other policies of the Government.

REFERENCES

1. Agarwal, Harsh (2010), "A Review of National Rural Employment Guarantee Act", available at www.policyproposalforindia.com, accessed on 29-08-2011.
2. Annaluru, Rajeev, "NREGA – A Beacon of Hope for Rural India", NREGA Article, available on <http://data.ashanet.org/files/Chapters/MIT/Projects/NREGA/> accessed on 26-09-2011.
3. Datt, Ruddar (2008), "Dismal Experience of NREGA: Lessons for the Future", Mainstream, Vol. XLVI, No. 17, April.
4. Dimitri B. Papadimitriou (2008), "Promoting Equality through an Employment of Last Resort Policy", Working Paper No. 545, The Levy Economics Institute of Bard College Blithewood, Annandale-on-Hudson, NY 12504 (USA).
5. Dreze, Jean, Reetika Khera and Siddharth (2007), "NREGA in Orissa: Ten Loopholes and the Silver Lining", Interim Survey Report, October.
6. Ghosh, Jayati (2006), "The 'Right to Work' and Recent Legislation in India", Social Scientist, Vol. 34, No. 2, January-February.
7. Gopi Nath Ghosh "Social Audit and NREGA Records", Yojna 2008 p 19.
8. <http://www.nareaga.ac.in>
9. Jha, Raghendra, (2010), "Targeting Accuracy of the NREG: Evidence from Madhya Pradesh and Tamil Nadu", ASARC Working Paper 2010/19.
10. John Moolakkattu, "National Rural Employment Guarantee Act": Issues and Implications, Vol 30 April-June 2008 pp 6-9
11. Pankaj, A. and R. Tankha (2010), "Empowerment Effects of the NREGS on Women Workers: A Study in Four States", Economic and Political Weekly, Vol.45, No.30.
12. Pankaj, Ashok K. (2008), "Processes, Institutions and Mechanisms of Implementation of NREGA: Impact Assessment of Bihar and Jharkhand", Institute for Human Development, New Delhi, November.

WEAK-FORM OF EFFICIENCY IN CHINESE STOCK MARKET

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ABSTRACT

Stock prices fully reflect all available information in Efficient Market Hypothesis (EMH). The Market here is so rational and random. The historic prices are not useful in predicting the future price movements in the weak form of efficiency. It is difficult to form trading strategy for abnormal returns. China, an emerging market is in the limelight because of her spectacular economic growth in the recent years. It is generally believed that emerging markets are less efficient, though; the empirical evidences are for and against. After 2003 almost all emerging markets witnessed tremendous growth, including returns in the stock market. In this paper an attempt is made to analyze the weak form of efficiency in the emerging market, Chinese stock market. The study involving the time period of January 2004 to February 2012, reveals that the stock returns are independent of each other. This is tested using serial correlation tests for low degree of serial correlation in the market return. Ljung – Box Q (LBQ) Statistics, Augmented Dickey Fuller (ADF) test, Run test and Phillips-Perron (PP) tests are used for checking the serial correlation coefficient and the market is found to be in efficient form. This is in line with some of earlier finding.

KEYWORDS

Auto Correlation, Efficient Market Hypothesis, Random Walk, Serial Correlation, Weak Form of Efficiency.

INTRODUCTION

Stock markets behave in rational way and the stock prices fully reflect all available information, in efficient market hypothesis (EMH). Stock prices adjust to the new information as and when that information is available¹⁹. In weak-form of efficient market, price changes are random and past price changes are not useful in forecasting future price changes after adjusting for transactions costs. In these markets, successive returns are independent of each other and follow a random walk (Fama 1965, 1970)²⁰. It is generally believed that emerging markets are less efficient, though, the empirical evidences are for and against this belief. Because of this property, there occurs no anomaly in any form in the market which makes it difficult to form trading strategy for abnormal returns. In emerging market studies, many have tested the efficiency of the markets during various time periods and come out with stating, either a stock market is in the weak form or not. But no one could conclude that a particular market is (in) efficient for its entire life period. After 2003 almost all emerging markets witnessed tremendous growth, including returns in the stock market. China, an emerging market is in the limelight because of her spectacular economic growth in the recent years. In this paper an attempt is made to analyze the weak form of efficiency in the emerging market, Chinese stock market. The basic objective here is to assess whether stock prices in the Chinese stock market move in random, or, the Chinese stock market mechanism is efficient. This is to empirically test whether the weak form of efficient market hypothesis holds good in Chinese stock market.

LITERATURE REVIEW

Weak form of efficiency is found in developing and emerging markets like the Kuala Lumpur Stock Exchange (Branes, 1986), Asian markets (Chan, Gup and Pan, 1992), the Nairobi Stock Exchange (Dickinson and Muragu, 1999), the Latin American countries market (Ojah and Karemera, 1999), seven European emerging stocks markets (Hassan et al. 2006), Botswana (Akinkugbe, 2005), Russia (Abrosimova et al., 2005) and The United Arab Emirates (Moustafa, 2004). Indian stock market exhibits weak form of efficiency over varying time periods (Rao and Mukherjee, 1971; Dhankar, 1991; Mittal, 1995; Mishra, 2009; and Gupta and Basu 2007). weak form of efficiency in Chinese market is claimed by Liu *et al.* (1997), Laurence *et al.* (1997), and Lima and Tabak (2004).

At the same time inefficiency in weak-forms are reported across the stock market like Korea and Taiwan (Cheung, Wong and Ho, 1993), 19 emerging markets (Claessens, Dasgupta and Glen, 1995; Harvey, 1994), Saudi Financial market (Nourrendine Kababa, 1998), the Johannesburg stock Exchange (Roux and Gilberson, 1978; Poshakwale S, 1996), Bangladesh (Islam & Khaled, 2005) and Turkey (Tas and Dursonoglu, 2005). In India (Chaudhary, 1991; Kulkarni, 1978; Subramanian, 1993) and in china (Mookerjee and Yu, 1999 and Ma, 2004) there are few studies which did not support the weak efficiency hypothesis. In all these studies

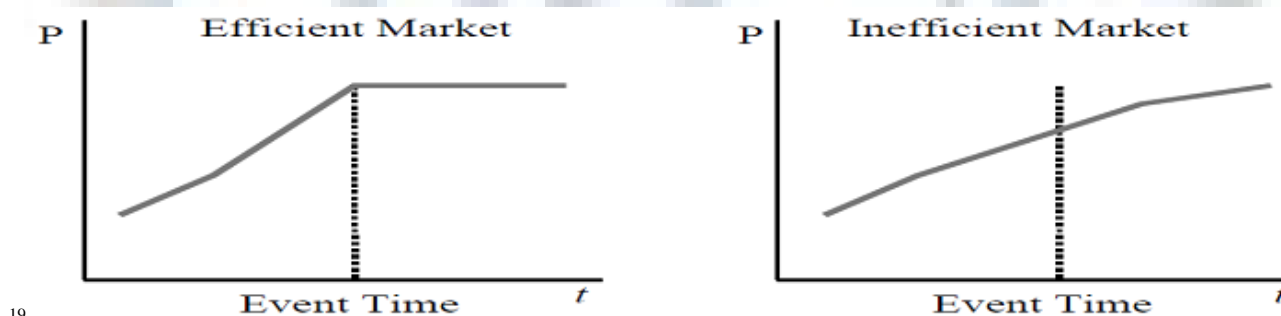


FIG. 1: MARKET REACTION TO AN EVENT

The Above figures shows the situation of market, in case of an event, if the market is efficient, stock prices immediately reflect effect of new event, but it will take some time for the prices to adjust for new information, if the market is not efficient.

²⁰ Fama (1970) defined efficient market as a market with large numbers of rational profit maximizing individuals actively competing with each other and doing attempts to predict future market values of individual securities, and where all important relevant information is almost freely available to all investors.

whether the stock market is in the weak form or not is being analyzed for a specific time frame. For the recent period, the stock market mechanism of China is being tested for efficiency in this study to add further literature in this direction.

METHODOLOGY

To test the weak form of efficiency in the Chinese stock market, the monthly market index sse-50, which is a weight adjusted composite price index, considering 50 largest stocks of good liquidity and representativeness by scientific and objective method, is considered. This reflects the complete picture of good quality large enterprises, which are most influential in Shanghai security market. These data are obtained from the shanghai stock exchange’s official website for the period January 2004 to Feb 2012, since the index was introduced in December 2003. The objective of the study is to identify observable interdependence and non-randomness in the market return. This could be tested for low degree of serial correlation in the market return.

This low degree of serial correlation in index returns suggest that stock index prices in the markets violates weak form of efficient market hypothesis (EMH). The computation of index return is done by calculating the percentage value of log variation in stock index.

Autocorrelation, otherwise called serial correlation test is the tool for checking randomness. It is a measure for testing the dependence between the members of series of observation in time order. This is widely used to notice any perceptible trend in index price movements. Serial correlation test measures whether the correlation coefficient between a series of returns and lagged returns in the same series, are significantly different from zero. A serial correlation of zero implies that price changes in consecutive time periods are not correlated and future price changes cannot be predicted from the past data. A significant positive serial correlation could be viewed as evidence of price momentum in markets. Serial correlation coefficients provide a measure of relationship between value of random variable ‘X’, in time ‘t’ and its value k-periods earlier.

Both parametric and non parametric tests could be used calculate the Serial correlation coefficient. Ljung – Box Q (LBQ) Statistics, Augmented Dickey Fuller (ADF) test are some of the parametric methods of calculating the serial correlation coefficient. Run test and Phillips-Perron (PP) tests are non parametric tests used for the calculation of serial correlation coefficient. LBQ Statistics measures correlation between index changes in consecutive time period. LBQ is more powerful in small sample properties with a chi-square distribution of m degree of freedom. If the Q statistic is significant, then the series can be identified as random in nature. The LBQ is calculated as,

$$Q = n(n+2) \sum_{k=1}^h \frac{\hat{\rho}_k^2}{n-k} \dots\dots\dots(1)$$

The Runs Test for Randomness is a non parametric test which does not require returns to be normally distributed. A ‘run’ is defined as “a succession of identical symbols which are followed or preceded by different symbols or no symbol at all”. When the expected number of run is significantly different from the observed number of runs, there is no randomness the series. The expected number of runs is represented by:

$$E(r) = \frac{n + 2n_a n_b}{n} \dots\dots\dots(2)$$

Where n represents the number of observations, na and nb respectively represent observations above and below the sample mean (or median), and r represents the observed number of runs.

The random walk nature of stock prices can also be tested by Unit Root Test²¹. A series with unit root is said to be non-stationary indicating nonrandom walk. The most commonly used test to examine the existence of a unit root is Augmented Dickey-Fuller (ADF) test which includes additional lagged difference terms. ADF is a modified Dickey-Fuller (DF) test with a parametric correction for higher order correlation to take care of possible serial correlation in the error terms. In ADF the following regression equation is estimated with u_t as pure white noise error term.

$$\Delta Y_t = \beta_1 + \beta_2 + \delta Y_{t-1} + \sum_{i=1}^m \alpha_i Y_{t-i} + u_t \dots\dots\dots(3)$$

Phillips-Perron (PP) test is an AR(1) process which takes care of the serial correlation in the error terms in the nonparametric statistical method (Gujarati, 1988), As a condition for a random walk, the ADF and PP unit root tests if fails to reject the presence of unit roots, then there is no evidence against weak form of efficiency.

EMPIRICAL ANALYSIS

The descriptive analysis shows that the return on stock index price of sse-50, ranges between +3.26 to -4.14 with a mean and standard deviation of 0.08 and 1.30 respectively (Fig.2). The stock index prices are ranging between 4627 and 731 with a mean of 1822. From the Box-Ljung test, (Table. 1) except for the first lag, the LBQ statistics are significant. From 10th lag onwards significant negative serial correlation is present and as lag length increases, the significance level also increases. This indicates that the future prices are not dependent on historic prices and they are in random. So the market is in the weak form of efficiency.

²¹ A random walk is a special case of a unit root process.

FIG. 2: DESCRIPTIVE STATISTICS

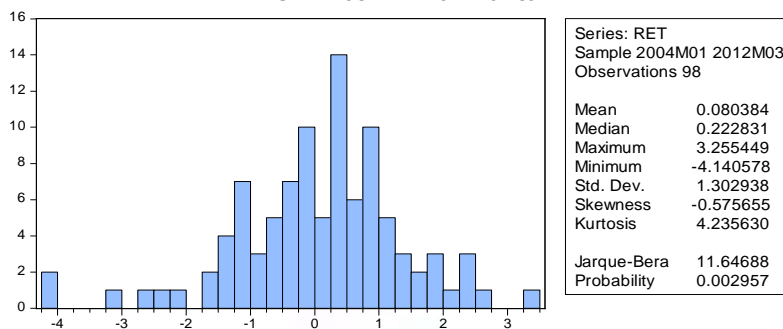


TABLE 1: AUTOCORRELATIONS - SERIES:RET

Lag	Autocorrelation	Box-Ljung Statistic	Sig.
1	.128	1.658	Not sig.
2	.189	5.286	***
3	.131	7.069	***
4	.307	16.871	*
5	.088	17.679	*
6	.000	17.679	*
7	.098	18.710	*
8	.032	18.818	**
9	.009	18.826	**
10	-.032	18.942	**
11	-.037	19.095	***
12	-.142	21.389	**
13	-.229	27.422	**
14	-.285	36.891	*
15	.027	36.979	*
16	-.082	37.780	*

*, **, *** are significance at 1%, 5% and 10% respectively

The t values are significant at level and at difference in the ADF test and PP test (Table. 2). From the run test the number of runs is significantly different from observed number of runs (Table.3). So the return series is in random, which in line with the LBQ test. The market is in the weak form of efficiency.

TABLE 2: AUGMENTED DICKEY-FULLER & PHILLIPS-PERRON TEST STATISTIC

	Augmented Dickey-Fuller test		Phillips-Perron test	
	t-Statistic	Prob.	t-Statistic	Prob.
Level	-2.900102	0.0491**	-8.825684	0.0000*
Difference	-10.98603	0.0000*	-55.23802	0.0001*

*, **, *** are significance at 1%, 5% and 10% respectively

TABLE 3: RUNS TEST

Particulars	
Test Value (Median)	.2228
Cases < Test Value	49
Cases >= Test Value	49
Total Cases	98
Number of Runs	38
Z	-2.437
Asymp. Sig. (2-tailed)	.015 **

*, **, *** are significance at 1%, 5% and 10% respectively

CONCLUSION

Weak form of efficient market which behaves in rational way usually has its market return in random. This is because the information is fully reflected in the stock prices and the successive stock returns are independent of each other. Depending on the time frame the market may be either in the weak form of efficiency or not. During late 1990's and early 2000's studies claim the Chinese stock market to be in the weak form of efficiency and some to be not in the weak form. But majority of the studies claim the market to be efficient. In the present study which involves the time period of January 2004 to February 2012 reveals that the stock returns are independent of each other. This is tested using serial correlation tests. So the market is in efficient form. This is in line with the other earlier finding of Liu *et al.* (1997), Laurence *et al.* (1997) and Lima and Tabak (2004). The price discovery mechanism is fully efficient. The investors could not formulate any investment strategy for abnormal returns in the market. The historic prices are not useful in predicting the future price movements. This could be tested for seasonal anomaly in the market return. Further study could be done on the calendar anomaly in the Chinese market so as to reconfirm that the

market is in the weak form of efficiency. Also the time periods of study includes the financial crisis period of 2008. The impact of this crisis is felt all over the globe. Its impact on the efficiency front is not discussed in this paper. Elaborate study could be done on the changes in the efficiency of the market because of the crisis.

REFERENCES

1. Abrosimova, Natalia, Dissanaïke, Gishan and Linowski, Dirk (2002) Testing Weak-Form Efficiency of the Russian Stock Market, EFA 2002 Berlin Meetings Presented Paper.
2. Akinkugbe. O (2005), Efficiency in Botswana Stock Exchange: An Empirical Analysis The Business Review
3. Branes Paul, (1986), "Thin trading and stock market efficiency: A case of the Kuala Lumpur Stock Exchange", Journal of Business Finance & Accounting, volume 13(4) winter, pp. 609- 617.
4. Chan Kam C., Gup Benton E., and Pan Ming-shiun, (1992) , "An Empirical Analysis of Stock Prices in Major Asian Markets and United States", The financial Review, vol-27, no-2, May1992, pp-289-307.
5. Chaudhuri S. K. (1991), Short-run Share Price Behaviour: New Evidence on Weak Form of Market Efficiency, Vikalpa, Vol. 16, No 4, October-December.
6. Cheung, Yan –Leung, Wong Kie-Ann, and Ho Yan-Ki, (1993), "The pricing of risky assets in two emerging Asian markets- Korea and Taiwan", Applied Financial Economics 3, issue 4, December, pp.315-324.
7. Claessens Stijin, Dasgupta Susmita, and Glen Jack, (1995); "Return behaviour in emerging Stock Market", The world Bank economic Review, vol.9, no.1, Pp. 131-151.
8. Dhankar RS (1991), Empirical Tests of the Efficiency of Indian Stock Market, Journal of Financial Management and Analysis.
9. Dickinson and Muragu, (1994), "Market Efficiency in Developing Countries: A case study of the Nairobi Stock Exchange", Journal of Business Finance & Accounting, volume 21(1) January, pp. 133-150.
10. Fama, E. (1965), "The behavior of Stock Market Prices", Journal of Business, vol 38, p.34-105.
11. Fama, E. F. (1970): "Efficient Capital Markets: A Review of Theory and Empirical Work". Journal of Finance, vol. 25, no. 2, 283-417.
12. Gujarati Damodar N., (1988), Basic Econometrics, second edition, Mcgraw –Hill Book Company, P.691.
13. Gupta. Rakesh, Basu. P. K. (2007), Weak Form Efficiency In Indian Stock Markets, International Business & Economics Research Journal, March, Volume 6, Number 3.
14. Harvey Campbell R., (1994), "Conditional Asset allocation in Emerging Markets", Working Paper, No.4623, Cambridge, MA.
15. Hassan, K. M., Haque, M., and Lawrence, S. (2006): "An Empirical Analysis of Emerging Stock Markets of Europe". Quarterly Journal of Business and Economics, vol. 45, no. 1 & 2, 31-52.
16. Islam. Ainul, Khaled. Mohammed (2005), Tests of Weak-Form Efficiency of the Dhaka Stock Exchange, Journal of Business Finance & Accounting Volume 32, Issue 7-8, pages 1613–1624, September.
17. Kulkarni, S.N. (1978) "Share Price Behaviour in India: A spectral Analysis of RandomWalk Hypothesis", Sankhya, Vol. 40, series D, Pt. II, 135-162.
18. Laurence, M., F. Cai and S. Qian (1997), 'Weak-form Efficiency and Causality Tests in Chinese Stock Markets', Multinational Finance Journal, 1: 291-307.
19. Lima, E.J.A. and B.M. Tabak (2004), 'Tests of the Random Walk Hypothesis for Equity Markets: Evidence from China, Hong Kong and Singapore', Applied Economics Letters, 11: 255-258.
20. Liu, X., H. Song and P. Romilly (1997), 'Are Chinese Stock Markets Efficient? A Cointegration and Causality Analysis', Applied Economics Letters, 4: 511-515
21. Ma, S. (2004), The Efficiency of China's Stock Market. Aldershot: Ashgate.
22. Mishra, P. K. (2009), Empirical Evidence on Indian Stock Market Efficiency in Context of the Global Financial Crisis, Global Journal of Finance and Management, Vol. 1, No. 2, pp.149-157.
23. Mittal RK (1995), Weak Form of Market Efficiency: Empirical Test on the India Stock Market, Prajnan, 23(3).
24. Mookerjee. Rajen, Yu. Qiao (1999), An empirical analysis of the equity markets in China, Review of Financial Economics, Volume 8, Issue 1, June, Pages 41–60.
25. Moustafa, Mohamed Abdou (2004), Testing the Weak-Form Efficiency of the United Arab Emirates Stock Market, International Journal of Business, Vol. 9, No. 3.
26. Nourredine Khababa, (1998), "Behavior of stock prices in the Saudi Arabian Financial Market: Empirical research findings", Journal of Financial Management & Analysis, Volume 11(1), Jan-June, pp. 48-55.
27. Ojah Kalu and Karemera, (1999), "Random walks and Market efficiency Tests of Latin American Emerging Equity Markets: A Revisit", The Financial Review, volume 34, pp.
28. Poshakwale S. (1996), "Evidence on the Weak-form efficiency and the day of the week effect in the Indian Stock Market", Finance India, Volume 10(3), September, pp. 605-616.
29. Rao, Krishna N and Mukherjee, K (1971). "Random-Walk Hypothesis: An Empirical Study," Arthaniti, Vol.14, No.142.
30. Roux, F. and B. Gilbertson (1978), The behavior of share prices on the Johannesburg stock exchange, Journal of Business Finance and Accounting, Summer, 223-232.
31. Tas Oktay and Dursunoglu Salim (2005), Testing Random Walk Hypothesis for Istanbul Stock Exchange, International Trade and Finance Association: International Trade and Finance Association 15th International Conference, 38.

CHALLENGES AND PROSPECTUS OF SUCCESSFUL WOMEN ENTREPRENEURS (A CASE STUDY IN DAVANGERE CITY)

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ABSTRACT

An entrepreneur is a person who is responsible for setting up of a business or an enterprise. Entrepreneur creates new business, generating jobs for themselves and those they employ. In fact, he is one who has the initiative, skill for innovation and who looks for high achievements. He is a catalyst agent of change and works for the good of people. Entrepreneurship is vast field; it is difficult to conduct research on whole field. In the present study an attempt has been made to know the challenges and prospectus for Women Entrepreneurship in India in general and in specific in Davangere city. To conduct study three successful women entrepreneurs were selected irrespective of field. Womens are selected from Shaviyagi industries field, DTP field, and Hotel field. Information has been collected from the entire three entrepreneurs and analyzed the case on the basis of information provided by them, problems faced by them and prospectus or remedies taken to overcome the problems and their entrepreneurial successful mantra also discussed in this paper.

KEYWORDS

women entrepreneurs, Davangere city.

INTRODUCTION

Entrepreneur is an important input of economic development. With him we prosper, without him we are poor. The Entrepreneurs the world's wisest minds who leave an indelible mark in the history of mankind. They make it possible through their action, and not through words. They do things in a completely new way. They think beyond obvious. They go deeper. They think from different perspective and angels. The characteristics of entrepreneurs are his hunger to learn, to work and to succeed. They have always something to learn. They keep learning because they enjoy the challenges. The word entrepreneur is derived from French word "Entrepreneur" which means to "Undertake"- i.e. the person who undertakes the risk of new enterprise. In many countries the entrepreneurs is often associated with the person who starts his own, new and small business. Business encompasses manufacturing, transport, trade and other self employed vocations in the service sector.

WOMEN ENTREPRENEURSHIP

"When women move forward, the family moves, the village moves and the nation moves".

- Pandit Jawaharlal Nehru

Women enterprise may be defined as the woman or a group of women, who initiate, organize and operate a business or enterprise.

Government of India defines Women Entrepreneurship as follows: "An enterprise owned and controlled by a women having a minimum financial interest of 51 percent of the capital and giving at least 51 per cent of the employment generated by the enterprise to women".

Like a male entrepreneurs a women entrepreneur has many functions. They should explore the prospects of starting new enterprise; undertake risk, introduction of new innovations, coordination, administration, control of business and providing effective leadership in all aspects of business.

WOMEN ENTREPRENEURS IN INDIA

In India the number of women entrepreneurs has increased, especially during the 1990s. The new generation of women owned enterprises is actively seeking capital for their business, using modern technology to find and create a niche in both the domestic and export markets. Entrepreneurship is a very important activity carried out in any country and it plays very important role in economic development of a country. Entrepreneurship activities are carried out by men and women. In advanced countries like U S, women's have more than 35% to 41% of share in total entrepreneurship activities in 2007-08. There is no doubt now it is 52%. But, it is very less in developing and under developed countries.

Surveys demonstrate that women's primary entrepreneurial activity is focused on the small and medium enterprises sector. Approximately 60% are small scale entrepreneurs 15 percent are large scale manufacturers and the remaining consists of cottage and micro entrepreneurs. They work in wide range of sectors, from trade and services, to tailoring, beauty parlors and printing. However, the involvement of women entrepreneurs in the production sector is minimal and the development of this sector is rather slow.

NEED FOR THE STUDY

Now-a-days youths are backbone of the nation, but in near future some words are replaced by the 'Women's are backbone of the country' no doubt. Because, women's are getting that much support from all the areas. Therefore, to support them it is very essential to know the difficulties faced by women in the field of entrepreneurship and suggest them to overcome the same and become successful. Present study is concentrating towards women entrepreneurs, therefore, we concentrating towards challenges and prospectus faced by women entrepreneurs in India in general and in specific in Davanager city.

OBJECTIVES OF THE STUDY

The present study is conducting to find out the result for following objectives:

- a) To study the socio-economic background of selected women entrepreneurs.
- b) To study general challenges and prospectus faced by women entrepreneurs in India general and specific in Davanagere.
- c) To know the success key of women entrepreneurs in Davanagere city.
- d) To suggest some ways to overcome the problems identified from the study.

RESEARCH METHODOLOGY

To conduct present study following research methodologies are used:

A) DATA COLLECTION METHOD

To carry out present study, information is collected from both primary data and secondary data. Primary data has been collected from few successful women entrepreneurs in Davangere by conducting direct interview with the help of well structured interview schedule. Secondary data are collected through different published resources like journals, books, magazines and internet sources.

B) SAMPLING TECHNIQUE

In the present study samples are selected from Davangere city. Three successful women entrepreneurs were selected irrespective of field.

SCOPE OF THE STUDY

Entrepreneurship is a broader concept, women entrepreneurship is a part of that. Many successful women entrepreneurs are working in the present field from many years. But, before becoming successful one, they were faced many challenges and found out some prospectus to overcome the same. Scope of the present study is limited to few successful women entrepreneurs of Davangere city

LIMITATIONS OF THE STUDY

Following few limitations are identified in the present study:

- a) Geographical area is confined to Davangere city only.
- b) Time has taken for the study is only ten days.
- c) Results are drawn on the basis of opinion given by the respondents.

CHALLENGES FACED BY THE WOMEN ENTREPRENEUR IN INDIA

1. **Traditions and Customs:** According to Indian customs men are superior to women. Indian customs and traditions distinguish women from men. Generally, husband or elder persons in a family do not allow women to venture. This is the major problem of women entrepreneurs. So women potentials are not properly utilised.
2. **Lack of Education:** Education in women has been very poor in India. Infact female literacy rate of India is among the lowest in the world. Due to the traditional and reproductive role ascribed to their gender, women were combined to the house, thus leading to supposed 'redundancy' of formal education. The gender bias in education has impacted female enterprise severely. Girls were not allowed to study beyond the age of 10 years, thus contributing to their ignorance of opportunity for employment, development of skills in learning the know-how, awareness of market functioning etc.
3. **Lack of Confidence:** Women generally lack of confidence in their own capabilities. Having accepted a subordinate status for long, even at home, members of their family do not appear to have total confidence in their abilities and on their decision-making. Society in general also lacks confidence in a women's strength, traits, and competence. This is quite apparent in the family's reluctance to finance a women's venture, bankers are reluctant to take risks on projects set up by women, and individuals are unwilling to stand guarantee for loans to a women.
4. **Gender Inequalities:** Due to the inherent gender inequalities women have been relegated to the role of 'puppets' in the hands of men. Over the past two decades gender inequality becomes 'feminized' – women have been found to be markedly poorer as compared men.
5. **Problems of Finance and Working Capital:** Another problem faced by women entrepreneurs is lack of access to funds because they do not possess any tangible security and credit in the market. Since women do not enjoy right over property of any form, they have limited access over external sources of funds. Even the members of her family have little confidence in the capability of the women to run a business. The chronic shortage of working capital leaves women entrepreneurs extremely vulnerable to competition and other emergencies.
6. **Complicated Procedures:** Women entrepreneurs faces some complicated procedures as well as challenges at the time of getting trade licenses, they can spend 325% income per capita money to get trade licenses, spend 6% property amount to register their property and 60% of cost of goods sold as tax payment. These procedures are very expensive for women entrepreneurs.
7. **Heavy Competition:** Many of the women enterprises have imperfect organisational setup. But they have to face severe competition from organised industries, multinational companies etc.
8. **Limited Access of Economic Resources:** Women entrepreneurs have faced difficulties in starting up their own business because of the hardship in finding and getting source of financing, including credits as well as high level of corruption and difficulties in negotiation in attempts to get government credits.
9. **Low Level Management Skills:** Another argument is that women entrepreneurs have low-level management skills. They have to depend on office staffs and intermediaries, to get things done, especially, the marketing and sales side of business. Here there is more probability for business fallacies like the intermediaries take major part of the surplus or profit.
10. **Women's Family Obligations:** Women's family obligations also bar them from becoming successful entrepreneurs in both developed and developing nations. "Having primary responsibility for children, home and older dependent family members, few women can devote all their time and energies to their business" (Starcher, 1996, p.8). The financial institutions discourage women entrepreneurs on the belief that they can at any time leave their business and become housewives again.
11. **Lack of Access to Technology:** Women controlled business are often small and it is not always easy for women to access the information they need regarding technology, training, innovative schemes, concessional alternative markets etc. Just a small percentage of women entrepreneurs avail this technology and they too remain confined to word processing software in the computer. Women entrepreneurs will not feel empowered unless they make use of technology and update themselves accordingly.
12. **Production Problems:** Production in a manufacturing enterprise involves coordination of a number of activities. While some of these activities are in the control of the entrepreneur, there are others over which she has little control. Improper coordination and delay in execution of any activity cause production problems in industry. The inability of women entrepreneurs to keep pace with the latest advances in technology and lack of technical know-how results in high cost of technology acquisition and machinery utilisation. These problems result in increasing the cost of production and adversely affecting the profitability of the unit.
13. **Marketing Problem:** Access to market is an important as access to finance. In order to make the company successful and profitable, the entrepreneur must be able to sell his products or services. Women entrepreneur, by and large continue to face the problems of marketing their products. For marketing the products she can take the help of middlemen who pocket the chunk of profit.

14. **Poverty:** The inequality of income distribution between genders has adversely impacted growth of women entrepreneurs in the country. Due to the accumulation of income in the hands of men, poverty has setting up enterprises.
15. **Socio-cultural Barriers:** A woman has to perform her family duties irrespective of her career as a working women or an entrepreneur. In our society, more importance is given to educating the male child as compared to the female child. This results in lack of schooling and vocational training of women, their lack of attaining technical skills and thereby lack of awareness of opportunities available. This adds to the constraints in establishing enterprises by women.

CASES ANALYSIS OF SUCCESSFUL WOMEN ENTREPRENEURS IN DAVANGERE CITY

CASE – 1: SMT. SAVITRAMMA, SRI MATHA HOME INDUSTRIES, K.T.J. NAGARA, DAVANGERE

Smt. Savithamma is come from agriculture family from Avaragolla village, Davangere taluk. She studied up to 4th standard in the village itself, she left the school and started working in the land as labour, she got married at the age of 18th year and reside at KTJ Nagar, Davangere. In KTJ Nagar there are many home industries are running from several years. It is the one of the important reason to enter into this business. She had a neighbour who makes shayviage (noodles) in the home by observing that Savitramma also started to make shayviage in her home only.

Savitramma took lenience from concerned authority under shop and establishment act to run her center. She is very cautious about the government proceedings. She took loan from nationalized bank under Rojagar Yojan Scheme and Scheme for small scale industries.

Initially she invested Rs. 30,000 to buy machines, and some wood material which requires making shayviage. Now, Savitramma became leading shayviage maker. She will take orders from many people and &&&& as early as possible. Marriage order is also taken by her. Now-a-days her total value of the industry is Rs. 5, 00,000 to 10, 00,000.

According to Savitramma, her profit margin is 25 to 30% per 1000 orders. Initially, she did not take any labour for her help. Now, she had had employ 6 people to make and delivery of orders. Savitramma is spending nearly 12 hours in a day in the industry. Her husband is not participated in any of her activities, he just supported and encouraging her.

She satisfied with her business activity but presently she is facing some problems usually faced by all the entrepreneurs.

PROBLEMS FACED BY ENTREPRENEUR

1. Stiff competition
2. Frequently changes in rate of raw materials is the major problem
3. There is no fixed rate; this will create competition among them.
4. Power Problem is more in recent years.
5. Labour Problems is more in recent years.
6. Seasonal Work.
7. Lack of Technical Knowledge to operate highly technological machines.

REMEDIES TAKEN BY SAVITRAMMA TO OVERCOME THE PROBLEM

1. Orders to be completed within the possible time.
2. She fixed rate as per season.
3. She will take small orders also.
4. To overcome power problem, she was installed generator in recent years.
5. She takes part time workers whenever she requires.

SUCCESS KEY FACTORS OF SAVITRAMMA

According to Savitramma, to success in any entrepreneurial activities the following qualifies are essential:

1. Hard work
2. Time sense
3. Dedication towards works
4. Good relationship with customers

CASE – 1: SMT. S. REKHA, REKHA D.T.P. CENTRE, K.B. EXTENSION, DAVANGERE

Smt. S. Rekha is come from poor family background and completed her B.A.degree in Davangere. While studying B.A. she also joined for computer course and typing. Soon after finishing her graduation she joined to a D.T.P. Centre as a D.T.P. operator. She worked for four years and become expertise in D.T.P. work. Because of health problem her owner want to sell D.T.P. centre on that time she came forward and acquired centre on installment basis, including building and all equipments installed in that shop. Now, she is running it successfully as a sole proprietor concern. She undertook all types of D.T.P. work including designing and job work. She is running her centre in rented building, and her family also residing in the same building.

She invested Rs. 70,000 as capital at the initial stage which is borrowed from Canara Bank as subsidy Loan. At present total value of the firm is around Rs. 3, 00,000. Monthly turnover lies between Rs. 25000-35000, it varies from one to another period.

According to her experience profit margin in D.T.P. field lies between 10-20%, profit margin varies on the basis of type of work undertake by them. From initial stage to till today only two workers are there in her shop. She is spending around 10-12 hours per day to carry out D.T.P. work. She does not taken any kind of training from central and state government to learn D.T.P. work. She took permission from municipality under shop and establishment Act. To run D.T.P. Business in Davangere, but institute not registered with DIC or SSIs. Reasons for not registering is registration is not compulsory according to law.

She is not satisfied with present entrepreneurial activity. Because, in this business there is not life security for entrepreneur, it is possible to run centre till entrepreneur is physically fit.

PROBLEMS FACED BY ENTREPRENEUR

1. Frequent changes in the rate of consumables in a short period of time are a major problem for entrepreneur. Because, entrepreneur needs revise the rates of D.T.P. works.
2. There is no standardized rate for works carried out by D.T.P. entrepreneur; different persons are fixed different rates for same work in Davangere city. Some entrepreneurs fix very less prize especially new comers it leads to competition.
3. In recent years power is the major problem for entrepreneur.
4. Trained workers are not available in D.T.P. field in recent years, if new persons taken it are very essential to train them for few months to carry out work in a systematic way.

5. Work stress, lack of technical knowledge, high rate of rent are the other few problems faced by entrepreneur.

REMEDIES TAKEN TO OVERCOME PROBLEMS

1. She revised prices from time to time on the basis varies in consumables rates and inform to customers earlier.
2. To overcome power problem 1 KVA UPS is installed in DTP Centre, it covers total home.
3. To overcome problem of stress she is spending half hour in park to give rest to her body as well as eyes in the evening and wash face with cold water three to five times per day.
4. To overcome labour problem training provided to persons who are illiterate in D.T.P. field and she also giving good salary.

CASE – 3: SMT. CHANNAMMA, SRIDEVI MESS, P.J. EXTENSION, DAVANGERE

Chennamma, the name itself indicates the courage. Chennamma, is a very dashing lady who started mess in the year 1992 when she was 23 years old. Her grandfather was running a small tea stall; her father and mother continue the same for several years. Later in the year 1992 she started a mess in the name called Sridevi and running successfully till today. She has lot of experience in running this field, because of her family background. It is a sole proprietary in nature.

When Sridevi mess was started with initial capital of Rs. 23,000, which was borrowed from friends. In the initial stage she dint took any labour because all the 10 members of the family involved actively supporting her. It helps channamma to come forward to start other 5 messes in different location of davanager. In all the mess she is maintaining same quality food and also same rate. At present the value of all the messes are around 35 lakh. Sridevi mess took license for running messes in Davangere from Municipality. According Channamma, if license is not taken government authority creates problem regularly.

Sridevi mess is opened in all 365 days. She is not only running mess, also providing catering services to various functions. Channamma motivated to start hotels/mess to other 5 women's and helping and guiding them in their business. All the 5 members are running the mess successfully and they are all remembering her in their success. She is very practical lady, she is advising them to be practical, honest in the work, and maintain good relationship with the customer definitely success will follow you.

Channamma is satisfied in her business and she doesn't bother about profile in the business. She believes that it will help us to time independently in this world, without begging other for anything.

Even though she is successful entrepreneur and encourages many people to become entrepreneur and to start self business. She is also facing only few problems in her hotel business. They are:

1. Frequent change in the rate of consumable and vegetables creates lot of fluctuations in the rate and profit margin.
2. There are no standardized rates in hotel business.
3. Labour Problem

SUCCESS MANTRA

- Channamma gives always first preference to Time.
- Hard work is essential quality is required for entrepreneur, if you adopt the same success will follows you.
- Dedication towards work is essential
- Good Relation with customer is essential while supplying food, receiving money etc.

CONCLUSION

Women Entrepreneurs are playing important role in developing countries. From year to year contribution to entrepreneurial activities in India is increasing from the side of womens. Many studies are conducted to study about women entrepreneurs. But, only few persons are given importance for small women entrepreneurs in their study. Therefore, in our study we are fully concentrated towards small women entrepreneurs who involved in entrepreneurial activities in Davangere. In Davangere many women entrepreneurs are carrying entrepreneurial activity, we are selected few successful women entrepreneurs from different field and who are in the same field from many years. In this paper we are disclosed information shared by women entrepreneur at the time of interview. It includes problems faced by those people in initial stage of business and present, remedies taken by them to overcome the problems and their business success mantras.

REFERENCES

TEXT BOOKS

1. C.B. Gupta and N.P. Srinivasan, "Entrepreneurship Development in India", Sultan Chand and Sons, New Delhi, 5th Edition, 2000, Pp. 1.3-1.15, 1.76-1.79, 4.38-4.39.
2. C.B. Gupta and S.S. Khanka, "Entrepreneurship and Small Business Management", Sultan Chand and Sons, New Delhi, 4th Edition, 2010, Pp. 1.11-1.12, 1.31-1.35, 2.44-2.52.
3. K. Venkataramana, 'Management and Entrepreneurship', Seven Hills Book Publication, Bangalore, First Edition, Pp. 2-4, 11, 19, 40.
4. Poornima Charantimath, 'Entrepreneurship and Small Business Management', Person Education, New Delhi, Pp. 65-75.
5. Vasant Desai, "Small-Scale Industries and Entrepreneurship", Himalaya Publishing House, Mumbai, 2008, Pp. 406-429, 603-612.

ARTICLES

6. Principal of Entrepreneurship, U.S. Department of State / Bureau of International Information Programs, Pp. 1-18.

EVALUATING THE MICRO-CREDIT MODEL AND SUCCESS STORY OF Grameen Bank, Bangladesh**DR. RICHA SINHA****ASST. PROFESSOR****JOSEPH SCHOOL OF BUSINESS STUDIES****SAM HIGGINBOTTOM INSTITUTE OF AGRICULTURE, TECHNOLOGY & SCIENCES (DEEMED UNIVERSITY)****ALLAHABAD****ABSTRACT**

The paper aims to review the issues, challenges and methodologies used by the Grameen Bank of Bangladesh which was led by Mohammad Yunus. The paper highlights the work of Grameen Bank in the field of micro-credit, innovative strategies, introduced in lending, thus ensuring an all round economic development and social welfare across the society. The paper is based on secondary data. The findings show that an effectively managed micro-credit system and proper allocation of resources can lead to success. The factors identified may be utilized by the corporate sectors to understand the micro-financing aspects. Further the paper also guides academicians and students to use it as a reference for further study. The study was restricted to the available data.

KEYWORDS

Microfinance, Micro-credit, Grameen Bank.

INTRODUCTION

Microcredit has become one of the most important tools used to combat poverty and to enhance families' wellbeing. Micro Credit is defined as provision of thrift, credit and other financial services and products of very small amount to the poor in rural, semi-urban and urban areas for enabling them to raise their income levels and improve living standards. Micro Credit Institutions are those, which provide these facilities. (As per RBI Master Circular, 2008). The concept of micro credit is known more by its approach than by monetary limits to the amount of loans. Of course, the target segment is the poorest, but Mohammed Yunus tried the concept of joint-liability or peer-pressure. Most micro credit loans are dispensed through village or community-level self-help groups (SHGs) who agree to create a pressure on the individual borrower to perform as per contract. The term Micro Finance is much broader than micro credit. The main components of microfinance are:

- Deposits
- Loans
- Payment services
- Money transfers
- Insurance to poor and low-income households and their microenterprises

Thus, micro credit is only a component of the broad spectrum of micro financing.

According to Yunus, the following are the categories of micro-credit.

A BROAD CLASSIFICATION OF MICROCREDIT

- A) Traditional informal microcredit (such as, moneylender's credit, pawn shops, loans from friends and relatives, consumer credit in informal market, etc.)
- B) Microcredit based on traditional informal groups (such as, tontin, su su, ROSCA, etc.)
- C) Activity-based microcredit through conventional or specialised banks (such as, agricultural credit, livestock credit, fisheries credit, handloom credit, etc.)
- D) Rural credit through specialised banks.
- E) Cooperative microcredit (cooperative credit, credit union, savings and loan associations, savings banks, etc.)
- F) Consumer microcredit.
- G) Bank-NGO partnership based microcredit.
- H) Grameen type microcredit or Grameen credit.
- I) Other types of NGO microcredit.
- J) Other types of non-NGO non-collateralized microcredit.

Source: http://www.grameeninfo.org/index.php?option=com_content&task=view&id=28&Itemid=108

Yunus also elaborated the concept of Grameen credit in the following features:

GENERAL FEATURES OF GRAMEENCREDIT ARE

- a) It promotes credit as a human right.
- b) Its mission is to help the poor families to help themselves to overcome poverty. It is targeted to the poor, particularly poor women.
- c) Most distinctive feature of Grameencredit is that it is not based on any collateral, or legally enforceable contracts. It is based on "trust", not on legal

procedures and system.

- d) It is offered for creating self-employment for income-generating activities and housing for the poor, as opposed to consumption.
- e) It was initiated as a challenge to the conventional banking which rejected the poor by classifying them to be "not creditworthy". As a result it rejected the basic methodology of the conventional banking and created its own methodology.
- f) It provides service at the door-step of the poor based on the principle that the people should not go to the bank, bank should go to the people.
- g) In order to obtain loans a borrower must join a group of borrowers.
- h) Loans can be received in a continuous sequence. New loan becomes available to a borrower if her previous loan is repaid.
- i) All loans are to be paid back in instalments (weekly, or bi-weekly).
- j) Simultaneously more than one loan can be received by a borrower.
- k) It comes with both obligatory and voluntary savings programmes for the borrowers.
- l) Generally these loans are given through non-profit organizations or through institutions owned primarily by the borrowers. If it is done through for-profit institutions not owned by the borrowers, efforts are made to keep the interest rate at a level which is close to a level commensurate with sustainability of the programme rather than bringing attractive return for the investors.
- m) Grameencredit gives high priority on building social capital. It is promoted through formation of groups and centres, developing leadership quality through annual election of group and centre leaders, electing board members when the institution is owned by the borrowers.

Source: http://www.grameen-info.org/index.php?option=com_content&task=view&id=28&Itemid=108

REVIEW OF LITERATURE

Microcredit lending is a bottom-up development plan that focuses on giving small loans to poor entrepreneurs. Loans are mostly directed towards women to promote gender-balanced development (Robinson, 2001; Wright 2000). Loans are generally under the equivalent of 100USD, and are given for the purpose of encouraging entrepreneurial women to start their own business (Robinson, 2001; Wright 2000; Woller and Woodworth 2001). Borrowers repay loans with a small amount of interest. This is a development plan that seeks to create self-sufficiency rather than dependence (Yunus, 2007). According to Yunus, self-employment is more dignified than wage employment in terrible conditions to move out of the poverty cycle (Wright, 2000). Muhammad Yunus emphasizes credit as a right to opportunity. According to Yunus, credit should not be seen as a luxury for the rich, it should be an opportunity for all: "Just like food is; credit is a human right" (Yunus, 1998). The Grameen Bank encourages the idea that the poor can benefit from financial services in the same way that people benefit in richer, developed nations (Pollin, 2007). Microcredit lending is a grassroots opportunity to shape personal development, or empowerment, with outside help. Yunus emphasized self-determination and personal creativity to escape the cycle of poverty, a different approach than many other traditional development plans (Yunus 2007). Empowerment is an important part of individual development, a part of the goal of microcredit lending (Daley-Harris 2007). Microcredit focuses on community and the individual who are not represented in most top-down development schemes, in most cases, women (Murdoch 1999). Microcredit lending provides a way to address gender inequalities in developing nations because of its bottom up style, and emphasis on empowerment. "Given the propensity of microfinance programs to target their services to women, current trends favoring the mobilization of social capital within communities also appear to have finally responded to decades of advocacy for gender equality by feminist economists and development practitioners" (Rankin 2002). Microcredit loans aim to target the "poorest of the poor," which is in many cases the women of developing nations. Women do not generally have separate income or personal capital in traditional societies, making it difficult for women to obtain loans from traditional banking institutions. By allowing women to borrow, it gives women a chance to gain fiscal power within a household, which theoretically gives a woman more status (Wright 2000). The identity of a woman in a particular culture plays a large part in their status and role in the economy (Nelson, 1993; Tickner, 2001; Whitworth, 1994). In many cases, especially in Muslim states, this identity is dictated heavily by religion (Sardar Ali, 2002). Micro-credit focuses on giving women the opportunity to enter the economic sphere in an empowered way.

RESEARCH METHODOLOGY

Secondary data was used for the purpose of research review.

RESULT AND DISCUSSION

In 1974, people of Bangladesh faced the horror of famine. At that time, Professor Muhammad Yunus, then a professor of economics, in Bangladesh was moved by the plight of people when the country faced a famine. Famine-struck "skeleton-like people began showing up in the railway stations and bus stations of the capital, Dhaka. Soon this trickle became a flood. Hungry people were everywhere. Often they sat so still that one could not be sure whether they were alive or dead. They all looked alike: men, women, and children. Old people looked like children, and children looked like old people." Yunus felt guilty teaching economics in the cool comfort of this classroom in this scenario. "What good were all my complex theories when people were dying of starvation on the sidewalks and porches across from my lecture hall? My lessons were like the American movies where the good guys always win. But when I emerged from the comfort of the classroom, I was faced with the reality of the city streets." Yunus left the campus and went to Jobra, a village in Chittagong of Bangladesh, to learn a new method of banking for the poor. He stated " I wanted to understand the reality around a poor person's existence and discover the real life economics that were played out everyday in the neighboring village, Jobra. At that time the 'Dadan' system prevailed in the country. In this system the traders used to advance loans against standing crops for the compulsory sale of the crops at a predetermined price which was usually lower than the market rate. When Yunus saw this he realized what was happening. He found that the people of the village were involved in taking loans and further loans to repay the previous loans. Finally they were going into debt and death was the usual way of paying off the debts as more and more loans led to huge debts which the villagers were not able to pay ever or were never in a financial condition to repay it.

Finally after some research work, Yunus got the idea of the problems faced by the poor in the village due to which the poverty level was increasing. Some of the major problems identified by Yunus were:

- No formal institution was available for the poor
- The problem was structural, not Personal
- Consultancy business misled the international donor agencies
- Bureaucracy problems
- Bribing came as hindrance
- Suppliers, potential contractors etc, looked into their own interests
- Foreign Aid was not properly directed
- Quality of Aid was not properly supervised
- Commercial banking problems
- Social hindrances like religion, caste, gender discrimination, creditworthiness of the poor etc.

Finally Yunus decided to provide tiny loans for self-employment of the poor, and thus, the idea of micro credit was born. Grameen Bank was established as a body corporate under the Grameen Bank Ordinance 1983. It is from here that it took the shape of Grameen Bank, Bangladesh, and thereafter, has spread all over the world. In 1995 with its success Grameen reached 1/10th the population of Bangladesh and within 10 years the bank has been successful in moving 1/03rd of its borrowers out of the poverty line and 1/3rd of its borrowers up close to the poverty line. The bank has a recovery record of 98%. Grameen had spread over 36,000 villages, recruited 12,000 staff and had over 1079 branches. It had 2.1 million borrowers out of which 94% were women. The housing loans of Grameen bank had helped 350,000 families to acquire houses and 150,000 families to build their own houses with the income from Grameen funded enterprises.

Thus, the principal activity of the Bank is to provide credit without collateral to landless persons for all types of economic activities. The Bank also accepts deposits but excluding business in foreign exchange transactions, carries out survey and research, issue publications and maintaining statistics with a view to improving the economic condition of the landless persons. The Bank undertakes income-generating projects for landless persons, invests its funds in Government Securities and provides professional counseling to landless persons regarding investments in small business and cottage industries. As per the report of 2009, Grameen Bank now operates 40 Zonal Offices, 268 Area Offices and 2,562 Branch Offices. The Bank offers five types of loans such as basic loans, housing loans, higher education loans, young entrepreneur loans and struggling members' loans. Loans & advances and Deposits as at December 31, 2009 were Tk. 56,359,028,995 and 83,330,734,611 respectively. As on December 31, 2009, out of 2,562 branches 1,618 registered profits. The remaining 944 branches were not profitable.

THE SUCCESS POINTS OF GRAMEEN BANK

1. **CREDIT AS HUMAN RIGHT:** Yunus considered 'credit' as 'Human right'. He believed that 'credit could play a strategic role in removing hunger from the world'. The conventional banking systems were at that time not appropriate for the credit lending aspects. Credit lending required lot of paper work, writing, reading, creditworthiness, assets worth and this was mostly acquired by the people who were above the poverty line. There was no bank which was ready to dispose off credit to the poor just because of one reason i.e. they were 'Poor'. Grameen did not follow this aspect. It considered that every human being on the earth has a right to 'Credit' whether rich or poor.
2. **NO DICTATORSHIP AND BUREAUCRACY INTERFERENCE:** At Grameen, Yunus decided to run the business on his own terms. In order to avoid any official hindrances and corruption aspects in which projects were allotted by bribing the officers in many cases, Grameen decided to run on its own rules, as it aimed at not getting targets, projects, profits, but the aim was to bring the people below the poverty line capable of moving up the poverty line and adopt a better standard of living.
3. **THE REPAYMENT MECHANISM:** The Grameen Bank adopted a very simple repayment mechanism for operational simplicity. There were equal weekly installments to be given by the borrowers and the interest charged was a very minimal amount. The reason for keeping the installments on weekly basis was due to the reason that it psychologically affected the poor. Payment in tiny amounts was very comfortable for the poor. When the installments are large the poor feel afraid of giving the lump sum amount but when the amount is less it feel less burdened with the returns to be given. In order to get the repayment the Grameen bank didn't adopt the system of police interference and 'client trust' was the basis of its repayment mechanism. The judiciary system had never been used by the Grameen bank for repayment purpose. There were no lawyers and no legal instrument was developed for repayment. The Grameen bank worked on 'relationships' and for them the 'psychology of borrowers' was the most important.
4. **ADEQUATE INSTITUTIONAL ARRANGEMENT:** The Grameen bank formed as a structural arrangement for the poor who were not provided credit from other conventional banks. Grameen reached those areas of the society which were ignored and not even discussed by the concerned authorities for the basis of development. It reached the people who were in real need of money in order to raise their standard of living by working and creating employment. The 'Self-employment' initiative was triggered by the bank by providing appropriate funds to those who had skills and potential to run their own small business and earn a living for their family. The poor were assisted by the bank to start their own business and earn their living rather than take loan from the money lenders who used to exploit them.
5. **WOMEN BORROWERS AND WOMEN WORKERS:** In most of the countries, the traditional banks were gender biased, and so were the traditional banks of Bangladesh. They didn't used to lend money to women unless and until they got an approval from the husband. The system of 'Purdah', religious laws, 'mullahs' and money lenders also considered that giving money to women would be a direct threat to their authority in the village, social boycott of women as initiators in earning were the major problems faced in Bangladesh in earlier years. The cultural barriers conspired against women working outside the home. Women used to face criticism if she walked outside and worked or talked for a longer time with someone. At Grameen, the women were identified as the most suitable persons to whom the money could be given. Yunus was of the point of view that when a woman had a job, the family pressure of her being considered as a burden is immediately removed. Earning an income changes the family status of a woman from 'being a burden to being an asset'. At Grameen, the workers devoted time and energy to make cordial relationships with the women clients by maintaining their religious values and beliefs. Grameen discovered a new reason to focus on women borrowers. While Yunus was working with women clients he found that 'the credit given to women brought about changes faster than when given to men'. The reason given by Yunus is that women face hunger and poverty in much more intense ways than men. Women starve more to feed family, can't feed baby properly in time of scarcity and famine, she is insecure as anytime she can be thrown out of the house by her husband or even get divorced, she cannot read and write and restrictions on moving out of the house are imposed even she is willing to become literate etc. It was realized that given an opportunity, a woman would build up her 'financial security'. "Independent studies have found that the incidence of women being beaten by their husbands is much lower after the women joined Grameen.

6. **CONVENTIONAL BANKS VS GRAMEEN BANK:** The following table provides a short comparison of how Yunus states that the Grameen bank was different from the Conventional banks in its operations and approaches:

	Conventional bank	Grameen bank
1	Clients have to visit the office	Grameen reaches the clients
2	The infrastructure and dealing with poor clients is a bit threatening for the poor and illiterate	People's psychology is given due importance
3	Clients need to show their worth of large wealth and assets. The material possession of the client is given due importance.	Borrower's do not need to show their large savings and their wealth. The potential of the person is given due importance.
4	Conventional banks look at what has already been acquired by a person.	Grameen looks at the potential that is waiting to be unleashed in a person.
5	Answerable to shareholders with the aim to maximize profits of the bank within the limits set by the government and industry wise regulators.	Answerable to shareholders but not with the aim of getting profits. Only 08% is owned by the government and the shareholders are the borrowers.
6	Meaning of return is: Increased Profits and Increased dividend	Meaning of return is: Proper housing to poor, Increase in standard of living, Decrease in Interest rate, elimination of poverty
7	Requires Collateral.	Does not require collateral
8	Bank-client relationship very formal. Once loan is taken the client is forgotten. Only at the time of default in repayment the client is remembered.	Regular Bank-client relationship is sought to as weekly and monthly visits are made to maintain the association with the borrowers.
9	Distrust the 'poor'	Trust the 'poor'
10	Most of the borrowers are above the poverty line.	Most of the clients are below the poverty line initially.
11	Focus on men for giving credit	Grameen gives high priority to women. 97% of Grameen bank borrowers are women.
12	Try to locate themselves as close as possible to the business districts and urban centers.	Located in rural areas.
13	Follow strict legal system of service offered and repayment mechanism.	There is no legal instrument between the lender and the borrower in the Grameen methodology. There is no stipulation that a client will be taken to the court of law to recover the loan.
14	Charging interest does not stop unless specific exception is made to a particular defaulted loan. Interest charged on a loan can be multiple of the principal, depending on the length of the loan period.	No interest is charged after the interest amount equals the principal.

7. **MYTHS:** The success of the Grameen Bank in removing poverty and bringing economic development removed many myths that came up with the starting off with the initial stages when the Grameen Bank was established. While Yunus was trying to convince the donors and other reputed institutions to lend the poor, the responses given were mere myths that were responded with certainty. Some of them are quoted as follows:

- 'the poor need to be trained before they undertake any income generating activity'
- 'the poor cannot save'
- 'the poor cannot work together'
- 'credit alone is useless, it must be packaged with training, marketing, transportation facilities, technology, education'
- 'poor women have no skills'
- 'the poor are too hungry and desperate to make rational judgements'
- 'the poor are not interested in anything that will change their life'
- 'the influence of religion and custom is so strong on the poor (particularly on women) that they cannot move an inch in any direction'
- 'the rural power is too powerful and too entrenched to allow such a credit programme to succeed'
- 'it will be impossible for women to keep the borrowings with themselves'
- 'the poor enjoy serving their masters rather than taking care of themselves'
- 'poor cannot repay the loan'
- 'by extending credit to women it would adversely affect her relations with the husband'

The list is unending, and only some have been quoted as stated by Yunus. But, The success of Grameen bank, removed all the misconceptions stated above. Grameen Bank dealt with the poor, gave them borrowings, made a proper structural arrangement for financing funds and repayment mechanism by understanding the real root cause of poverty and thus today, Grameen Bank succeeded by following its own vision and proved the myths to be wrong.

8. **FOCUS ON PEOPLE RATHER THAN THE PRODUCT IE 'CREDIT':** At Grameen, every worker focused on understanding the poor people to be served rather than selling the product i.e. 'Credit' to the poor. The clients were looked upon as human beings. It's the job of the workers at Grameen to help the poor people change their lives. Credit was considered as a tool or instrument to achieve the objective of bringing to poor above the poverty line.

9. **TRAINING THE GRAMEEN EMPLOYEES:** At Grameen, a simple approach was followed to recruit the employees. Only those who were dedicated and wanted to work for the benefit of the poor were recruited. Fresh people who were energetic and young were chosen. People with no experience were preferred and hiring from banks and other organizations were avoided. Motivation and Loyalty were the aspects on which the candidate was measured. Anyone whether with a degree or without a degree could become an employee of Grameen provided he/she had motivation and loyalty towards the achievement of the goal that Grameen laid out. The employees were given practical field experience for understanding the psychology of the poor people. The employees are trained as to mould them as teachers so that they can tap the potential of the borrowers and discover the strength of poor people and help them explore opportunities to get out of poverty circle. A problem-solving attitude is developed among the workers so that they can be advisors and guides to poor people's problems.

Thus, the Grameen Bank believes that the best way for participants to learn about how the bank works, is through first hand exposure and observations at the field level. Through these experiences, participants are encouraged to draw their own conclusions about the effectiveness of Grameen Bank's work and the impact it has on the poorest of the poor. The objectives of GB's training programs are to:

- 'Arouse curiosity'
- 'Stimulate interest on the subject of Microfinancing'
- 'Encourage responsibility of self-motivated learning'

- 'Learn and share with others'

- 'Discover individual role in the organization and the global community'

10. **START UP 'SLOWLY'**: At Grameen, the working started at a very low pace. The aim was not profit but to slowly make people come out of the poverty line. So it required lot of hard work and solutions to barriers that came on the way. A slow and steady pace and be contributed to the growth and success of the Grameen Bank.

GRAMEEN BANK INDICATOR

According to Yunus, a member is considered to have moved out of poverty if her family fulfills the following criteria:

1. The family lives in a house worth at least Tk. 25,000 (twenty five thousand) or a house with a tin roof, and each member of the family is able to sleep on bed instead of on the floor.
2. Family members drink pure water of tube-wells, boiled water or water purified by using alum, arsenic-free, purifying tablets or pitcher filters.
3. All children in the family over six years of age are all going to school or finished primary school.
4. Minimum weekly loan installment of the borrower is Tk. 200 or more.
5. Family uses sanitary latrine.
6. Family members have adequate clothing for every day use, warm clothing for winter, such as shawls, sweaters, blankets, etc, and mosquito-nets to protect themselves from mosquitoes.
7. Family has sources of additional income, such as vegetable garden, fruit-bearing trees, etc, so that they are able to fall back on these sources of income when they need additional money.
8. The borrower maintains an average annual balance of Tk. 5,000 in her savings accounts.
9. Family experiences no difficulty in having three square meals a day throughout the year, i. e. no member of the family goes hungry any time of the year.
10. Family can take care of the health. If any member of the family falls ill, family can afford to take all necessary steps to seek adequate healthcare.

Source: http://www.grameen-info.org/index.php?option=com_content&task=view&id=23&Itemid=126

FINDINGS

ESSENTIAL POINTS IN REPLICATION OF GRAMEEN MODEL OF SUCCESS

Various points have been in discussion as to what points should be kept in mind while replicating the Grameen model. Some of the issues relating to it are as follows:

1. **FOCUS ON WOMEN**: Experience has shown that poor women prove to be better microcredit clients than men. Poor women tend to use their loans for income generation rather than consumption. They are therefore better able to keep up with weekly payments. This is so because they tend to invest the gains that they make from credit into meeting more effectively the needs of the family. In other words women prove to be more effective agents of change and development.
2. **AWARENESS BUILDING AND LEADERSHIP DEVELOPMENT**: The vast majority of problems that arise during set up phase of microcredit programs do so because there has not been adequate preparation to implement the microcredit program, or there is not a complete understanding or training of the principles of microcredit. Since implementing microcredit is a difficult task, committed leadership is an important requirement; that is leadership that will see the project through the inevitable teething problems that arise. A proper advisory system supports the leadership aspects in order to take proper and correct decisions.
3. **SUSTAINABILITY AND FUNDING**: Grameen Bank attracted a 17 great deal of international funding in the early years, microcredit programs today compete for much scarcer donor funds. Thus, the management of microcredit programs has to be very creative in organizing funding for their expanding programs. Ultimately the only sustainable way is through the mobilization of savings or to borrower from commercial financial institutions and markets. For the former, most microcredit programs will have to transform into formal financial institutions, for the latter they have to become efficiently run profitable institutions. From Grameen Trust experience funding shortage appears to be for the main constraint for the expansion to reach large numbers of the poor. Thus microcredit programs should plan to reach financial self sufficiency within a five to eight year period. For this, it has to have a clear business plan towards this. It would also require staff with financial expertise to plan and implement these plans. It is important for microcredit programs to be run professionally and in a business like way following clearly formulated business plans, especially as they seek funds from commercial sources and donors.
4. **SOCIO ECONOMIC AND LEGAL ASPECTS**: Microcredit has been found to work better in areas with better infrastructure, relatively easy access to markets and where there is a high density of poor people. Since microcredit is a very different kind of business than regular banking, Professor Yunus has been arguing that a separate legal framework, as well as a separate regulatory body in the form of a Microcredit Regulatory Commission, be created in each country where microcredit operates. The law should define clearly what a microcredit bank is in terms of:
 - Clear definition of microcredit (e.g. condition of no collateral, small initial loan size etc)
 - The target group to be reached (e.g. bottom 25 per cent of the population or those on less than a dollar a day)
 - Preference given to poor women.
 - No upper limit for microcredit since loan sizes grow as borrowers' business grows.
 - Permission for microcredit banks to mobilize deposits from both borrowers and the public, with maximum amount of deposits to be mobilized to be related to the amount of loans outstanding of the organization.

The role of the Microcredit Regulatory Commission as Professor Yunus sees it is not to over-regulate but rather enable microcredit banks to innovate and grow. Since the banks are designed to help the poor, the commission should not control to the extent that microcredit banks' expansion is not limited.

5. **BOT APPROACH**: In a different type of program, Grameen Trust also goes into a country to create a microcredit program directly on the ground with experienced staff from Grameen Bank, under a **Build-Operate-Transfer (BOT)** contract. Grameen Trust staff set up the program, recruiting and training local staff. This is a very efficient approach which shows good results and can be scaled up quickly. The program can be started quickly, and since it is implemented by highly trained staff, many risks and uncertainties can be overcome. Lag time between a decision to start a program and implementation is minimal. BOT approach can and has contributed to rapid expansion of microcredit in areas where it doesn't exist. Grameen Trust set up successful BOT projects in Turkey, Myanmar, Kosovo and Zambia over the last nine years. It has embarked on directly implemented programs in Costa Rica and Guatemala financed by the Whole Planet Foundation. In the case of BOT projects, more easily obtained permission for easy transfer of funds, opening of bank accounts, and easier international movement of trained personnel with specialist knowledge would greatly facilitate the process of setting up these programs.

6. **STRONG MANAGEMENT AND ADVISORY TEAM:** An important feature of successful replications of Grameen is transparency of the programs and disciplined organizational practices. Procedures are simple and financial transactions take place in front of borrowers. Taking banking services into remote villages is an exacting task, so field staff and managers should be well trained and well paid.
7. **DEFINING THE 'POOR':** The Government should clearly define what the term 'poor' means. Conceptual vagueness damages the aspect of alleviation of poverty. If required, even the poor should be categorized for the purpose of poverty removal as suggested by Yunus.
8. **PRACTICAL INNOVATION AND CHANGE:** As Grameen believed in practical innovation and change, its suggested that any micro-credit programme should properly review its practicality and applicability in the real world. Vague measures are not going to work at all.
9. **GOALS OF ECONOMIC DEVELOPMENT:** The Economic development goals of a country should clearly define its developmental aspects with respect to the poverty and micro-credit programmes. The power of free market economies and power of capital should be identifies. A strong capital provision to the people of the country can help in economic development. Poverty is created by the structure of the society. The economic system should be competitive as competition is the driving force for all innovation, technological advancement and management. According to Yunus, all human beings are entrepreneurs. It's just that appropriate funds are provided to those who need it so that their potential can be used for economic development. The goals of economic development should be redefined. In the words of Yunus, "The changing quality of life is the essence of development."
10. **SPECIALIZED INSTITUTIONS:** The institutions that deal with micro-credit facilities should be developed to enhance the system of funding. These institutions should be capable enough in order to provide micro-credit facilities to the poor and needy in an easier and simpler way.

GRAMEEN BANK, MICRO-CREDIT, POVERTY ALLEVIATION AND ECONOMIC DEVELOPMENT: THE CONCLUSION

The Grameen Bank has brought an extraordinary opportunity of women's emancipation in Bangladesh. The Bank was begun as an experimental project in 1976 and turned into a formal financial institution in 1983 but with only 75 branches in the whole of Bangladesh. Since then, it has been experiencing a remarkable rate of growth. The successful operation of the Grameen Bank in Bangladesh has prompted governmental and non-governmental organizations in many less developed countries as well as the United States and Canada to replicate the Grameen model in their own countries. Grameen Bank has reversed the conventional banking wisdom by removing collateral requirement and created a banking system which is based on mutual trust, strict supervision, accountability, participation and creativity. At Grameen Bank, credit is the entry point and it serves as a catalyst in the overall development process. Grameen Bank sees credit as an empowering agent, an enabling element in the development of socio-economic conditions of the poor who have been kept outside the banking orbit on the simple ground that they are poor and hence not bankable.

Grameen Bank has now become a national institution that provides credit to the rural poor in Bangladesh. It is today also owned by the poor, whose paid up share capital amount to Taka 200 million. Credit provided by Grameen in 1994 exceeded the total amount of all other financial institutions and NGOs put together in Bangladesh. Grameen is committed to the goal of alleviation of poverty and empowerment of the rural poor. To fulfill its strategic objective, Grameen has grown institutionally, its credit operations have expanded rapidly and its programmes have become more diversified. Grameen's modus operandi has clearly demonstrated that poverty can be alleviated within a short time and new opportunities created for self employment, higher incomes, improved housing, better health & nutrition, children's schooling, and altogether a better quality of life. A substantial number of Grameen's clientele, according to some evaluations, have already succeeded in overcoming absolute poverty. It is Grameen's firm conviction that a majority of its borrowers will cross the poverty line in the coming years, thus contributing to the economic development to the country.

REFERENCES

1. ———. 1998. "Does Microfinance Really Help the Poor? Evidence from Flagship Programs in Bangladesh," Hoover Institution, Stanford U., July, draft.
2. ———. 1999. "The Role of Subsidies in Microfinance: Evidence from the Grameen Bank," J. Devel. Econ., Oct.
3. ——. 2000. "Social Capital and the Foundations of Democratic Public Culture: Contributions from Critical Ethnography of Nepal." Paper prepared for the 6th Annual Conference of the University of Toronto–York University Joint Centre for Asia Pacific Studies, "Democracy and Identity Conflicts in Asia: The Politics of Cultural Difference in an Age of Globalization," December 4–5, 2000.
4. ———. 2000. "The Microfinance Schism," World Devel., forthcoming.
5. Daley-Harris (2007). "State of Micro-credit Campaign Report, 2006" Time Magazine, Person of the Year issue, 1992
6. Morduch, Jonathan. 1995. "Income Smoothing and Consumption Smoothing," J. Econ. Perspect. 9:3, pp. 103–14.
7. Pollin, Robert (2007). "Microcredit: False Hopes and Real Possibilities". Foreign Policy Focus, <http://www.fpif.org/fpiftxt/4323>, accessed on Dec. 2, 2008.
8. Rankin, Katharine N. 1996. "Planning for Equity: Ethical Principles from Newar Representations of Finance." Studies in Nepali History and Society 1(2): 395–421.
9. Robinson, Marguerite. 2001. The Microfinance Revolution: Sustainable Finance for the Poor. World Bank. Washington.
10. Shaheen Sardar A., Siobhan Mullally, 'Women's Rights and Human Rights in Muslim Countries: A Case Study,' in H. Phoenix, A., Stacey J. (eds.) Working Out new Directions for Women's Studies Falmer, 1992) pp. 113-123.
11. Wright, Graham A. N. 2000. Microfinance Systems: Designing Quality Financial Services for the Poor. Zed Books Ltd. London & New York, and The University Press Limited, Dhaka.
12. Yunus, 1999. "Banker To The Poor", Penguin Books Ltd., New Delhi, India

**COMMON PROPERTY RESOURCES-AVAILABILITY AND DEPENDENCY PATTERN
(A CASE STUDY OF BOLUVAMPATTI PANCHAYATH - TAMIL NADU)**

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ABSTRACT

Large number of poor people of rural India virtually depends on the common property resources. However, over use of the common property resources by the community and intrusion of forest for non-forest activities have resulted in environmental degradation, contributing to climate change in the developing countries. To protect environment and at the same time to meet community's livelihood need, proper management of Common Property Resources has become indispensable. Improved CPR management will lead both to benefit for those who depend on CPRs for livelihood and also for conservation purposes towards sustainability. The socio-economic conditions and the availability pattern of the CPRs reveals that the dependency pattern of CPR resources. By an overview the extent and dependence of CPR land shows there is difference in land holding pattern among four sample villages. This analysis is an attempt to show how CPR would affect the dependency and availability pattern of the people of Bolumpatti panchayath. Common Property Resources as a major source of livelihood to the villages, play an important role in meeting the energy needs of the rural population. The study shows that there are several reasons for CPR reduction. The reduced availability of CPRs would have been the major reason for increased dependency. Generally, the reason for CPR reduction is population increase, urbanization, and decline in carrying capacity, state intervention and encroachment. In the study area, the mean analysis revealed that population and urbanization are the main reason for CPR reduction, and by the way of encroachment, the CPRs reduced by the land holders.

KEYWORDS

CPR, Accessible, Common village Land, Village forest, Exclusive property rights.

INTRODUCTION

Common Property Resources (CPRs) are integral aspect of the social and institutional arrangements made to meet the everyday requirements of village communities. They are of particular relevance to the landless, the agricultural laborer and the rural working class. Generally, CPRs may be identified by access, common use and communal purpose. Jodha define CPRs as a "community's natural resources, where every member has access and usage facility with specified obligation, without anybody having exclusive property right over them". (Jodha,1995)

Common property is the concept developed around the hypothesis posed by Hardin (1968) in his article on the "tragedy of the commons," in which he claims that farmers, herders, fishermen, and other users are inevitably "condemned" to exploit to extinction common resources upon which they depend. Hardin believed that, in the case of making use of common resources, individual interests would overcome the interests of the collective. To resolve the "tragedy of the commons," the author proposes total centralization of management by the state or privatization of the natural resources.

Common property resources constitute all such resources which are meant for common use of the people. In the pre-British India, a very large part of the country's natural resources was freely available to the rural population. Those resources were largely under the control of the local communities. Gradually, with the extension of the state control over these resources decay took place in the community management system. The commoners' right over the resources has gradually declined over the years. Nevertheless, It is widely held that CPRs still play an important role in the life and economy of the rural population..

COMMUNAL AND PUBLIC ASSETS

Apart from people's personal assets, people's livelihoods can benefit from access to assets held in common, by a group, a community or the state, such as access to public goods and services. Common goods, such as community forests or pastures, provide individual benefits; similarly, access to public health facilities or water delivery systems provides a benefit stream that improves people's livelihoods. Other public services affect people's asset holdings through their effect on vulnerability. The concept of common property (also referred to as "collective goods", "common goods", "public goods", "the commons", "collective resources", "common pool resources", etc.) refers to something that is used as if it belonged to all members of a group. The group may be large or small. An essential aspect of common property is that no member can be excluded from the use of the resource. In fact, many have argued that management of common property resources can never be sustainable, because the fundamentally selfish individual will maximize his/her private benefit by over-exploiting these resources to the detriment of the resource and therefore to society in general. Understanding the concept of common property and their management is essential in dealing with a wide variety of issues, usually where resources are overused.

DEPENDENCE OF THE POOR ON COMMON PROPERTY RESOURCES

Not with standing monitoring and measurement complexities, some of the benefits derived from common property resources in the dry regions of India have been quantified in previous studies (Jodha, 1986). Common property resources have been degraded and their productivity is much lower today than in the past. Consequently, the rural rich depend very little on them. It is not worth while for them to collect and use meager quantities of products from these resources.

On the other hand, the rural poor (small farmers and landless laborers) with limited alternatives increasingly depend on low pay-off options offered by such resources. The heavy dependence of the rural poor links these resources to the dynamics of poverty and to development interventions centered on the poor. Therefore, any change in the status and productivity of common property resources directly influences the economy of the rural poor.

COMMON PROPERTY RESOURCES AND VILLAGE ECONOMY

Common Property Resources are important natural resources for rural communities in developing countries. CPRs occupy an important position in the economy of the poor in rural India, whose employment and income generation opportunity from private property are limited. To the landless and land poor, this is the resources to fall back upon during times of need. Thus, CPRs contribute significantly to the village economy and the poor.

- The rural poor are more dependent in CPRs. They receive the bulk of their food, fuel, and fodder and other substance from CPRs.
- CPR product collection is an important source of income and employment during the periods when other opportunities are almost not existed.
- CPRs provide the sources for water for irrigation, drinking water entertainment and such other for village people.
- CPRs help for environmental and ecological balance.
- The inclusion of CPRs income in total household income from other sources helps to reduce the income inequalities.
- CPRs help for the betterment of other occupation such as livestock production crop and cash crop production petty trading.
- CPRs are the main sources of construction of house and shade, furniture and such other.

Common Property Resources (CPRs) are resources over which a community has traditional access. These may include village pastures, forests, wastelands, irrigation systems and such other commodities having collective utilization. Such resources are accessible to the whole village community and no one person can stake his own preclusive claim. But, unlike open access resources where people's use is on a "free rider" basis with no recognized property rights, in CPRs accessibility is exclusive with only the identified community having access to it and not others.

REVIEW OF LITERATURE-THEORETICAL BACKGROUND

Recent literature on CPR management criticized "Hardin's Tragedy of the Commons" often results, not from any inherent failure of common property, but from institutional failure to control access to resources, and to make and enforce internal decisions for collective use. These critiques argue that Hardin's tragedy of commons' is applicable only to the situation of appropriation of 'open access resources' and not to commons i.e. common property resources (Ciriacy-Wantrup and Bishop, 1975; Bromley and Cernea, 1989). In case of open-access and unregulated common property individuals do not get proper incentives to act in a socially efficient way. The subdivision present the review of literature related to the study the purpose of the part to understand the result of various studies already undertaken in the relevant field and to find the research gap for the present study. **Jodha (1989)** examine the developing countries is increased pressure on land, leading to over-exploitation and degradation of the natural resource base of agriculture. The problem is greater in the low-productivity, high-risk environments such as dry tropical regions. **Jack Croucher.D.C (1990)** observed that a collective action/club goods model for analyzing the private collective approach to common property resource systems (CPR). **Murty (1994)** has finds that the voluntary collective action may be an alternative to market and government in the management of common property resources. **Catherine tucker (1999)** had analyses recent studies of common property have shown that it can provide certain advantages for the rural poor, particularly by fostering equitable access to subsistence resources. **IngelaTernstrom (2002)** made study on the analysis of common-pool resource management one step further by looking closely at how the users adapt to disturbances. The analysis provides insights on how to analyse and promote adaptability in common-pool resource management systems. **BhimAdhikari (2003)** investigate Poverty, property rights and distributional implications of community-based resource management have become major topics of discussion and debate in recent years. **Bryan Bruns (2005)** reported that increasing policy support for community-based natural resources management and institutional redesign has been followed by questioning of the feasibility, risks, and results of such approaches. **Ana Paula Glinfskoiet.al (2006)** Studies of local natural resource management institutions have contributed to many co-management agreements around the world and also have demonstrated how communities interact with their environment through their culture and social organization. Common Property Systems (CPS), which define duties and rights in the use of natural resources, are examples of these interactions. **Stefan Ambecy.et.al (2007)** have made an attempt to use the information provided by regulating open access resources is welfare enhancing for society but not necessarily for all users. **NoriTaruiet.al(2007)** has analysed their model is a dynamic common property resource game with unobservable actions and non-linear stock-dependent costs. **Michael Cox (2008)** has made study on Common-pool resources are managed in complex environments that are amenable to understanding, analysis, and management at multiple levels. **Ugo Pica-Ciamarra, et.al (2008)**. The theme of the article was Livestock, Poverty and Common Property Resources (CPRs). Poor livestock keepers significantly depend on access to common property resources for their livelihoods but CPRs are declining both in extent and quality, thereby increasingly constraining the livelihood opportunities of the rural poor. **Paul Chibisa (2008)** has explained the effectiveness of community-based institutions in achieving sustainable natural resource management. **Olden, et.al (2011)** examined Water scarcity is a reality in the world today, and is a major threat to our food production systems that have to provide enough food for a growing and wealthier population. Managing water for agriculture is a major part of the solution for scarcity. **Lenton (2011)** examines the practices and approaches that have come to be known as integrated water-resources management (IWRM). It begins with an analysis of integrated approaches to water-resources management at different levels, including watershed management, agricultural water management, basin management, national policies and governance, and transnational decision making.

NEED FOR THE STUDY

Now a days the availability of CPRs in the form of land, water, forest are showing declining trend. There are several reasons behind it, but most of the village population, tribes as well as non-tribal depend on CPRs for their survival. In most of the villages CPRs play a major role in meeting the livelihood of the people. Hence, a study in CPRs will be relevant and useful from socio-economic point of view of villages.

STATEMENT OF THE PROBLEM

CPRs occupy an important position in the economy of the rural poor. The rural households mainly depend on the CPRs for fuel. Fodder and a variety of other forest and non-forest produce, which include items such as fruits, roots leafy vegetables, gums, honey, medicinal herbs, fish leaves, bamboo etc. Even though it was neglected and they are facing serious decline in areas as well as in productivity.

The depletion of CPRs is caused by different factors such as rural literacy rate, rural poverty level, livestock population, agricultural productivity, rural population growth etc. In recent years, most of the villages' commons were degraded owing to open access situation with a weak property rights, lack of institutional arrangements and break down of local authority systems. Since the CPRs are being used collectively and freely, a situation of no caretaker prevails. Which leads to exploitation, culminating in a state of degraded condition and there by places a further stress on the rural economy, as a result, the area under CPR is on the

decline, the CPR dependants are forced to face problems. In addition, environmental degradation caused considerable hardships to fuel wood collection in rural areas. In this context, it is needed to create a data base on these resources. Any attempt in this direction, even a small sample household survey would help to enrich knowledge in this realm and facilitates protection of CPR in the long run.

OBJECTIVES AND METHODOLOGY

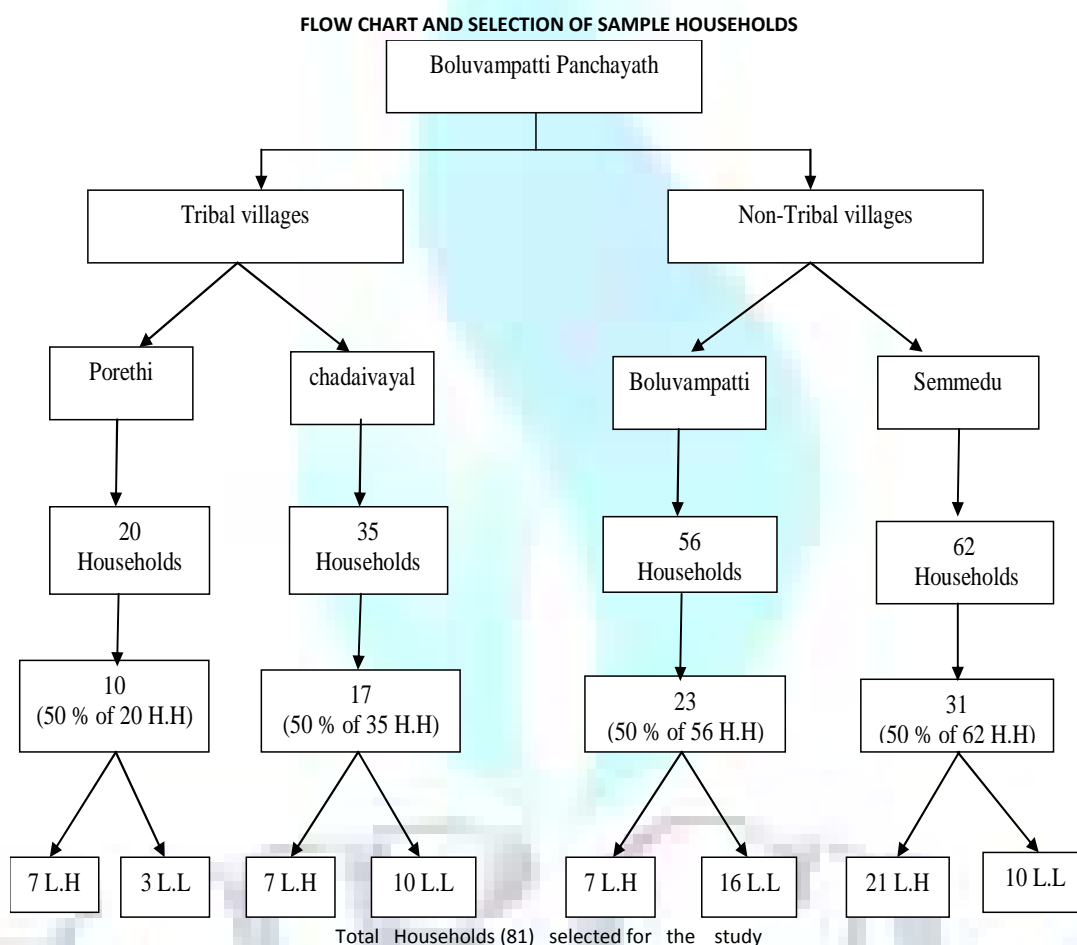
The present study is aimed to study the availability and dependency pattern of Common Property Resources in Boluvampatti panchayat; the specific objectives of the study are:

OBJECTIVE

1. To identify the distribution pattern of common property land resources in sample Villages.
2. To find out the land holding pattern of the tribal and non-tribal villages.
3. To analyse the usage and dependency pattern of common property resources.
4. To find out the causes for depletion and degradation of common property resources.

METHODOLOGY AND SELECTION OF SAMPLE

Coimbatore is the third largest city of Tamil Nadu, also an important district of the state. Due to its several textile industries, it is sometime called as the textile capital of south India or the Manchester of the South. The district city is situated on the banks of the river Noyyal. Thondamuthur block is a revenue block of Coimbatore district of Tamil Nadu. This revenue block consists of 10 panchayats villages. Boluvampatti is one of the village panchayat. It has a population about 166 persons living in around 58 households



H.H (House holds), L.H (Land holders), L.L (Land less)

SAMPLING DESIGN

In order to realize the set of objective, this study is used multi stage sampling methods i.e. proportionate, stratified random sampling methods to select the sample villages and sample households.

DATA SOURCE

The entire exercise has been carried out systematically which warranted more than three months time together information. Multistage sampling methods were adopted to collect information from tribal and non- tribal settlements. A prepared interview schedule containing relevant questions has been used. Significant too, is the informal discussions with the cross sections of the native dwellers. This is the fact that respondents seldom divulge information through formal enquiry.

TOOLS OF ANALYSIS

To analyze the various objectives of the present study the basic statistical tools such as partial correlation, linear regression, chi-square, one way ANOVA, cross tabulations, mean, paired sample test are used.

DATA ANALYSIS

Common property resources are the major contribution of Poor's livelihood life in general particularly socially vulnerable section of tribal, almost all the tribal and Non-tribal people are depends on CPRs for their survival. Local communities have been geographically, ecologically and culturally linked to forest habitats,

particularly in tropical regions of the world. Their view of nature is based on trust rather than domination, a perception as common among hunter-gathers communities have been affected by restrictions to forest access under protection laws.

Rigorous primary household survey was conducted during April to June 2011, across the tribal settlements. The response from the households was satisfactory. As indicated in methodology. Four villages were selected; the village names are Porathi, Chadivayal. Semmedu, Boluvampatti. The intensive field survey conducted in the study villages aimed to address a host of issues related to socio-economic an environmental dimension of common property resources and the livelihood.

DISTRIBUTION OF COMMON PROPERTY LAND RESOURCES-ASSET (LAND) REDISTRIBUTION

Redistribution to the landless and to small landowners was the key element of the land reforms introduced in the early 1950s in India. Having failed to acquire surplus land from large farmers and absentee landlords through effective land ceiling laws, the state governments found it easier to redistribute common lands. While most are fragile, sub marginal and best suited to natural vegetation, their division into individual private holdings immediately brought them under the plough. Therefore, one consequence of common property division was low and unstable crop yields.

TABLE 1: DISTRIBUTION OF SOCIAL GROUPS AMONG VILLAGES

Grouping of the community (tribes/non tribes)	Name of the village				Total
	Porathi	Chadivayal	Boluvampatti	Semmedu	
Tribes	10	17	0	0	27
Non-tribes	0	0	23	31	54

Source: Computed data

Table: 1 shows the grouping of the community (Tribes and Non tribes)among 81 households. It stated that 27 households include the categories of tribal and 54 household include the category of non-tribal, from the 27 households 17 are from Chadivayal village 10 from Porathi, Boluvampatti, and Semmedu gave not tribal and the same way out of 54 non-tribal 23 household from Boluvampatti village and 31 from Semmedu so from these we can understand out of 81 households 31 are from Semmedu.

TABLE 2: TYPES OF HOUSES IN THE SAMPLE VILLAGES

Name of the Village and Type of the House					
Name of the Village	Type of the House				Total
	Thatched	Tiled	Terraced	Pucca	
Porathi village	1	3	2	4	10
Chadivayal village	11	2	2	2	17
Boluvampatti village	10	7	2	4	23
Semmedu village	6	7	14	4	31
Total	28	19	20	14	81

Source: Computed data

Table: 2 and the bar diagram explained that out of 81 households from the four village having the house types are thatched, tiled, terraced and pucca, from this villages thatched house more in Chadivayal. out of 17 households 11 having thatched house. In Porathi only one thatched house out of 10 households. In Semmedu out of 31, 14 households having terraced house. In Boluvampatti out of 23 household 10 having thatched house.

TYPES OF HOUSES IN THE SAMPLE VILLAGES

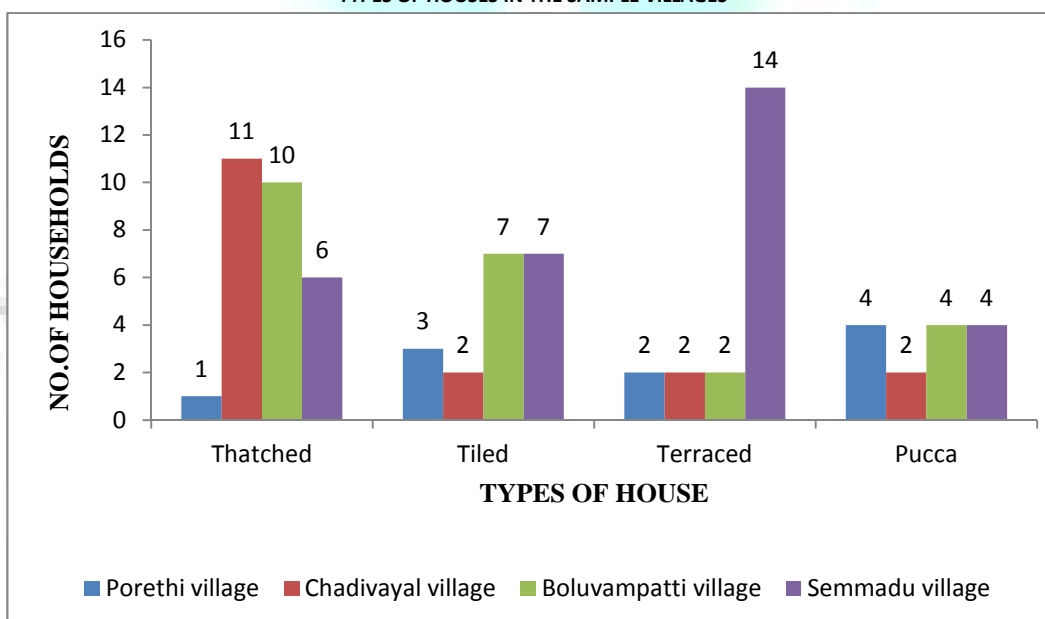


TABLE 3: INCOME AND DEPENDENCE ON CPRs IN SAMPLE VILLAGES

Total family income (per annum)	Dependence on CPRs for survival		
	Yes	No	Total
25,000-50,000	16	1	17
50,000-75,000	16	0	16
75,000-1,00,000	13	0	13
1,00,000-1,25,000	12	0	12
1,25,000-150,000	11	1	12
1,50,000-1,75,000	9	0	9
1,75,000-2,00,000	2	0	2
Total	79	2	81

Source: Computed data

Table:3 from this table clearly observed that 79 household depend on the CPRs, and 2 of them gave response that they don't depend on CPRs for survival, from this 79 household, 16 equal number of household lies in the income category of 25000-50000 and 50000-75000 and 1 of the household of 25000-50000 category of income level have not depend on the CPRs. 2 households having in the category of 1,75000-200000.

TABLE 4: TYPE OF LAND HOLDINGS AND ACRES OF OWN LAND HOLDINGS IN SAMPLE VILLAGES

Type of land holding	Acres of Own Land					Total
	Not Applicable	1-2acr	2-3acr	3-4acr	4-5acr	
Not Applicable	39	0	0	0	0	39
Own land	14	3	10	4	4	35
CPRs land	7	0	0	0	0	7
Total	60	3	10	4	4	81

Source: Computed data

The Table:4 stated that 39 households not owing lands, 35 respondents having own lands and 7 having CPRs lands from this, 10 having 2-3 acres of own lands. 7 household having CPRs land but they don't know how much acres of land they holding.

TABLE 5: TYPE OF LAND HOLDING AND ACRES OF NATTHAM LAND IN SAMPLE VILLAGES

Type of land holding	Acres of nattham land		Total
	Not Applicable	1-2acr	
Not Applicable	39	0	39
Own land	33	2	35
CPRs land	7	0	7
Total	79	2	81

Source: Computed data

Table:5 shows that from the 35 respondents, 33 having own lands and 2 of them having land 1-2 acres. 7 households having CPRs land but don't know how much acres of nattham land they are holding.

TABLE 6: TYPE OF LAND HOLDING AND ACRES OF GRAZING LAND IN SAMPLE VILLAGES

Type of land holding	Acres of grazing land			Total
	Not Applicable	1-2acr	2-3acr	
Not Applicable	39	0	0	39
Own land	35	0	0	35
CPRs land	0	5	2	7
Total	74	5	2	81

Source: Computed data

It has been identified from the table:6 that 39 respondents have not holding land, 35 having own land, 7 having CPRs land laying in between 1-2 acres and 2-3 acres of having 5, 2 households respectively.

EXTENT OF LAND BASED CPRs AMONG FOUR VILLAGES

TABLE 7

Name of the village	Extent of nattham land acres				Total
	Not Applicable	1-5	6-10	11-15	
Porathi village	10	0	0	0	10
Chadivayal village	15	1	1	0	17
Boluvampatti village	7	7	8	1	23
Semmedu village	13	12	6	0	31
Total	45	20	15	1	81

Source: Computed data

The table shows that how the land based CPR varies in four villages. 20 respondents has only land range of 1-5 acres and only one respondent has land holdings above 10 acres.

TABLE 8: EXTENT OF GRAZING LAND

Name of the village	Extent of grazing land acres					
	Not Applicable	1-5	6-10	11-15	16-20	Total
Porathi village	4	0	0	2	4	10
Chadivayal village	4	0	7	4	2	17
Boluvampatti village	10	12	1	0	0	23
Semmedu village	12	14	5	0	0	31
Total	30	26	13	6	6	81

Source: Computed data

Table: 8 shows that name of the village and extent of natham land increases. In Porathi village the household have not nathamlands, in Chadivayal only one has natham land in 1-5 and 6-10 acres, out of 17 households. In Boluvampatti one is having natham land (11-15) acres. In Semmedu out of 31 households 13 have not land in the form of natham.

Table: 9 explain that extent of grazing land among four villages. In Porathi four household having 16-20 acres of grazing land of 16-20 acres, in Chadivayal 7 household having 6-10 acres of grazing land. In Semmedu 14 household having 1-5 acres of grazing land.

TABLE 9: LAND HOLDING PATTERN

ANOVA

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	51.792	3	17.264	22.494	.000
Within Groups	59.097	77	.767		
Total	110.889	80			

Source: Computed data

The significance variance, i.e., p-value, given under the head Sig. is 0.000. Since the significance value is less than 0.05 ($p < 0.05$), the variance between different experimental conditions is significant. Therefore, we conclude that the four sample means differ from each other significantly.

DEPENDENCE AND USAGE PATTERN OF COMMON PROPERTY RESOURCES

TABLE 10: REASONS FOR DEPENDENCY OF CPRs

CORRELATIONS

Grouping of community (Tribes/Non tribes)		Grouping of community (tribes/non-tribes)	if yes what is the reason
	Pearson correlation	1	.161
	Sig. (2-tailed)		.151
	N	81	81
if yes what is the reason	Pearson correlation	.161	1
	Sig. (2-tailed)	.151	
	N	81	81

Source: Computed data

It is clearly observed that the table gives the main matrix of the Pearsons correlation coefficient. Variables have been arranged in matrix such that their column/rows intersect. In the cells there are numbers that tell about the statistical interaction between the variables, three type of information are provided in each cell. i.e., Pearsons correlation, significance and number of cases, the value of either side of the diagonal are mirror images of each other i.e., the values are the same, hence one can ignore the information above the diagonal or below the diagonal as one wishes. The value against Pearson correlation i.e., .161 is the r value. Since the r value is positive and significance (2-tailed) value of .151 (the p-value) is high 0.01, the group community gave reason of CPR dependency.

TABLE 11: DEPENDENCY OF CPRs IN SAMPLE VILLAGES

Name of the village	if yes what is the reason					Total
	Not Applicable	Family condition is poor	Easy accessibility of the resources	Free of costs	others	
Porathi	0	2	4	4	0	10
Chadivayal	2	3	8	4	0	17
Boluvampatti	0	10	6	5	2	23
Semmedu	0	1	15	14	1	31
Total	2	16	33	27	3	81

Source: Computed data

Table: 11 describe that the 4 village people statement about reason for the dependency of the CPRs, they stated the reasons are family condition is poor, easy accessibility of the resources, free of cost, and also other reason. In Porathi most of the household stated its because of easy accessibility of resources and free of costs. In Boluvampatti out of 23 household 10 stated that they depend because their family condition is poor. In Semmedu 15 stated that they depend because easy accessibility of resources.

FUEL WOOD FROM CPRs

Common property resources, as a major source of fuel wood supply to the villagers, play an important part in meeting the energy needs of the rural population. A large majority of the rural households still depends on bio-mass fuel, particularly fuel wood, for cooking and heating. The growing needs for fuel wood and the resulting depletion in the vegetative cover in the country side have been causes for grave concern for quite some time now.

FUEL WOOD COLLECTION AMONG FOUR VILLAGES

TABLE 12

Name of the village and fuel wood collection in qty per annum							
Name of the village	fuel wood collection in qty per annum						Total
	Not Applicable	1-100kg	101-200kg	201-300kg	301-400kg	401-500kg	
Porathi village	0	0	1	4	1	4	10
Chadivayal village	2	3	6	2	0	4	17
Boluvampatti village	2	13	8	0	0	0	23
Semmedu village	7	21	3	0	0	0	31
Total	11	37	18	6	1	8	81

Source: Computed data

The table12 clearly observed that, 37 household collecting quantity of fuel wood(1-100kg)fuel wood only 1 household have collecting 301-400 kg,4 households from Porathi and Chadivayal village household collecting fuel wood of 401-500 kg.In Semmedu out of 31 household collecting 1-100 kg.

COLLECTION OF LAND BASED CPRs AMONG FOUR VILLAGES

TABLE 13: HONEY COLLECTION FROM CPR PROPERTY

Name of the village	Honey collection in qty per annum			Total
	Not Applicable	1-5 lt	6-10 lt	
Porathi village	1	4	5	10
Chadivayal village	14	2	1	17
Boluvampatti village	23	0	0	23
Semmedu village	31	0	0	31
Total	69	6	6	81

Source: Computed data

This Table: 13 show that only Porathi and Chadivayal village households collecting honey mostly from Porathi (1-5 liter) 4 households and (6-12 liter) 5 households.

TABLE 14: HONEY COLLECTION AND ITS VALUE

ANOVA

Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	310.926	1	310.926	1.946E3	.000 ^a
Residual	12.461	78	.160		
Total	323.387	79			

Source: Computed data

a. Predictors: (Constant), Honey collection in qty per annum

B. Dependent Variable: values of Honey in Rs per annum

The result of ANOVA gives the p-value under significance column is <0.01.This tells that the variance in honey collection and value of honey.(two independent variables or predictor variables) contribute significance.

TABLE 15: MEDICAL HERBS COLLECTION FROM CPRs

Name of the village	MH collection in Qty per annum			Total
	No1t applicable	6-10kg	11-15kg	
Porathi village	4	4	2	10
Chadivayal village	15	2	0	17
Boluvampatti village	23	0	0	23
Semmedu village	31	0	0	31
Total	73	6	2	81

Source: Computed data

The table: 23 shows that Porathi have collecting medical herbs (6-10) kg by 4 households and (11-15Kg) by 2 households.

TABLE 16: WATER RESOURCE AND USAGE

Purposes of tap water	Grouping of the community (tribes/non-tribes)		Total
	Tribes	Non-Tribes	
Not Applicable	9	26	35
Drinking	1	0	1
Domestic use	13	6	19
Irrigation	4	22	26
Total	27	54	81

Source: Computed data

Table: 16 clearly declared that 22 of them use river water for irrigation purpose, 13 tribe use river water for domestic purpose.

FINDINGS

The findings were derived by analyzing the 4 objectives. The total households divided into tribes and non-tribes. Out of 81 samples only 27 is covering tribal and the remaining 54 from non-tribes. The total tribes and non-tribes come under the category of four villages. The villages are Porathi, Chadivayal, Boluvampatti and Semmedu, and the stated about their dependency of CPRs.

From the analysis, it is found out the socio-economic conditions of the people of tribes and non-tribes, and their dependence of CPRs for survival reveals most of the people income level comes under the category of 25,000-50,000 and 50,000-75,000 per annum.

- The households depend own land and CPR land, they hold or depend land. The dependence of the type of lands is natham land, poramboke land, grazing land, burial ground, foot path, and cart path. In tribal village most of the land just put in the form of poramboke or grazing land
- The tribes and non-tribes both are depend CPR for their survival in principle or supplementary type. There are several reasons behind their dependency, family condition is poor, easy access of CPR resources and also the free of costs. There is not so much regulation for using of CPR resources.
- It is clearly mentioned the livestock dependence on CPRs and role in livelihood.
- Common Property Resource as a major source of fuel wood supply to the villagers, play an important part in meeting the energy needs of the rural population. From the estimate of fuel wood collection from the CPRs at the national level.

Generally, the reason for CPR reduction is population increase, urbanization, and decline in carrying capacity, state intervention and encroachment. In the study area, the mean analysis revealed that population and urbanization are the main reason for CPR reduction, and by the way of encroachment, the CPRs reduced by the land holders.

CONCLUSION

Despite the complexity in drawing conclusions with a modest sample 81 households, this study forth the following concluding remarks. The entire tribal and non-tribal life is related with the nature environment in general, common property resources, in particular. Tribes are mainly depending upon CPRs for their livelihood. Tribal and Non-tribal people with their indigenous knowledge and traditions have utilized resources for long time.

The socio-economic conditions and the availability pattern of the CPRs reveals that the dependency pattern of CPR resources. By an overview the extent and dependence of CPR land shows there is difference in land holding pattern among four villages. From the analysis shows that the numbers of livestock will reducing because of cattle disease, grazing land decline, change in bio-diversity and urbanization. Common Property Resources as a major source of fuel wood supply to the villages, play an important in meeting the energy needs of the rural population. The land less and land holding people are depending fuel wood in the same way, but their expense of fuels are different. Tribal village people collecting honey and medical herbs, and its value are different in related to the availability. The four villages getting water resource in very well manner for meeting their irrigation and other purposes. They mainly depend canal and river water for irrigation. There are several reasons for CPR reduction. Availability of CPRs will reduce but the dependence will increase.

The full understanding of the relationship between institutions, resource use pattern and forest management (degradation) outcome will be a major step toward formulating policies and programmes that aim to increase equity and enhancing the sustainability of resource base at the community level. The study will recommend future policy that will facilitate and promote efficient and equitable resource management regimes where forest-based livelihoods are pervasive features of the rural economy. It will also be possible to better inform policymakers about institutional support structures that would facilitate more equitable participatory forest management at the local level.

REFERENCES

1. Barton Bray David (2010) "the community as entrepreneurial firm: common property capitalism in Mexican forest communities creates jobs, competes in global markets, and conserves biodiversity", *Americas quarterly*, vol.no 2, pp. no 12-16.
2. Bohrac.s et.al (2009) "Common Property Waste Land- Use Planning for Sustainable Resource Development in Ramgad Catchment, Kumaun Himalaya", *scientific world*, vol. 7, No. 7, July 2009.
3. Cristiana Simaoseixas (2010) "Community-Based Enterprises: The Significance of Partnerships and Institutional Linkages", *IASE*, vol.4, no 1, pp. 183-212.
4. Molden D.et.al (2011) "Water Availability and Its Use in Agriculture", *Treatise in Water Science*, PP.No 707-773
5. N. S Jodha (1992) *Common Property Resources; A Missing Dimension Of Development Strategies*. Vol. no 15, pp .no.261-283, concept publishers
6. NSSO 54 National Level Surveys (1997-98) *Common Property Resources in India*.
7. Short Christopher (2008) "The Traditional Commons of England and Wales in the Twenty-First Century; Meeting New and Old Challenges", *international journal of the commons* vol.no. (2)12, pp. 192-221.
8. Tauri Noriet.al (2007) "Corporations in the Commons with UN Observable Actions", *journal of environmental economics and management*, vol. no. 55, pp.no 37-51

WEBSITES

9. <http://www.indianplanning/commission.com>
10. <http://www.jstor.org/cgi>
11. www.forestry@odi.org.uk

HOUSING PROPERTY INVESTMENT PREFERENCES IN POST RECESSIONARY BANGALORE ECONOMY - A CONSUMER PERSPECTIVE ANALYSIS

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ABSTRACT

Bangalore the IT hub of India and the capital city of Karnataka state being one of the 5 most promising cities of India has been Real Estate heaven for the last 15 years. Constantly growing purchasing power, urban migration, growing importance of the city as an educational hotspot made it even a stronger player in the real estate market. These with many more positive factors have attracted all the realty majors and the equal number of Bangalore based realtors into the business in the last ten Years. India the fastest growing free democracy with highest proportion of population belonging to young and powerful aspiring customers is among the first ones to recover out of recession. The issue of crediting the success of recovery on regulatory mechanism would only make it worse if business sentiments are not recognized. In the current context of post recessionary economy it is of paramount interest to check and evaluate the strategic concerns of marketing the Organized Housing projects to consumers. Hence the problem has been stated "CHANGING HOUSING PROPERTY PREFERENCES IN POST RECESSIONARY BANGALORE ECONOMY".

KEYWORDS

Housing property, Consumer preference, Post recessionary economy, Bangalore.

1. INTRODUCTION

The Indian Real Estate market, particularly the residential asset class, is showing signs of robust recovery in line with the revival of the Indian economy. Our economy is being driven by its strong fundamentals, demographic features and structural robustness including: Young population comprises of over 60% of Indians, High growth of Urbanization, Nuclearisation of families, Rise in house hold disposable income, Improved outlook on urban infrastructure development, Increased penetration of home financing for end customers.

Above factors, along with an enhanced consumer confidence arising from higher jobs, income security and moderation of prices in Tier 1 cities are expected to drive, the demand up for real estate sector in particular and all market segment in general. As the developed nations' growth path is on a recovery mode, the demand for commercial space catering to exports (IT, ITES etc) is also expected to witness a substantial growth in the coming years.

With the growth momentum back on track, the availability of capital to real estate sector is also on a rise, both for domestic and foreign capital. This will boost the confidence of all stakeholders of the industry and provide the right impetus for developers to cater to the potential end users demand growth.

Bangalore the IT hub of India and the capital city of Karnataka state being one of the 5 most promising cities of India has been Real Estate heaven for the last 15 years. Constantly growing purchasing power, urban migration, growing importance of the city as an educational hotspot made it even a stronger player in the real estate market. These with many more positive factors have attracted all the realty majors and the equal number of Bangalore based realtors into the business in the last ten Years. But the recent economic downturn has devastatingly depreciated the values of marketable lands and Houses. The post recessionary economy has shown new dimensions spurred by new product offerings, greater influx of end-user demand and an increasing upwardly-mobile segment, luxury and ultraluxury housing projects, with prices ranging between Rs 1 crore and Rs 15 crore, again seem to be making a comeback.

The rise in affordable housing projects, owing to the 2008 economic downturn, and the oversupply in the premium housing market is currently going through market lethargy. Exponentially increasing interest rates, rise in cost of building materials and increasing labour charges have put developers in a fix with regard to profitable execution of such projects.

The above said reasons clearly signify the importance of bringing these strategic concerns into the knowledge of academic community. Hence this research has explored and evaluates the HOUSING PROPERTY INVESTMENT PREFERENCES IN POST RECESSIONARY BANGALORE ECONOMY.

2. STATEMENT OF THE PROBLEM

Major drivers of Housing Realty constructions such as Enhanced purchasing power, booming Business dimensions, rising salary levers, escalating dimension job market have all come to a halt in the recent economic downturn of 2008. Heavy reliance of Housing property on IT/ITES industry as the primary source of demand and the root for above said factors literally doomed the industry into a serious turmoil.

Realty sector even after being one of the heavily hit industries has shown tremendous resilience. But the double side pressure of price as well as the highest quality standards made the industry to seriously consider the slack of lessons from the recent recession.

India the fastest growing free democracy with highest proportion of population belonging to young and powerful aspiring customers is among the first ones to recover out of recession. The issue of crediting the success of recovery on regulatory mechanism would only make it worse if business sentiments are not recognized. In the current context of post recessionary economy it is of paramount interest to check and evaluate the strategic concerns of marketing the

Organized Housing projects to consumers. Hence the problem has been stated "HOUSING PROPERTY INVESTMENT PREFERENCES IN POST RECESSIONARY BANGALORE ECONOMY"

3. REVIEW OF LITERATURE AND SIGNIFICANCE OF THE STUDY

VIVEK JOSHI¹ in his article "SECURITIZATION AND ITS RELATIONSHIP WITH REAL ESTATE GROWTH – AN ANALYSIS" has analyzed the growth of Real Estate sector in India and has opined that starting from the year 2004 the world Real estate market has seen the growth of 248% cumulatively. The breaks to this multifold growth was applied in March 2008, though some pre-cursors were visible in 2007, when in USA the mortgage market became stagnant and the impact was later sensed through the collapse of world's real estate investment. The impact was so sudden and deep that almost all international and domestic markets saw nosedive in prices of realty.

In a study entitled "*Real Estate Market & Opportunities*" released by *Indian Brand Equity Foundation*, The economic growth of India has trickled down to the large Indian middle class increasing affordability and affluence. Improving living standards are driving the demand for better quality housing and urban infrastructure. The study also strongly argued that housing in India is today moving from being viewed as a purely basic need to an aspirational purchase.

Shiller(2006) opined on the long term health of the housing market: Is the current boom in home prices temporary? Is a crash possible? And, if prices do fall, will they come back up fairly soon, or will they stay down for many years? Given the dramatic recent decline of real estate prices we have answers that real home prices in 2009 were down significantly from their 2006 peak, with large foreclosure discounts continuing. We do not yet have an answer to an emerging question that, will the real estate future is always under heavy uncertainty of uncertain economic ups and downs.

This clearly signifies that in the context of present and post Recessionary economy the dimensions have changed but not yet sensed clearly.

4. OBJECTIVES OF THE STUDY

1. To explore and understand the real estate industry and its working mechanism in Bangalore
2. To study the consumer preferences in Housing property Industry through **7 Ps of Marketing approach**
3. To explore and critically evaluate the strategic marketing concerns raised in post recessionary economy from employers perspective.
4. To analyze prospect customer opinion on the above identified strategic concerns.

HYPOTHESES

- I. Ho1: Bangalore hasn't seen shift in demand to peripheral areas
Ha1: Bangalore has seen shift in demand to peripheral areas
- II. Ho2: Realtors does not feel the heat of Recession in marketing in the post recessionary scenario
Ha2: Realtors does feel the heat of Recession in marketing in the post recessionary scenario
- III. Ho3: Job security concerns are not the prime de-motivators of real estate demand in Post recessionary economy
Ha3: Job security concerns are the prime de-motivators of real estate demand in Post recessionary economy.
- IV. Ho4: Affordable housing projects does not appeal the most for Bangalorean Real estate customers today
Ha4: Affordable housing projects appeal the most for Bangalorean Real estate customers today
- V. Ho5: IT sector dependency is beneficial as well as detrimental in Economic ups and downs
Ha5: IT sector dependency is beneficial as well as detrimental in Economic ups and downs

5. SCOPE OF THE STUDY

Bangalore City being one of the prime locational hotspot for commercial purposes boosted by the success of IT/ITES industry encompasses huge demand for Real Estate in the foreseeable future. But the city's heavy reliance on the same IT/ITES as the major customers of realty market makes it the most vulnerable one in all economic ups and Downs. Hence Bangalore makes a very good sample for the study of Post Recessionary strategic marketing concerns.

To make the study more focused, the case of Shobha Developers and its Prospectual Customers has been taken. The area and the case reference being one of the narrowly researched fields adds knowledge to the academic society and becomes useful for Shobha Developers and the Industry at large.

6. RESEARCH METHODOLOGY

A. RESEARCH DESIGN

Since there have been few exploratory studies on real estate markets and on Sobhadevelopers, the researcher has planned to go to the details of marketing strategies and the effect of post recessionary changes in economy on these strategic choices, the research is pursued on descriptive research design.

B. STUDY POPULATION

To analyze the effect of recent economic downturn on real estate markets and its sentiments, one must basically study the phenomenon from the perspectives of both end consumers and the real estate marketers. Hence the study population consists of all the potential buyers of domestic houses in apartment buildings and the real estate marketers from organized as well as unorganized real estate organization, local real estate agents and all the people who are in either direct contact or the indirect contact with this market. This is a pretty big population as far as the study is considered.

C. SAMPLING UNIT

The sampling unit for the study has been chosen as Sobha Developers, wilsen garden branch of Bangalore, Karnataka, India.

D. SAMPLE DESIGN

The size of service providers in the Real estate is very high in Bangalore. Since detail study of opinions of all Service Providers towards marketing concerns is very difficult and times consuming, therefore, the study adopted convenience random sampling method and selected 50 respondents from different geographical, age, employment backgrounds.

E. SAMPLE SIZE

The study chosen to contact two groups of respondents to analyze the perspective of marketers as well as prospect customers. The total respondent size is 50 out of which 48 are present or prospect customers.

F. INSTRUMENT

A well-structured pre-tested questionnaire has been administered to gather accurate and precise responses from respondents. Personal observation and casual interaction with consumers as well as employees is also used to gather a lot of informal information.

G. SOURCES OF THE STUDY

The study based on both primary and secondary data. Primary data shall be collected from the sample respondents by adopting convenience random sampling method through pre-tested questionnaire. The secondary data shall be collected through sources like, Published articles, reports, papers, books etc.

H. TOOLS AND TECHNIQUES

The study uses tools like tabular method, five points scale and t-test is applied to interpret the data systematically and draw the meaningful conclusions.

7. FINDINGS**7.1. RESPONDENT PROFILE BY ANNUAL INCOME**

Annual Income	Respondents	Percentage
Less than 5,00,000	7	14.6
5,00,001-10,00,000	30	62.6
10,00,001-20,00,000	8	16.6
20,00,001-30,00,000	3	6.3
30,00,001-Above	0	0

7.2. RESPONDENT PROFILE BY SOURCE OF INCOME

Source of income	Respondents	Percentage
Govt. Employees	2	4.2
Employee of MNC	36	75.0
Employee of domestic company	3	6.3
Work at MSME	7	14.5

7.3. RESPONDENT PROFILE BY INDUSTRY BELONG TO

Industry Belong to	Respondents	Percentage
IT/ITES	33	64.6
Health Care	3	6.3
Transport	2	4.2
Retail	3	6.3
Real Estate	4	8.3
Any other	3	6.3

7.4. NEED IMMEDIACY PREFERENCES

Need A Home	Respondents	Percentage
Immediately	3	6.3
In 90 Days	4	8.3
In 6 Months	16	33.3
Within a year	26	52.1

7.5. FLAT TYPE PREFERENCES

The type of flat to own Or willing to Purchase	Respondents	Percentage
Detached single unit house	3	6.3
Semi-detached:Two Houses	7	14.6
Attached multi-unit apartment building	38	79.1

7.6. VALUE CATEGORY PREFERENCES

Want to consider homes in this value category	Respondents	Percentage
20-30 lakhs	11	22.9
31-40 lakhs	2	4.2
41-50 lakhs	14	29.2
51-60 lakhs	14	29.2
61-80 lakhs	7	14.5
80 and above	0	0

7.7. BED ROOMS NUMBER PREFERENCES

Want this number of bed rooms	Respondents	Percentage
1	2	4.1
2	27	56.3
3	12	25.0
2 or 3	7	14.6

7.8. PROFESSIONALHELP PREFERENCES BEFORE SEARCHING A HOUSE IN AN APARTMENT

professional help before searching a house in an apartment	Respondents	Percentage
SDA	3	6.3
DA	2	4.2
MA	7	14.6
A	23	47.9
SA	13	27.0

7.9. LOCATION AREA PREFERENCE

Location Areas	Respondents	Percentage
Bangalore south	9	18.8
Bangalore north	12	24.9
Bangalore east	27	56.3
Bangalore west	0	0

7.10. SPECIFIC LOCATION PREFERENCES

Exact Location or Area	Respondents	Percentage
ITPL Road	26	54.2
HSR Layout	0	0
Devanahalli Airport	12	25
Yelahanka	8	16.7
Bannerghatta Road	2	4.2
Nelamangala	0	0

7.11. RESPONDENT PROFILE BY BASIC PREFERENCE

Basic Preferences	Not at all important	Not that important	Neither important nor important	Important	Very Important
Location of project,	0%	0%	4.2%	39.6%	56.3%
competitor pricing in the market	0%	0%	2.1%	41.7%	56.3%
construction quality	0%	0%	0%	12.5%	87.5%

7.12. RESPONDENT PROFILE BY PRE ADVANCE PAYMENT PREFERENCE

Pre advance payment preferences	Not at all important	Not that important	Neither important nor important	Important	Very Important
Developer past track record in terms of delivery commitments,	0%	0%	.0%	29.2%	70.8%
Project approvals from concerned authority	.0%	.0%	.0%	12.5%	87.5%
documentation before booking	.0%	.0%	.0%	18.8%	81.3%

7.13. RESPONDENT PROFILE BY PRE-PURCHASE PREFERENCE

Pre-purchase preferential Basic Realtor	Not at all important	Not that important	Neither important nor important	Important	Very Important
EMI facilities	2.1%	.0%	6.3%	56.3%	35.4%
Pre-launch offers	2.1%	2.1%	2.1%	33.3%	60.4%
Official website	.0%	2.1%	2.0%	18.8%	77.1%
Brochure	.0%	.0%	2.0%	66.7%	31.3%
Promotional preferences	Not at all important	Not that important	Neither important nor important	Important	Very Important
Brand Image	0.00%	0.00%	2.0%	41.70%	56.30%
Brand Positioning	2.10%	0.00%	4.10%	62.50%	31.30%
Celebrity endorsement	67.50%	10.0%	14.60%	5.00%	2.9%

7.14. RESPONDENT PROFILE BY FACILITIES

Differential weightage to Facilities-1	Not at all important	Not that important	Neither important nor important	Important	Very Important
Infrastructure	2.10%	0.00%	0.00%	22.90%	75.00%
Swimming Pool	0.00%	10.40%	20.80%	52.10%	16.70%
Parking Lot	0.00%	0.00%	0.00%	20.80%	79.20%
Lift facilities	0.00%	0.00%	2.10%	20.80%	77.10%
Open space	4.10%	0.00%	0.00%	31.30%	64.60%
Society Hall	2.1%	4.2%	2.1%	77.1%	14.6%
club House and Amenities	2.1%	.0%	.0%	64.6%	33.3%
Playground	.0%	.0%	2.1%	54.2%	43.8%
Gym	.0%	.0%	.0%	25.0%	75.0%
Advanced security systems	.0%	.0%	0%	33.3%	66.6%

8. SUMMARY OF FINDINGS

- 63% of respondent's annual income lies between the ranges of Rs. 5lakh to 10lakh.
- 75% of respondents work in multinational companies and their income source is also from MNC.
- 75% of respondents who work in MNC among them 65% of respondents work in IT/ITES companies.
- 71% of respondent's family structure is of nuclear type.
- The 52% of respondents say that they need a home within one year.
- 79% of the respondents are willing to buy attached multi-unit apartment building.
- 30% of the respondents are willing to buy a home in the ranges of Rs. 41lakh to 50lakh.
- 56% of the respondents want to buy 2 bedrooms flat.
- 56% of the respondents are looking to buy the home in 2000-2700 square footage of living area.
- 27% of the respondents strongly agree that they take professional help while searching a home.
- 56% of respondents say they want to purchase the home in the Bangalore East area because most of the IT companies are situated in this area.
- 54% of respondents say they want to buy the home in ITPL area.

- 88% of respondents say that construction quality is the basic preference while purchasing the home.
- 88% of respondents say pre advance payment preference is accepted if projects are approved by concerned authority only.
- Most of the respondents say they refer official website during their pre-purchase evaluation.
- 56% of respondents say they consider Brand image while purchasing the home.
- 79% of respondents say infrastructure and parking facilities is main preference.
- 75% of respondents give Gym is the second preference in facilities.

9. HYPOTHESIS TESTING

Null Hypothesis	Test Value = 0						Remarks
	t	df	Sig. (2-tailed)	Mean Difference	95% Confidence Interval of the Difference		
					Lower	Upper	
H ₀₁ : Bangalore hasn't seen shift in demand to peripheral areas	34.986	47	.000	3.583	3.38	3.79	Since the calculated Value is greater than table value Null Hypothesis is rejected
H ₀₂ : Realtors does not feel the heat of Recession in marketing in the post recessionary scenario	28.477	47	.000	2.917	2.71	3.12	Since the calculated Value is greater than table value Null Hypothesis is rejected
H ₀₃ : Despite Recession the land and residential value are not increasing in Bangalore	26.205	47	.000	3.063	2.83	3.30	Since the calculated Value is greater than table value Null Hypothesis is rejected
H ₀₄ : I do not agree that last two years were tough for property sellers	6.172	47	.000	3.875	2.61	5.14	Since the calculated Value is greater than table value Null Hypothesis is rejected
H ₀₅ : IT sector dependency is beneficial as well as detrimental in Economic ups and downs	34.028	47	.000	2.938	2.76	3.11	Since the calculated Value is greater than table value Null Hypothesis is rejected

10. INTERPRETATION AND SUGGESTION

The study based on the results of collected data Interpretation, Interviews with marketing executives, Visitors of Real Industry expo Bangalore suggest the following for Industry, Academia and Policy makers

1. Affordable and Comfort seeking housing projects will dominate the future of Real estate sector. Hence it is imperative for the industry and academia to chalk out the innovative ways to cut down project cost and enhance comfort based consumer value in the housing projects.
2. The income of 5-10 lakh of majority house seekers show a paramount area of need which could be converted into demand if custom made and low budget houses can be launched in market.
3. 2 BHK, 2000-2700 square footage of living area. Nuclear type family structure continues to dominate the housing property market which does mean the difficulty in making differentiation as a easy cup of tea in the future.
4. Zero compromise in the quality is the only way to sustain in the Industry. Long delays in project completion, Heavy maintenance charges, largely unsought equipment and services should be completely avoided.
5. Realtors should not get in the war of arms race, these Battles only increase costs and decrease revenues. It's good to accept that it's never too late to play a fair game. Post recessionary economy is only preaching this to all the realtors.
6. In luxury housing category, being Unique and different must be made keeping in view of 7 Ps requirements and their optimal usage.
7. In real marketers have started taking serious correction lessons from recent economic downturn. It should never be forgotten even if the markets hits the highest points in future.
8. The industry's vastness makes it real difficult to write a success mantra (Formula). But Better approach, Better value and emotionally attached designs with good value of money for investment is what consumers are looking in concrete.

11. CONCLUSION

Observing the kaleidoscopic nature of Housing property industry, the effectiveness of Real estate marketers is one difficult task to evaluate in the best comprehensive form. The recent economic downturn made this task even more difficult. As the industry is changing at lightning speed the realtors are working their hard mettle out to sell their projects. The correction process of recent economic downturn made realtors to check their basic equations of real estate marketing. The strategic concerns of delivering highest quality houses to low Income groups are more challenging than any other. Narrowing down the Knowledge gap, working on making realistic promises, deliver in time value is at all delivered, communicating the value delivered are some old challenges which are gaining space in the post recessionary economy Bangalore. The significance of peripheral geographic shift of demand, terrible failure of celebrity advertisement and media based Knowledge of consumers which leads to false expectations are some new hard nuts to crack. Service mindedness with a willingness to go an extra mile to achieve excellence in construction quality and cool minded optimism are the regular pills which will and must drive out of box innovations in Bangalore Real estate Industry.

REFERENCES

1. Benjamin, D. John (2003), "The Environment and Performance of Real Estate", Journal of RealEstate Literature, Vol. No. 11, Page 279 to 324.
2. Focke, Christian, "The Development of German Open-Ended Estate Funds", Journal of RealEstate Literature, Vol. No. 14, Page 39 to 56.
3. Jackson, O. Thomas (2001), "The Effects of Environmental Contamination on Real Estate", Journal of Real Estate Literature, Vol. No. 09, Page 91 to 116.
4. Malpezzi, Stephen, "The role of Speculation in Real Estate Cycles", Journal of Real Estate Literature, Vol. No. 13, Page 141 to 164.
5. Seiler, J. Michael (1999), "Diversification Issues in Real Estate Investment", Journal of RealEstate Literature, Vol. No. 07, Page 163 to 179.

VALUES FOR CORPORATE DEVELOPMENT

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ABSTRACT

In the modern era of technological advancements, market fluctuations, and fierce competition businesses are finding it harder to survive. Many companies fall by the wayside unable to take the heat. Many others have not only survived but grown continually and emerged as successful global institutions. Has 'values' any part to play in this? If we go by what Tom Peters & Robert Waterman observe in their seminal management book "In Search of Excellence" based on their research of the top Fortune 500 companies in the world, then it appears to be so: "every excellent company we studied is clear on what it stands for and takes the process of value shaping seriously. In fact we wonder, whether it is possible to be an excellent company without clarity on values and without the right sort of values." The research examined the role of values in shaping corporate institutions. Who sets the values? At what level in the organisation do values need to be applied? To what extent do they determine the longevity and continued success of organisations? The second part looked at different types of values. It examined the nature of Core values and how it differs from Strategies used by companies - which is more essential for corporate growth? Some of the key values like Action, Direction, Objectivity, Self control, Gratitude and Service were analysed with examples taken from companies to see if they work. These companies were multinationals such as IBM, Tata, GM, BT, John Lewis and others who've weathered the storm and established themselves as role models for future organisations. Establishing a strong base of values within the business is the best way to most effectively meet the dual interests of successful long term financial performance and also meeting the growing expectations for social and environmental responsibility. Without one, it can be a lot harder to achieve goals across the organisation, even if you have some successful programmes and certain leading business units that exemplify best practice. Getting it right can win all sorts of benefits:

- *Employees who are loyal and supportive of the company, and more likely to stay if offered an equivalent position elsewhere*
- *Customers who are more likely to trust the company – because whenever they look they see the company's employees doing the right thing*
- *Suppliers who believe in the company's integrity*
- *Enhanced relationships with investors, who may see that the company runs less risk of corporate scandals or controversies*
- *Good relationships with government and local communities that begin to see the company as a good neighbour*

To change a corporate culture from one of no values to a values driven company requires full and consistent commitment from the top, excellent communication throughout the organisation and empowerment of staff to begin to use the values as their guide for making decisions. Even with all of these factors, it takes time to change – time that may be in short supply for the modern top CEO whose tenure in any one position has become fairly short term.

KEYWORDS

Action, corporate development, objectivity, service, values.

ROLE OF VALUES

Values can be defined in general as 'Principles or standards of behaviour' (Oxford Dictionary). Since we are looking at values specifically in the context of its role in the development of corporate organisations, we can define values as, 'important and enduring beliefs or ideals shared by the members of a culture about what is good or desirable and what is not. Values exert major influence on the behaviour of an individual and serve as broad guidelines in all situations' (<http://www.businessdictionary.com/>). To acknowledge some feature of things as a value is to take it into account in decision making, or in other words to be inclined to advance it as a consideration in influencing choice and guiding oneself and others. Corporate development is the 'systematic use of scientific and technical knowledge to meet specific objectives or requirements in the corporate environment.' Corporate development involves three processes: development of cognitive (thinking, idea generation, and decision making) highlighted as 'Purpose' in the diagram below; behavioural (choosing appropriate attitudes and values) indicated as 'People' and environmental (suiting management style to the situation) skills, found as 'Process' below. Values play a vital role in developing all of the above.

THE PURPOSE, PEOPLE AND PROCESS MODEL

For businesses to be successful, it is necessary that the three critical dimensions of purpose, people and process are clearly aligned and work synergistically throughout the organisation at the strategic, tactical and operational levels.



(http://www.in-corporate.eu/our_approach/purpose_people_process_model.html. 2007)

Over the years the corporate organisations have evolved to become one of the major forces directing the societies. They seem to permeate into every facet of life. In fact societies seem to have become largely dependent on the way these organisations operate. Any decisions they take affects the society at large – right from influencing wealth generation to influencing people’s choices.

Corporate values are shaped by a handful of people who are guardians of the vision and the shapers of the corporate conscience. It is especially the role of the chief executive to define the character of the business and to establish the corporate values system/ culture. A corporation can instil within its basic policy structure and patterns of behaviour a corporate culture, a corporate value system that can prevail. But values have to be understood and implemented at every level of the organisation. When practised earnestly, values build material prosperity for the company, their shareholders and further stabilises the larger financial system. Secondly it promotes personal growth of the management and workforce who would be able to translate these values into the larger society they relate to.

Individuals drive an organisation. It is their initiative, skill, enthusiasm and creativity that shape the unit. They are its brain, nerve centre, heart and limbs. They play different roles as the management, labour, shareholders and consumers. And each one of them is crucial to the success of the organisation. Then the question arises, what drives individuals? This is where the role of values becomes crucial. Whatever ‘value’ the individuals cherish would be the driving force behind their actions. They would aspire to live up to the ideals they have set and inspire other members of the unit to imbibe it thus creating a work ethic in the organisation.

Most executives are nervous about discussing organizational values. Many are downright cynical, and believe that shared values are something that manager’s talk about to make their staff feel good but that has no bearing on performance.

Recent research indicates that shared values do in fact provide a framework within which people make decisions and take actions that ultimately affect the performance of their organizations. Values evolve as an organization tackles and solves the problems it faces. They are not always articulated. Some are so fundamental to human nature, to a company, or to an industry that people are not even conscious of them.

The CEO of Xerox, Anne Mulcahy reported at a keynote address to the Business for Social Responsibility annual conference in New York, USA: “corporate values helped save Xerox during the worst crisis in our history, and living our values has been one of Xerox’s five performance objectives for the past several years.”

(<http://www.strategy-business.com/article/05206?gko=7869b-1876-9176155>, Summer 2005)

Jaffe & Scott observe in their book, ‘Values: The Organisation’s Cultural Bedrock’, “Values represent an organising principle for our lives and for our organisation. What is most important for us to accomplish and to do at work, in our family and in our personal life and career can be described in relation to the values that we want to achieve... Values are sources of strength as they give people the power to take action... The highest achievement of people and organisations arise when they feel inspired to accomplish something that fits their highest values.”

Therefore the value of Values is:

1. Motivating Commitment – Values connect employees and their organisation. Values link individual effort to the whole organisation. And can help employees find meaning and purpose in what they do.
2. Aligning Action – Values establish a common guide for decision-making and reduce the need for specific rules to cover every situation. Values offer a set of guiding principles for all actions, relationships and decisions.
3. Transcending Conflict – Values represent the set of standards and ideals to be upheld in the organisation and can be used as a way to resolve individual and group conflict and determine appropriate behaviour.

(<http://www.breakthroughsunlimited.com/values.articulation/values7.htm>)

STANDARD OF GROWTH X STANDARD OF VALUES

Two factors that constitute a corporate organisation are the standard of growth & standard of values. A healthy organisation is dependent upon the development of both these facets. But an organisation devoid of a value system and merely looking to generate profits falls into a state of imbalance which would ultimately lead to downfall of the unit. Values act much like the foundation of a building – one does not see its role immediately. One may admire the look, shape and size of the building but that is possible because of the foundation. Though apparently not seen, the foundation holds the building together. Similarly the value of values is hard to measure. Hence Albert Einstein (1879 – 1955), the world renowned physicist remarks: “Everything that can be counted does not necessarily count; everything that counts cannot necessarily be counted.” (<http://www.valuequotes.net/chronological.html>). Stronger the values greater would be the stability and longevity of the organisation. In sheer ignorance some companies ignore values and focus on mere growth and profits. They pay a heavy price - instability, corrupt practises leading to extinction of the organisation. Henry Ford 1863 – 1947, American industrialist observes: “A business that makes nothing but money is a poor kind of business.” (<http://www.valuequotes.net/chronological.html>, Jan 08)

TYPES OF VALUES

Values may be grouped into various categories depending upon the area of application. At a personal level there are Healthy values, Moral values, Religious & Traditional values. At the community level one can have Social values, Aesthetic values & Historic values. And at the national level Social, Economic & Political values.

Similarly corporations have a set of values to instil within its basic policy structure and patterns of behaviour a corporate culture, a corporate conscience that can prevail. These values uphold the dignity of the individual, openness to people and ideas, optimum standards of service, entrepreneurship, synergism, leadership through competence, and behaviour based on values.

Shared values affect performance in three key ways. They provide a stable base for guiding employee decisions and actions in an otherwise rapidly changing workplace; they form an integral part of an organization’s value proposition to customers and staff; and they energize people to go the extra mile for their company, thereby creating a source of competitive advantage that is hard to replicate.

Below are listed different types of values. These are considered complementary and juxtaposed on the same level if illustrated graphically on for instance an organization’s web page.

1. **Core Values**, which prescribe the attitude and character of an organisation, and are often found in sections on Code of conduct on its web page. The philosophical antecedents of these values are Virtue ethics.
2. **Protected Values** are protected through rules, standards and certifications. They are often concerned with areas such as health, environment and safety.
3. **Created Values** are values that stakeholders, including the shareholders expect in return for their contributions to the firm. These values are subject to trade-off by decision-makers or bargaining processes.

Wenstøp, F. and A. Myrmel (2006). "Structuring organizational value statements" Management Research News 29(11): 673 - 683.

4. **Instrumental Value** (or **extrinsic value, contributory value**) is the value of objects, both physical objects and abstract objects, not as ends-in-themselves but a means of achieving something else. These are values that can be used to get something else. In other words the value is an instrument which allows you to get some other things. It is often contrasted with items of intrinsic value. (http://en.wikipedia.org/wiki/Instrumental_value, Jan 09)
5. **Intrinsic value** is generally defined as the inherent worth of something, independent of its value to anyone or anything else. Something has intrinsic worth simply because of what it is and not necessarily what it will lead to or because of its acceptance. (<http://cnx.org/content/m12160/latest/>, July 04)
6. **Prerequisite Values:** These are values that are necessary before you can get to some bigger goal. It is similar to the prerequisite course that you must take in order to get to the more advanced course. Some good examples of this type of value include safety (which is needed before people can even think about having anything else), Justice (which is needed before we can move onto equality), or the common good (which must be honoured if we can ever get to a state of peace).

(Ref: Lincoln-Douglas Debate) (www.mcsoh.org/mhs/langarts/quade/values.doc, Sep 08)

CORE VALUES

‘Core values’ are defined as: operating philosophies or principles that guide an organization's internal conduct as well as its relationship with the external world. Core values are usually summarized in the mission statement or in the statement of core values. (businessdictionary.com)

What would you expect to find in a core values statement?

There is no ‘one size fits all’. However, factors that often come up in values statements include:

- Treating employees fairly, equitably and with respect
- Operating ethically and with integrity
- Observing key standards of human rights, and keeping within the law
- Protecting the environment for future generations
- Being a responsible neighbour in the community.

Core values are a high level statement that describes how the company behaves. It is not a mission statement that describes what task the company aims to fulfill. Neither is it a set of commercial objectives. The rule of thumb is that if it describes time limited objectives, task-oriented goals, or aspirations of achievement then it is a mission statement or goals. Core values are about how and what the company stands for and how its employees behave. They are about framing a role for the business that gives it a purpose beyond profit. (http://www.bitc.org.uk/resources/publications/corporate_values.html)

The core values of an organization are those values we hold which form the foundation on which we perform work and conduct ourselves. We have an entire universe of values, but some of them are so primary, so important to us that through out the changes in society, government, politics, and technology they are still the core values we will abide by. In an ever-changing world, core values are constant. Core values are not descriptions of the work we do or the strategies we employ to accomplish our mission. The values underlie our work, how we interact with each other, and which strategies we employ to fulfil our mission. The core values are the basic elements of how we go about our work. They are the practices we use (or should be using) every day in everything we do.

<p>CORE VALUES</p> <ul style="list-style-type: none"> • Govern personal relationships • Guide business processes • Clarify who we are • Articulate what we stand for • Help explain why we do business the way we do • Guide us on how to teach • Inform us on how to reward • Guide us in making decisions • Underpin the whole organisation • Require no external justification • Essential tenets 	<p>CORE VALUES ARE NOT:</p> <ul style="list-style-type: none"> • Operating practices • Business strategies • Cultural norms • Competencies • Changed in response to market/ administrative changes • Used individually
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(<http://www.nps.gov/training/uc/whcv.htm>)

In a visionary company, the core values need no rational or external justification. Nor do they sway with the trends and fads of the day. Nor even do they shift in response to the changing market.

(Collins & Perras: “Built to Last – Successful Habits of Visionary Companies”)

CORPORATE STRATEGY

Corporate Strategy is the approach to future that involves (1) examination of the current and anticipated factors associated with customers and competitors (external environment) and the firm itself (internal environment), (2) envisioning a new or effective role for the firm in a creative manner, and (3) aligning policies, practices, and resources to realize that vision. (www.businessdictionary.com)

Corporate Strategy is a means to an end. It is there to serve core values. For example: Bank of England may increase or decrease taxes, increase or decrease inflation but all that is done to uphold their two core values: monetary stability and financial stability.

Core values remain stable over long periods of time and would further include Intrinsic and Instrumental values. Strategies are the fundamental business concepts that cause customers to prefer a firm's products or services to those of its competitors. It may have to be adapted, modified and tailored to suit current economic conditions, labour market, product demand etc. Strategies provide short term gains and Core values lead to long term growth. But if there is total reliance of strategy to the neglect of core values then greed, corruption and unethical practises take over. At the same time only adherence to core values would make the company inflexible, rigid and unable to keep up with the competition. A good corporation is one which is able to strike the right balance between core values and strategy.

British Telecom, BT Group, is the largest communications service provider in the United Kingdom. It is also one of the largest communication companies in the world.

Its strategy is outlined as: "We build long-term partnerships with our customers. With their support, we can maximise the potential of our traditional business, through a combination of enhanced quality of service, creative marketing, innovative pricing and cost efficiency. At the same time, we'll pursue profitable growth by migrating our customers to new wave products and services, such as ICT (information communications technology), broadband, mobility and managed services."

In contrast its core values are:

- Trustworthy - we do what we say we will
- Helpful - we work as one team
- Inspiring - we create new possibilities
- Straightforward - we make things clear
- Heart - we believe in what we do

(<http://www.btconferencing.com/btc/company/values.asp>)

KEY CORE VALUES

ACTION

Action is the insignia of a work environment, the heart and soul of every business. More action, more productivity leads to more prosperity. A report published by the ILO – International Labour Organisation reports that the workers in the United States had the maximum working hours and the United States still leads the world in terms of productivity. (http://www.chinadaily.com.cn/en/doc/2003-09/01/content_260191.htm, Sep 03). Action keeps the minds of the workers fresh. Like you find the water in flowing rivers is clean and fresh while stagnant ponds collect dirt and breed germs. Other qualities come forth from being active. For example one of Tata's (India's largest business group and multinational company) core values is *Excellence* and they describe it as: "We must constantly strive to achieve the highest possible standards in our day-to-day work and in the quality of the goods and services we provide." (<http://www.tata.co.in/aboutus/articles/inside.aspx?artid=CKdRrD5ZDV4=>). General Motors, the world's largest automaker adopts the Japanese principle of 'Kaizen' which means *Continuous Improvement* as one of their core values: "We will set ambitious goals, stretch to meet them, and then "raise the bar" again and again. We believe that everything can be done better, faster, and more effectively in a learning environment."

(http://www.gm.com/corporate/responsibility/reports/06/300_company/2_twenty/320.html, 2007)

DIRECTION

- True productivity is achieved when actions are guided by a purpose. The purpose, goal or ideal gives the direction to the action. This is achieved by the alignment of the interests and actions of every employee towards the clearly stated and communicated key goals of the organisation. Johnson & Johnson is a global American pharmaceutical, medical devices and consumer packaged goods manufacturer founded in 1886. Johnson & Johnson is known for its corporate reputation, consistently ranking as the world's most respected company by *Barron's Magazine*. Its products are sold in over 175 countries. They are guided in everything they do by 'Our Credo', a management document authored more than 60 years ago.

(http://en.wikipedia.org/wiki/Johnson_&_Johnson, May 2009)

According to their website this document has given them the direction that has made them successful: "The overarching philosophy that guides our business is Our Credo, a deeply held set of values that have served as the strategic and moral compass for generations of Johnson & Johnson leaders and employees." (<http://www.jnj.com/connect/about-jnj/management-approach/>). Dell, Inc. is a multinational technology corporation that develops, manufactures, sells, and supports personal computers and other computer-related products. Dell grew during the 1980s and 1990s to become (for a time) the largest seller of PCs and servers. (<http://en.wikipedia.org/wiki/Dell>, Jan 09) But there was a time when the company's growth stopped. Dell's share prices tumbled and the employees lost motivation and interest in the organisation. Kevin Rollins, the CEO remarks: "I realized that we had created a culture of stock price, a culture of financial performance, and a culture of 'what's in it for me?' throughout our employee base." Then he went about setting a direction: "There had to be something more in this institution that we loved and enjoyed than just making money or just having a stock price that went up." What kind of company do we want to be? What is our aspiration? What would a new winning culture look like here at Dell?" Indeed, the company's resurgence and sustained growth during the past several years owes much to its leaders' insight that something fundamental needed to be reformed: Dell's soul.

(http://www.bitc.org.uk/resources/publications/corporate_values.html, Feb 2009).

OBJECTIVITY

Objectivity is defined in the Business Dictionary.com: Striving (as far as possible or practicable) to reduce or eliminate biases, prejudices, or subjective evaluations by relying on verifiable data. To see things as they are, not as you would like it to be. Objectivity enables one to look beyond the daily mechanical work and see the direction in which the company is going, to appreciate the gains and anticipate the losses. Without objectivity one would function like a mere robot. Further objectivity brings innovation and creativity to work. Thereby one finds satisfaction and enthusiasm at work. The Civil Service is an integral and key part of the government of the United Kingdom. It supports the Government of the day in developing and implementing its policies, and in delivering public services. Civil servants are accountable to Ministers, who in turn are accountable to Parliament. One of its core values is 'objectivity' - basing your advice and decisions on rigorous analysis of the evidence (<http://beta.civilservice.gov.uk/about/work/vision.aspx>). Citi Institutional Consulting <http://www.citi.com>

/investconsulting/homepage/mission.htm, March 2008) & The McGraw-Hill Companies (<http://www.mcgraw-hill.com/cr/values.shtml>) also have objectivity as one of their core values. The core values of MIT – Massachusetts Institute of technology speaks of the highest standards of objectivity in its research conduct (<http://web.mit.edu/fnl/volume/196/lerman.html>), . IBM has listed 'Innovation' as their core value: "Innovation that matters, for our company and for the world." (<http://www.ibm.com/ibm/values/us/>)

SELF CONTROL

A corporate organisation is designed to benefit not one individual but the collective organisation and the society as a whole. However there is a temptation for one or a group of executives to grab all the profits for themselves. The practise of self-control is essential to prevent this individualism taking over collectivism. Values are like the banks of a river. They keep the water in check and avoid it from overflowing and destroying the crops it has been nourishing. Similarly there is a tendency in human beings to be self-centred and individualistic. The role of values is to introduce checks to prevent this tendency from corrupting the growth of the organisation. In 'Anatomy of Greed: The Unshredded Truth from an Enron Insider' Brian Cruver highlights how a lack of values led to greed and brought down the billion dollar energy giant 'Enron', then the seventh biggest company in the world.

GRATITUDE

The culture of gratitude is inculcated and encouraged by the management. They show their gratitude towards their employees through financial rewards, freedom to make decisions or recognition of their achievements. In some cases like the John Lewis Partnership, all their permanent employees have been given co-ownership of the business as a fundamental recognition of the gratitude for their efforts towards the organisation. In fact it is enshrined in their 'Constitution', one of very few companies to have one. John Lewis is a chain of upmarket department stores operating throughout Great Britain and popular amongst the British middle class for its high quality goods. All 69,000 permanent employees have been made partners in the business and they own the leading UK retail business. In 2007 John Lewis was voted 'Britain's Favourite Department Store'. Charlie Mayfield, Chairman of the John Lewis Partnership, said: 'This is a huge accolade for the John Lewis Partnership. I hope that all our employees, who as Partners own our business, will feel proud to see their efforts recognised in this way. It demonstrates the commitment of Partners to making our customers' experience of shopping in John Lewis stand out from the crowd.'

SERVICE

Service is an attitude of putting others interests first - an organisation that looks after the employees interests, the staff that looks after customers interest, the management that looks after shareholder interests. This motivates the recipient and leads to satisfaction and long-term loyalty. Tesco plc is a British-based international grocery and general merchandising retail chain. It is the largest British retailer by both global sales and domestic market share with profits exceeding £2 billion. In 2008, Tesco became the world's fourth largest retailer, the first movement among the top five since 2003. It has designed a corporate steering wheel (given below) that reflects this value of service it expects from the management and employees. Its mission statement is 'Every little helps'.



Johnson & Johnson explains: Our Credo (a set of its values) challenges us to put the needs and well-being of the people we serve *first*. It also speaks to the responsibilities we have to our employees, to the communities in which we live and work and the world community, and to our shareholders. We believe Our Credo is a blueprint for long-term growth and sustainability that's as relevant today as when it was written.

In the next century, the emphasis will be on values... People will be seeking to work in organisations that allow them to bring their personal values to work, that give them an opportunity to make a positive difference in the world and allow them to become all they can be – to fulfil their potential... Organisations will then create a vital, self-actuated work force that will outperform companies operating under the old paradigm of command and control (Richard Barrett – Institutional Change & Strategy Department, World Bank) (<http://www.breakthroughsunlimited.com/values.articulation/values4.htm>)

REFERENCES

- Collins & Perras: "Built to Last – Successful Habits of Visionary Companies"
- Richard Barrett – Institutional Change & Strategy Department, World Bank
- <http://beta.civilservice.gov.uk/about/work/vision.aspx>
- <http://cnx.org/content/m12160/latest/>, July 04
- <http://en.wikipedia.org/wiki/Dell>, Jan 09
- http://en.wikipedia.org/wiki/Instrumental_value, Jan 09
- http://en.wikipedia.org/wiki/Johnson_&_Johnson, May 2009
- <http://web.mit.edu/fnl/volume/196/lerman.html>
- http://www.bitc.org.uk/resources/publications/corporate_values.html: February 2009
- http://www.bitc.org.uk/resources/publications/corporate_values.html
- http://www.bitc.org.uk/resources/publications/corporate_values.html, Feb 2009
- <http://www.breakthroughsunlimited.com/values.articulation/values4.htm>

13. <http://www.breakthroughsunlimited.com/values.articulation/values7.htm>
14. <http://www.btconferencing.com/btc/company/values.asp>
15. <http://www.businessdictionary.com>
16. http://www.chinadaily.com.cn/en/doc/2003-09/01/content_260191.htm, Sep 03
17. <http://www.citi.com/investconsulting/homepage/mission.htm>, March 2008
18. http://www.gm.com/corporate/responsibility/reports/06/300_company/2_twenty/320.html, 2007
19. <http://www.ibm.com/ibm/values/us/>
20. http://www.in-corporate.eu/our_approach/purpose_people_process_model.html. 2007
21. <http://www.jnj.com/connect/about-jnj/management-approach/>
22. <http://www.mcgraw-hill.com/cr/values.shtml>
23. <http://www.nps.gov/training/uc/whcv.htm>
24. <http://www.strategy-business.com/article/05206?gko=7869b-1876-9176155>, Summer 2005
25. <http://www.tata.co.in/aboutus/articles/inside.aspx?artid=CKdRrD5ZDV4=>
26. <http://www.valuequotes.net/chronological.html>
27. <http://www.valuequotes.net/chronological.html>, Jan 08
28. Wenstøp, F. and A. Myrmet (2006). "Structuring organizational value statements" Management Research News
29. www.mcsoh.org/mhs/langarts/quade/values.doc, Sep 08

CHILD LABOUR IN INDIA: CAUSES, PERSPECTIVE & GOVERNMENTAL POLICIES IMPERATIVES

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ABSTRACT

Child labor strategy and plan of action needs to be reviewed and a new strategy practical and viable needs to be formulated with great urgency. The time is ripe to adopt a more enabling and empowering strategy that does not treat child workers as the problem, but include them as a part of the solution. The Action Plans for addressing child labor are built on a certain erroneous premise...they address the demand side of child labor and not the supply side. It is like removing the scum from the top of a boiling pot, without doing anything about the fire underneath. Child labor is the symptom of a very complex disease. It is now abundantly clear that the present piece-meal, scheme based, relief-oriented approach has little or no impact and practically no sustainability. Putting a child laborer in school does not solve the reasons s/he went to work in the first place. Schools do not solve poverty, deprivation, unemployment and discrimination. Children do not work because they enjoy doing so, but because they and their families have no other choice. Bans only attempt to shut off the demand for child workers, paying scant attention to the causes for the increasing supply of children into the labor market. Children are not commodities like narcotics that can be removed with a raid and then disposed of. What the children and families need most is a humane approach. An approach that does not snatch away their chances of survival, but provides real viable alternatives. Child labor in India can be eradicated only if its root causes are also addressed. Without strengthening both enforcement mechanisms and provisions for rehabilitation, this step has little meaning. Irreversible change is possible when children, parents, community groups and local government come together to identify, address and resolve the issues that constrain children. Raids only worsen the situation for the child as they are forced to work in worse conditions and in secrecy. They say if the government doesn't want us to work, they should ensure better paid jobs for our parents. If our parents get enough money, we will not have to work. It does not follow that all the work of children is ignoble or unworthy, and it certainly should not lead to the universal conclusion that children are always better off in schools. It is one thing to take children out of hazardous and health destroying occupations...but it is quite another to deprive families of the slender but critical income children can provide. Child labor is a far more complex and difficult phenomenon than campaigners suggest...it does not follow that initiation into a useful social function necessarily militates against the best interests of children. Trade does not necessarily promote economic growth. Even if trade boosts the economy, trade's benefits either do not trickle down to most citizens or are offset by the costs. One of the harshest ironies is how food and farm Products flow from areas of hunger and need. As countries are diverting resources away from social provision s to repay debt, those most affected are the poor, especially women and children. Child Labor is banned... the most detrimental aspect of this strategy is that children working in the banned sectors have no protection what so ever and are considered as infringers of the law themselves. India's secondary school enrolment figures... 58% [for] boys and 47% [for] girls. Of these children... the attendance is only 45% and 36% respectively. This indicates that more than half of India's young people between the age of 14 and 18 are not in schools and presumably must be engaged in some form of economic activity. The programmes framed by the Government of India based on the dictates of the World Bank increasingly deprive communities and families of resources on which they have traditionally depended. The symptoms of this negative fallout are visible. Children... are forced to migrate to urban centers in the hope of finding a means for survival. The ILO... turned a deaf ear to the solutions offered by working children themselves. Excluding them from the debate and criminalizing their means of livelihood without offering any viable alternatives. Child labor is not an easy issue to resolve; while it seems noble to immediately withdraw investments and cooperation with firms and factories that employ child labor it may do more harm than good. Depriving them [working children] of this income has led to some children seeking different, lower paid work, and even prostitution in some cases. Other ways with schemes to help children would likely be needed so that this labor can be phased out. A gradual phase out is said to be a more preferable solution. As long as alternative sources of income are not found for families whose children work in the banned sectors, the law would continue be flouted. The bad news of children continuing to be exploited will continue as long as the root causes of child labor are not highlighted and effectively addressed. What is the state of the government run schools to which these children will be admitted, how effective and relevant is the education being imparted in them? The many complex factors that precipitate and perpetuate the unholy trinity of poverty, illiteracy and child labor must be acknowledged and understood if these inextricably linked problems are to be effectively and conclusively addressed.

KEYWORDS

child labour, India.

INTRODUCTION

Child labour is a global phenomenon. Its magnitude and dimensions, however, vary widely from country to country. India possesses the largest child labour force in the world despite various measures undertaken by the government and non-governmental agencies to tackle this issue. According to estimate there are over 60 million children labour is in India constituting nearly twenty five per cent of the working children of the world. Child labour is not a new phenomenon to our age. What is new, however, is its perception as a social problem the world over. In the pre-industrial agricultural society of India, children worked as helpers and learners in hereditarily determined family occupations under the benign supervision of adult family members. The work place was an extension of the home and work was characterized by personal informal relationships. The tasks and technology that work involved were simple and non-hazardous which the child could learn smoothly and unconsciously, over the years through association. The social scenario, however, changed radically with the advent of industrialization and urbanization under the impact of the newly generated centrifugal and centripetal forces. There was an unbroken stream of the rural poor migrating to urban centres in search of livelihood. The child had to work as an individual person either under an employer or independently. His

work environment endangered his physical health and mental growth and led to his exploitation. The protection and welfare of these children, therefore, become an issue of paramount social significance. India has all along followed a pro active policy in the matter of handling problem of child labour. Child Labour is, generally speaking, work for children that harms them or exploits them in some way (physically, mentally, morally, or by blocking access to education). According to the articles 23 and 24 of Indian constitution no children below the age of 14 should be allowed to do work in any factory, mines or in any other hazardous work. Mainly the child labour are engaged in the works like taking care of animals, planting and harvesting food, many kinds of small manufacturing (e.g. of bricks and cement), auto repair, making of footwear and textiles. More number of boys works outside their homes than girls. But more number of girls work in some particular jobs: for instance, as domestic maids. Being a maid in someone's house can be risky. Maids typically are cut off from friends and family for which they can be physically or sexually abused easily. Despite various pro-active measures taken by the Government and some leading NGOs, Child Labour problem still remains a concern in Odisha. It indicates that either the enforced legislation in this regard is not at par with the problem or there are loopholes in executing it. It may be a small problem for others but in a poor state like Odisha this is a major issue to be dealt with. Everybody knows that Poverty is the reason behind the issue of Child Labour in Odisha. But it is also a fact that unemployment and lack of education also contributes to it. When a parent observes that even after getting education for long years when one still remains jobless, it is better to employ the kid from the early stage who can add some income to the family. As a result besides tea stall and hotels child labours are also seen working in hazardous occupations and processes like Beedi Manufacture, Diamond Industry, Silk Manufacture, Fireworks Manufacture, Domestic labour, Construction works and Brick kilns. The case even sometimes reach to more extreme stage when they are found to be illegally employed and used in drug trafficking, prostitution, illicit relations, forced labour, slavery and armed conflicts. It is a matter of high concern that these young buds are deprived of adequate education, health, leisure and basic freedoms of life, violating their rights. Employment of a teenager under the age of 14 is termed as Child Labour. This is not the age to work and to collect livelihood rather this age is the learning stage for the kids and to move freely to enjoy their freedom. Once they will get a good childhood they can be good citizens in the future. Also taking their age as a veneration it has been felt that often the employers torture them and the poor children have no other way but to bear it. The scheme of providing mid day meal to the school children by the Government is a good step towards eradication of poverty, illiteracy and Child Labour. However it is also a matter of regret that even some responsible public representatives do not feel ashamed to manipulate with the children's share and we have ill famous dal scam in Odisha. Different measures are being taken to deal with the problem at different stages. The framers of the Indian Constitution incorporated relevant provisions under various articles in Part-III and IV so as to protect childhood and youth against exploitation and ensure that no child below the age of 14 years shall be employed to work in any factory, mine or any hazardous employment. Besides, a plethora of national laws, some dating back to the 1930s, and offer protection from exploitation to India's working children. The Bonded Labourer System (Abolition) Act, 1976 and Child Labour (Prohibition and Regulation) Act, 1986 are the most significant and far reaching of these laws. Despite all these provisions, the incidence of child labour continues to remain high in our country, particularly in rural and tribal areas. Recently PECUC, the People's Cultural Centre had organized a rally against Child Labour on the occasion of Child Labour day in Bhubaneswar. Also on 19th March 2011 National Legal Services Authority (NALSA) has declared 2011 as the Year of Protection of Child Rights in a grand occasion organized at Kalinga Institute of Social Sciences (KISS), Bhubaneswar to support the causes of working children. In the international level even steps are being taken. The International Labour Organization (ILO) launched the first World Day against Child Labour in 2002 as a way to highlight the plight of working children. On 12th June every year it has been celebrated in every corner of the world. We welcome all these actions and also appeal the whole Odia society throughout the world to stand against this tragic issue. It needs co-operation from every section of the society to perform their respective obligations to fight with this most unfortunate socio-economic problem.



"Save the future full of promises by stopping child labour.

Children are the future heroes;

they need to learn before they can work.

See your child in every child, Stop Child Labour"

CHILD LABOUR: CONCEPTS AND CONNOTATIONS**WHAT IS CHILD LABOUR?**

The word 'Child Labour' has been differently defined in various studies. According to the committee on child labour, 'Child labour', however, can broadly be defined as that segment of child population in work, either paid or on unpaid. The term "child labour is commonly interpreted in two different ways: first, as an economic practice, and second, as a social evil. In the first context it signifies employment of children in gainful occupations with a view to adding to the total income of the family. It is in the second sense that the term child labour is now more generally used. In assessing the nature and extent of social evil, it is necessary to take into account the character of the jobs on which children are engaged, the danger to which they are exposed and the opportunities of development of which they have been denied. The term includes wage-labour as well as self-employed children working independently as well as in family enterprises. Child labour therefore, can be defined here as any work undertaken by children below 14 years in such works which are injurious to their health, and harmful to their proper development

A broad definition of child labour would generally include all working children, paid or unpaid, below the age of 15. In developing countries child labour is defined as work that impairs the development and well – being of children. Economists generally viewing child labour as those participating in some kind of economic activities have now come to realize that ignoring the time spent by the children in collecting wood and water, tending the animals, preparing food and meals, caring for family members would imply that a child spending only two hours a day in agriculture work could be placed alongside twelve hours a day in the absence of their parents. The Campaign against Child Labour (CACL) defines child labour to include children prematurely leading adult lives, working with or without wages, under conditions damaging to their physical, social, emotional and spiritual development, denying them their basic rights to education, health and development. This includes children working in any sector, occupation or process, including the formal and non- formal, organized and unorganized, within or outside the family. The general perception remains that any child out-of-school is a potential labour. The Government's ambivalent stand in this regard is considered to be the prime reason for the persistence of the problem, which reflected in the lack of political will. The most unrealistic and the reducing figures of child labour in India speak volumes about the misunderstood perception and lack of political and administrative determination to tackle the problem. The sector wise percentage distribution of child labour in the census 1991 reveals that more and more children are being pushed into the informal sector. Though over 80 % per cent of child labour in India are reported employed in agriculture (Census 1991), another 5.67 % in livestock management, while others employed in the domestic, hotel and some other industries, yet the National Policies and the CLPRA, Child Labour (Prohibition and Regulation) Act 1986 only recognizes and prohibits certain selected 'hazardous' occupations and processes which are estimated to be only six per cent of the total child labour force. As a result, a very large number of working children in the non-hazardous occupations' are without legal protection (or any schemes) or social programming that ensures the realization of their rights (HAQ). A study conducted by UNICEF in 1999 and 2000 in 30 developing countries revealed that factory work was rare. Only 3% of children worked outside of their households for remuneration and the unpaid domestic work remained the most common child labour practice.

PREVALENCE OF CHILD LABOUR

The numerical estimation of child labour has been subjected to differences in definitions, reference periods and the limited perceptions of the agencies concerned. The NSS 50th round (1993-94), puts the number of child workers across the country at 10.1million. The estimated number of working children in the country as per the 55th Round of the NSSO Survey 1999-2000 puts the child labour figure at 10.4 million (Economic survey, 2002-2003) which stands much in contradiction to the non-governmental estimates varying between 60 to 115 million. It accounts for the highest number in the world ranging from 75 to 90 million-child labours under the age of 14 (Human Rights Watch, 1996). International Labour Organization (ILO) estimates that 250 million children between the ages of 5 and 15 are working around the world, the largest numbers being in India. Whatever be the exact numbers, criteria or definitions, it is widely believed that one in every four-child labour in the world is to be found in India.

WHY DO CHILDREN WORK?

At the micro level poverty within the family as the major factor behind the prevalence of child labour remains the most accepted theory. It is viewed that e very where parents prefer to send their children to school but it is lack of resources that induces the impoverished households to push their children into child labour to meet their basic needs for their survival. It is the world's poorest nations that mostly account for the child labour population when compared to the richer and affluent countries with relatively higher per capita income and GDP. On the domestic front in India, child labour is more concentrated in the states of Uttar Pradesh, Bihar, M.P, Andhra Pradesh, Orissa, Karnataka and Tamil Nadu. Although, these more backward and the poverty stricken states account for a large percentage of child labour, this may not always hold true since there are instances of growing child labour in better off states like Punjab and Haryana. But, at the same time, poverty as the sole reason does not always have a direct bearing and it fails to convince the prevalence of the child labour situation in several parts of the country. The phenomenon spells out new dimensions in the wake of the new economic order, market forces and the globalization. It also holds true that the parents want their children to work. This view implies that parents take advantage of any earning opportunities open to their children. It is therefore appropriately believed that so long as the parents benefit more when the child goes to work than when the child goes to school, the problem of child labour will persist. It also most commonly observed that incidence of child labour is higher wherever the access to primary education is low. Child labour has a lot to do with the primary education system and the provisions thereof. In India, in spite of the Constitutional guarantee under the Directive Principles recognizing free and compulsory education of children in the age group of 6-14 years and now the same as a fundamental right, nearly 80-100 million children are reportedly out of school. Some of the prime reasons, probably not unknown that account for out of school children are: distance of school from home, poor school infrastructure, overcrowded classrooms, schools without proper drinking water facilities and sanitation (15.5% of primary schools had urinals, NCERT, NAYAR 1993), absenteeism of teachers, unappealing curriculum etc.

CAUSES OF CHILD LABOUR IN INDIA

Child labour is a source of income for poor families. A study conducted by the ILO Bureau of Statistics found that "Children's work was considered essential to maintaining the economic level of households, either in the form of work for wages, of help in household enterprises or of household chores in order to free adult household members for economic activity elsewhere". In some cases, the study found that a child's income accounted for between 34 and 37 percent of the total household income. This study concludes that a child labourer's income is important to the livelihood of a poor family. There is a questionable aspect of this study. It was conducted in the form of a survey, and the responses were given by the parents of the child labourers. Parents would be biased into being compelled to support their decision to send their children to work, by saying that it is essential. They are probably right: for most poor families in India, alternative sources of income are close to non-existent. There are no social welfare systems such as those in the West, nor is there easy access to loans, which will be discussed.

What is apparent is the fact that child labourers are being exploited, shown by the pay that they receive. For the same type of work, studies show that children are paid less than their adult counterparts. Employers would have been likely to defend their wages for child workers, by saying that children earn the same wages as adults. The fact that no employers stated children earned more than adults, should be also be noted. Other studies have also concluded that "children's earnings are consistently lower than those of adults, even where there two groups are engaged in the same tasks"

WHAT ROLE DOES POVERTY PLAY?

The percentage of the population of India living in poverty is high. In 1990, 37% of the urban population and 39% of the rural population was living in poverty (International Labour Organization 1995, 107). Poverty has an obvious relationship with child labour, and studies have "revealed a positive correlation - in some instances a strong one - between child labour and such factors as poverty". Families need money to survive, and children are a source of additional income. Poverty itself has underlying determinants, one such determinant being caste. When analyzing the caste composition of child labourers Nangia (1987) observes that, "if these figures are compared with the caste structure of the country, it would be realised that a comparatively higher proportion of scheduled caste children work at a younger age for their own and their families' economic support". Scheduled caste (lower caste) children tend to be pushed into child labour because of their family's poverty. Nangia (1987) goes on to state that in his study 63.74% of child labourers said that poverty was the reason they worked.

The combination of poverty and the lack of a social security network form the basis of the even harsher type of child labour -- bonded child labour. For the poor, there are few sources of bank loans, governmental loans or other credit sources, and even if there are sources available, few Indians living in poverty qualify. Here enters the local moneylender; for an average of two thousand rupees, parents exchange their child's labour to local moneylenders. Since the earnings of bonded child labourers are less than the interest on the loans, these bonded children are forced to work, while interest on their loans accumulates. A bonded child can only be released after his /her parent makes a lump sum payment, which is extremely difficult for the poor. Even if bonded child labourers are released, "the same conditions of poverty that caused the initial debt can cause people to slip back into bondage" (International Labour Organization 1993, 12).

Even though poverty is cited as the major cause of child labour, it is not the only determinant. Inadequate schools, a lack of schools, or even the expense of schooling leaves some children with little else to do but work. The attitudes of parents also contribute to child labour; some parents feel that children should work in order to develop skills useful in the job market, instead of taking advantage of a formal education. Poverty is generally considered as the most important reason for which children work at inappropriate jobs. But there are other reasons as well:

- Family expectations and traditions
 - Abuse of the child.
 - Lack of good schools and day care
 - Lack of other services, such as health care.
 - Public opinion that downplays the risk of early work for children.
 - Uncaring attitudes of employers
 - Limited choices for women.
- Besides these reasons one important reason is illiteracy of parents, which is most common in Rural areas.

CHILD POPULATION IN INDIA

As per 2001 Population Census, children in the age group of 0-14 constituted about 360 million and accounted for 35.3 percent of total population. Children in the 5-14 age group constituted about 251 million and accounted for 24.6 percent of the population. Though there is an increase in the absolute number of children, the proportion of children in the total population is declining between 1991 and 2001. By Census of India projections, the proportion of children (0 to 14) has further come down to 32.1 percent during 2006. Elementary school age children (5 to 14) in the total population constituted 241.7 million accounting for 21.7 percent of the total population. The reduction in the proportion of children is attributed to drastic reduction in the Total Fertility Rate (TFR) in many of the major states, especially in Kerala, Andhra Pradesh, and Tamil Nadu, Maharashtra and Gujarat. On the other hand TFR remains high in some of the major states like Uttar Pradesh, Bihar, Rajasthan and Madhya Pradesh. Thus the segment of child population varies across states depending on the TFR. It is seen Some Aspects of the Well-Being of India's Agricultural Labour in the Context of Contemporary Agrarian Crisis that the Proportion of children in the population has implications for the incidence of child labour. Number of empirical studies on child labour has associated large family size with high incidence of child labour. The demographic approach to child work has provoked a lively debate on the causal relationship between high fertility and the utility of children for the rural household⁴. Fertility behaviour is also related to various social and cultural factors. The results of these debates have so far been inconclusive. In India for example, the States that have experienced rapid decline in TFR have witnessed decline in the intensity of child labour. In contrast to this the states in Northern India where the trends in fertility decline have been rather slow the incidence of child labour has in fact increased between 1991 and 2001. Within India, Kerala State, where the fertility rate is lowest, has achieved highest literacy rates in the country and the incidence of child labour is negligible. Thus, the changes in the demographic structure in many states provide a positive ground towards elimination of child labour.

Key Statistics

- 246 million children are child labourers.
- 73 million working children are less than 10 years old.
- No country is immune: There are 2.5 million working children in the developed economies, and another 2.5 million in transition economies.
- Every year, 22,000 children die in work-related accidents.
- The largest number of working children – 127 million – age 14 and under is in the Asia- Pacific region.
- Sub-Saharan Africa has the largest proportion of working children: nearly one-third of children age 14 and under (48 million children).
- Most children work in the informal sector, without legal or regulatory protection: • 70% in agriculture, commercial hunting and fishing or forestry;
- 8% in manufacturing;
- 8% in wholesale and retail trade, restaurants and hotels;
- 7% in community, social and personal service, such as domestic work.
- 8.4 million Children are trapped in slavery, trafficking, debt bondage, prostitution, pornography and other illicit activities.
- 1.2 million of these children have been trafficked

ELIMINATION OF CHILD LABOUR: POLICY PERSPECTIVE**CONSTITUTIONAL AND LEGAL PROVISIONS**

India has all along followed a pro-active policy in the matter of handling problem of child labour. The Constitution of India, both in the Directive Principles of State Policy and as a part of Fundamental Rights, has laid down that the State shall direct its policy towards securing the health and strength of workers, men and; women and; the tender age of children not abused and that citizens are not forced by economic necessity to enter vocations unsuited to their age or strength, and that children, are given opportunities and facilities to develop in a healthy manner and in conditions of freedom and dignity. Childhood and youth are to be protecting against exploitation and no child below the age of 14 years shall be employed to work in any factory, mine or in any hazardous employment. The framers of the Indian Constitution incorporated relevant provisions under various articles in part III and IV to ensure justice to children. Selected articles of Indian Constitution in this regard are presented as follows:

- ❖ **Article-23:** Prohibition of traffic in human beings and forced labour.
- ❖ **Article-24:** Prohibition of employment of children below the age of 14 years in factories, mines, or in any other hazardous employment.
- ❖ **Article-45:** Provision of early childhood care and education for children Until the age of six years (86th Constitutional Amendment Act-2002).

- ❖ **Article-21(A)** : Provision of free and compulsory education of children of the age of six to fourteen years (86th Constitutional Amendment Act, 2002).
- ❖ **Article-51-A (k)**: Fundamental duties of parent or guardian to provide Opportunities for education of children between the age of six and fourteen years. (*Human Rights Watch, 1996; Govt. of India, 2002*)

A number of legal provisions, including laws, acts, declarations, conventions, prohibiting child labour have been made at the international and national levels. The following international human rights conventions prohibit the practice of child labour. India is a party to all of them, and as such is legally bound to comply with their terms:

- Convention on the prevention and suppression of slave trade and all forms of slavery, 1926 (Signed at Geneva on 25th September, 1926).
- Supplementary Convention on the abolition of slavery, the slave trade, and institutions and practices similar to slavery, 1956. (Done at Geneva, 7th Sept. 1956).
- International Convention on Civil and Political Rights (ICCPR), 1966 prohibits slavery and the slave trade in all their forms, (UN Doc. A/6316, 1966).
- Convention on the Rights of the child, 1989. A plethora of national laws, some dating back to the 1930s, offer protection from exploitation to India's working children. The Bonded Labour System (Abolition) Act of 1976 is, for the purposes of this report, the most significant and far-reaching of these laws. The Bonded Labour System (Abolition) Act, the Child Labour (Prohibition and Regulation) Act, and the other pieces of protective legislation that apply in varying circumstances to the situation of the child labourer, are betrayed by an extremely low rate of enforcement. (*Human Rights Watch, 1996, p.27*).
- The major domestic national laws include:
 - ❖ Bonded Labour System (Abolition) Act, 1976.
 - ❖ Children (Pledging of Labour) Act, 1933.
 - ❖ Factories Act, 1948.
 - ❖ Bidi and Cigar Workers (Conditions of Employment) Act, 1966.
 - ❖ Child Labour (Prohibition and Regulation) Act, 1986.
 - ❖ Inter-state Migrant Workmen (Regulation of Employment and Conditions of Service) Act-1979.
 - ❖ Contract Labour (Regulation and Abolition) Act, 1970.
 - ❖ Minimum Wages Act, 1948.
 - ❖ Plantation Labour Act, 1950.
 - ❖ Apprentices Act, 1961.
 - ❖ Shops and Establishment Act, 1961.
 - ❖ Shops and Commercial Establishment Act.
 - ❖ The Motor Transport Workers Act, 1952.
 - ❖ The Mines Act, 1952.
 - ❖ The Merchant Shipping Act, 1958.

A number of programmes have been envisaging both at the international and national levels for the elimination of child labour.

INTERNATIONAL PROGRAMME

The International Programme on the Elimination of Child Labour (IPECL) was launched as a global programme by the International Labour Organization (ILO) in December 1991 with the aim to work towards the progressive elimination of child labour by strengthening national capacities. IPECL's priority target are bonded child labourers, children in hazardous working condition and occupations, and children who are particularly vulnerable, i.e. very young children (below 12 years of age) and working girls. Since 1999 and the adoption of Convention 182, children in prostitution has been added to the list of priority groups. IPECL has also targeted indirect elements to help facilitate and support the withdrawal of children from the work force, and assist their integration into educational programmes. Focus is also placed on research and training institutions in government and non-government sectors, workers' and employers' organizations, factory and labour inspectors and the communities and families of the children

NATIONAL CHILD LABOUR PROGRAMME

A National Policy on Child Labour was announced in 1987 which emphasised the need for strict enforcement measures in areas of high child labour concentration. In order to translate the above policy into action, the Government of India initiated the National Child Labour Project Scheme in 1988 to rehabilitate the working children starting with 12 child labour endemic districts of the country. Under the Scheme, working children are identified through child labour survey, withdrawn from work and put into the special schools, so as to provide them with enabling environment to join mainstream education system. In these Special Schools, besides formal education, they are provided stipend @ Rs.100/- per month, nutrition, vocational training and regular health check ups. In addition, efforts are also made to target the families of these children so as to cover them under various developmental and income/employment generation programmes of the Government. The Scheme also envisages awareness generation campaigns against the evils of child labour and enforcement of child labour laws. It is seen that the level of enforcement in the States of Tamil Nadu, Andhra Pradesh, Maharashtra & West Bengal is encouraging, whereas that in UP, Rajasthan, Madhya Pradesh & Orissa it is very low.

SOLUTIONS TO STOP CHILD LABOUR-ROLE OF STAKEHOLDERS IN STOPPING CHILD LABOUR

1. NATIONAL GOVERNMENT AGENCIES

- a) National Agencies need to ratify the UN Convention on the Rights of the Child. (CRC)
- b) An effective legal system needs to be introduced to check employment of children below 14 years through proper legislation
- c) Economic sanctions to be enforced on countries that allow the employment of children for the manufacturer of export products
- d) Proper monitoring and implementing authorities to be set up to implement various acts passed by the National Government.
- e) National social welfare schemes to be introduced to supplement income for poor families whose children are removed from work sites

2. N.G.Os

- a) NGOs have a Key role in raising awareness and informing people about the misuse of children, denying them the fundamental rights of shelter, food and education. UNICEF has clarified the role of NGOs as essential players in many of the intervention stages with direct involvement in identification and rescue operations.
- b) Assist governmental agencies in implementing 1206 Educ. Res. various pieces of legislation
- c) Identify areas where child labour exists and bring to the notice of Government.
- d) Undertake advocacy with national governments for the implementing of strict legislation to ban child labour .
- e) Organise rehabilitation centres to shelter children removed from work sites.

3. CIVIL SOCIETY / PEOPLES FORUM

- a) Civil society can play an active role in identifying and alerting authorities to child labour sites
- b) Create awareness among parents and the public about the effect of child labour on children.
- c) Motivate parents to send their children to school
- d) Organise counselling sessions for children and parents
- e) Organise joint protests, rallies, hoardings etc. against employing children below 14

4. CORPORATE ENTITIES

- a) Include banning of child labour in their mission
- b) Introduce welfare schemes for children
- c) Allot separate welfare funds as part of corporate social responsibilities to help organisations working for the cause to ban child labour
- d) Put up hoardings giving messages on the benefits of banning child labour

5. INDIVIDUAL SOCIAL SERVICE ACTIVISTS

- a) Resist any form of child labour
- b) Openly oppose child labour activities which comes to their notice without any fear
- c) Be very assertive in expressing displeasure to shop owners and organisations that employ children for labour. In India, there are many international and national NGOs campaigning for the abolition of child labour. A few important NGOs in the field are:

- a) Child right resource centre (CRRC)
- b) Campaign against child labour (CACL)
- c) Child Line

6. SOME MORE MEASURES ARE

- Income of the families should be increased
- Education for all children irrespective of their economic and social background should be ensured, that helps children learn skills that help them earn a livelihood.
- Social securities should be provided by the Govt. and other agencies, that help children and families to survive in crises, such as disease, loss of home and shelter there should be an awareness campaign for small families, so that families are not burdened by children.

CONCLUSION

The complex issue of child labour is a developmental issue worth investigating. The notion that children are being exploited and forced into labour, while not receiving education crucial to development, concerns many people. India is the largest example of a nation plagued by the problem of child labour. Estimates cite figures of between 60 and 115 million working children in India -- the highest number in the world. What are the causes of child labour in India? How do governmental policies affect it? What role does education play in regard to child labour in India? A critical analysis of the answers to these questions may lead in the direction of a possible solution. These questions will be answered through an analysis of the problem of child labour as it is now, investigating how prevalent it is and what types of child labour exist. The necessity of child labour to poor families, and the role of poverty as a determinant will be examined. Governmental policies concerning child labour will be investigated. The current state of education in India will be examined and compared with other developing countries. Finally, India's policies concerning compulsory education will be assessed. Child labor is a pervasive problem in today's world, but it is not a hopeless one. The evidence is clear that when individuals make a commitment, when communities mobilize, when societies come together and decide that child labor is no longer acceptable, great progress can be made toward the goal of ensuring that children are not denied a childhood and a better future. However, it's tough going. Building consensus—and bringing real change—remains an immense challenge internationally, nationally and in the families and communities where child labor exists. The common sense objective is to provide kids the opportunity of a sound education and parents a fair chance at a decent job. This is an economic issue for countries and families—but it is also an ethical one. The fight against child labor is ultimately a battle to expand the frontiers of human dignity and freedom. *Policymakers seeking to end child labor must address the poverty that is most often the cause of the problem. Although abusive child labor exists and must be eliminated, data show that the typical child laborer works alongside a parent and is helping his or her family meet its most basic needs. An effective policy for ending child labor can thus be crafted only within the context of a country's overall development strategy, and it must consider whether it eliminates the need for children to work and what children will do in the absence of work.* Child labour is both a cause and consequence of poverty and squanders a nation's human capital. It can impede the education of children, particularly girls. Any of the worst forms of child labour – including prostitution and trafficking – are a cause and consequence of the HIV/AIDS pandemic. Therefore, eliminating child labour is particularly relevant to achieving millenium development goal 1 (eradicate extreme poverty and hunger), millenium development goal 2 (ensuring that all boys and girls complete primary schooling) and millenium development goal 6 (combat HIV/AIDS, malaria and other diseases). Achieving millenium development goal 7, which seeks to reverse the loss of environmental resources, would help reduce environmental disasters – which devastate households and significantly increase conditions that foster child labour . Child labour is a significant problem in India. The prevalence of it is shown by the child work participation rates which are higher in Indian than in other developing countries. The major determinant of child labour is poverty. Even though children are paid less than adults, whatever income they earn is of benefit to poor families. In addition to poverty, the lack of adequate and accessible sources of credit forces poor parents to engage their children in the harsher form of child labour -- bonded child labour. Some parents also feel that a formal education is not beneficial, and that children learn work skills through labour at a young age. These views are narrow and do not take the long term developmental benefits of education into account. Another determinant is access to education. In some areas, education is not affordable, or is found to be inadequate. With no other alternatives, children spend their time working. The Constitution of India clearly states that child labour is wrong and that measures should be taken to end it. The government of India has implemented the Child Labour Act in 1986 that outlaws child labour in certain areas and sets the minimum age of employment at fourteen. This Act falls short of making all child labour illegal, and fails to meet the ILO guideline concerning the minimum age of employment set at fifteen years of age. Though policies are in place that could potentially reduce the incidence of child labour, enforcement is a problem. If child labour is to be eradicated in India, the government and those responsible for enforcement need to start doing their jobs. Policies can and will be developed concerning child labour, but without enforcement they are all useless. The state of education in India also needs to be improved. High illiteracy and dropout rates are reflective of the inadequacy of the educational system. Poverty plays a role in the ineffectiveness of the educational system. Dropout rates are high because children are forced to work in order to support their families. The attitudes of the people also contribute to the lack of enrolment -- parents feel that work develops skills that can be used to earn an income, while education does not help in this matter. Compulsory education may help in regard to these attitudes. The examples of Sri Lanka and Kerala show that compulsory education has worked in those areas. There are differences between Sri Lanka, Kerala and the rest of India. What types of social welfare structures do these places have? What are the attitudes of the people?

Is there some other reason why the labour market for child labourers is poor in these areas? These are some questions that need to be answered before applying the concept of compulsory education to India? India is making progress in terms of educational policy. The DPEP has been implemented only four years ago, and so results are not apparent at this time. Hopefully the future will show that this program has made progress towards universal education, and eradicating child labour. Child labour cannot be eliminated by focusing on one determinant, for example education, or by brute enforcement of child labour laws. The government of India must ensure that the needs of the poor are filled before attacking child labour. If poverty is addressed, the need for child labour will automatically diminish. No matter how hard India tries, child labour always will exist until the need for it is removed. The development of India as a nation is being hampered by child labour. Children are growing up illiterate because they have been working and not attending school. A cycle of poverty is formed and the need for child labour is reborn after every generation. India needs to address the situation by tackling the underlying causes of child labour through governmental policies and the enforcement of these policies. Only then will India succeed in the fight against child labour.

REFERENCES

1. Devi, R. 1985. Prevalence of Child Labour in India: A Secondary Data Analysis. In *Child Labour and Health: Problems & Prospects*, edited by U. Naidu and K. Kapadia. Bombay: Tata Institute of Social Sciences.
2. Grootaert, C., and R. Kanbur. 1995. Child labour: An economic perspective. *International Labour Review* 134:187-201.
3. Human Rights Watch. 1996. *The Small Hands of Slavery - Bonded Child Labor in India*. New York: Human Rights Watch.
4. International Labour Organisation. 1992. *World Labour Report*. Geneva: International Labour Organisation.
5. International Labour Organization. 1993. *World Labour Report*. Geneva: International Labour Organization.
6. International Labour Organization. 1995. *World Labour Report*. Geneva: International Labour Organization.
7. Jain, S. N. 1985. Legislation and Government Policy in Child Labour. In *Child Labour and Health: Problems & Prospects*, edited by U. Naidu and K. Kapadia. Bombay: Tata Institute of Social Sciences.
8. Mehra-Kerpelman, K. 1996. Children at work: How many and where? *World of Work* 15:8-9.
9. Nangia, P. 1987. *Child Labour: cause-effect syndrome*. New Delhi: Janak Publishers.
10. Narayan, A. 1988. Child labour policies and programmes: The Indian experience. In *Combating Child Labour*, edited by A. Bequle and J. Boyden. Geneva: International Labour Organisation.
11. Subrahmanya, R.K.A. 1987. Can the Child Labour Act of 1986 Effectively Control Child Labour? In *Young Hands at Work - Child Labour in India*, edited by M. Gupta and K. Voll. Delhi: Atma Ram & Sons.
12. The World Bank. 1995. *Economic Developments in India: Achievements and Challenges*. Washington: The World Bank.
13. Weiner, M. 1991. *The Child and the State in India*. Princeton: Princeton University Press.

IMPACT OF FOREIGN DIRECT INVESTMENT (FDI) ON INDIAN ECONOMY: A SECTORAL ANALYSIS

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ABSTRACT

Invest in India is an initiative to market, India as an investment destination all over the globe, to provide a networking platform to the Indian businesses at a global level and to provide information to the international investors about investment opportunities in India. It is the policy of the Government of India to attract and promote productive Foreign Direct Investment (FDI) from non-residents in activities which significantly contribute to industrialization and socio-economic development. Foreign investment is a subject of topical interest. Countries of the world, particularly developing economies, are vying with each other to attract foreign capital to boost their domestic rates of investment and also to acquire new technology and managerial skills. The wave of liberalization and globalization sweeping across the world has opened many national markets for international business. It is stated that FDI has to play a vital role in the world economy. The role of FDI has now transformed from a tool to solve the financial crises to a modernizing force. In past liberalization regime India has experienced tremendous growth in FDI inflows from an average of US \$5-6 billion during previous five years; it has crossed the level of US\$30 billion. Foreign Direct Investment (FDI) has grown dramatically as a major form of international capital transfer over the past decade. Between 1980 and 1990, world flows of FDI-defined as cross-border expenditures to acquire or expand corporate control of productive assets-have approximately tripled. Foreign direct Investment (FDI) has made a dynamic surge into the world economy in the last fifteen years by growing strongly at rates well above those of global foreign trade. FDI has become a major form of net international borrowing for Japan and the United States (the world's largest international lender and borrower, respectively). In this research paper, Impact of FDI in India in terms of GDP growth rate and FDI inflows in different sectors has been analyzed and also explore the sector wise distribution of FDI inflows in order to point out the dominating sector which has attracted the major share. The paper also study the impact of FDI Inflows to different sectors on GDP (gross domestic product) of India Although, India is receiving FDI inflows from number of sources but large percentage of FDI inflows is invested with few major countries i.e. Mauritius, USA, UK, Japan, Singapore, Netherland constitutes 66% of the entire FDI inflows to India. This research paper state the significance as it shows the result of development in sectors that attracting highest FDI to the economy of the country. FDI plays a significant role in contributing to the different variables that affect the development of economy of the country. In this paper, impact of FDI on Indian economy is to be analyzed to know that to what extent it impacts to the economy and top sectors having highest attraction of FDI is to be analyzed. FDI has helped to raise the output, productivity and export in some sectors. Hence, India needs to have financial resources to accomplish double digit growth rate and overall development of the country. For the openness of trade and favorable environment, FDI play a significant role so as to achieve the desired goals of the economy.

KEYWORDS

FDI, GDP, export, GDCF, sectors.

INTRODUCTION

FOREIGN DIRECT INVESTMENT (FDI) means investment by non-resident entity/person resident outside India in the capital of the Indian company under Schedule 1 of FEMA (Transfer or Issue of Security by a Person Resident outside India) Regulations 2000 (Government of India, 2010). 'FDI' inflows into core sectors are assumed to play a vital role as a source of capital, management, and technology in countries of transition economies. It is a high level of indicator of economic health of a country. Foreign investment plays an important role in the long term economic development of a country by augmenting availability of capital, enhancing competitiveness of a domestic economy through transfer of technology, strengthening infrastructure, raising productivity, generating new employment opportunities and boosting exports. Developing countries like India need substantial foreign inflows to achieve the required investment to accelerate economic growth & development. India has increased labour productivity as enhances a faster rate of growth of output and argued that FDI can bring the technological diffusion to the sectors through knowledge spillover. This unprecedented growth of global FDI in 1990 around the world make FDI an important and vital component of development strategy in both developed and developing nations and policies are designed in order to stimulate inward flows.

There is a clear strong worldwide competition for attracting FDI. Generally, FDI means capital inflows or outflows from or to abroad those is invested in the production capacity of the host economy and are usually preferred over other forms of external finance because they are non-debt creating nonvolatile and their returns depend on the performance of the projects financed by the investors. FDI also highlights the modernization & employment generation. Host government policies benefits the FDI that triggers the technology spillovers, assists human capital formation, contributes to international trade integration & particularly exports. It enhances total factor productivity & improves the efficiency of resources use.

According to a recent survey by the United Nations conference on Trade and development (UNCTAD), responses from transnational corporations placed India as the second most attractive global business location. (UNCTAD 2005: 34) India rose from being ranked sixth in 2003 to second in 2005 on the FDI confidence index, 2004, 2006. (Kearney 2003; 2005), only China is ahead of India. India has experienced tremendous growth in FDI inflows in the last few years, from an average of US\$ 5-6 billion during previous five years to around US\$ 30 billion in 2008-09. With strong governmental support, FDI has helped the Indian economy grow tremendously. But with \$34 billion in FDI in 2007, India gets only 25% of the FDI in China.

India has been a major recipient of FDI inflows in the majority of sectors. There has been an unnerving upsurge in the economic developments of the country. India has among the most liberal & transparent policies on FDI emerging economies. FDI up to 100% is allowed under the automatic route in the sectors except that requires prior approval of government.

Globally, FDI inflows remained stagnant in 2010 at an estimated \$1,122 billion compared with \$ 1,114 billion in the previous year with flows to developing & transition economies surpassing the 50% mark of global FDI flows.

REVIEW OF LITERATURE

This section reviews the empirical studies on the FDI in India and sectoral analysis which could study the positive impact of FDI on growth of the countries and the flows of FDI in sectors in regards to GDP.

Blomstrom and kokko (2003), they said in their paper that least developed economies attracting less FDI. It suggests that the existence of threshold level of development is necessary for FDI. Having more attraction of FDI inflows in least developed economies that results in boosting the economy of a country.

DrMaathaiK. Mathiyazhagan (2005), This paper studied the annual period data from 1990-91 to 2000-01 as to examine the long run relationship of FDI with Gross Output, Export and Labour Productivity at sectoral level in the Indian Economy. FDI Inflows into the sectors is to boost the output, labour productivity and export in some sectors and it is to be tested by the panel co-integration (PCONT) test. This results as that there is no significant cointegration and hence, concluded that FDI has not able to hold a positive impact at the sectoral level on the Indian economy. And the whole study suggests that to expand export oriented sectors and the higher growth of the economy could be achieved through the growth of these sectors.

Bose, Jayashree (2007), the book studied the sectoral analysis of India & China related to FDI Inflows. In his book, he lights on the emerging issues on FDI inflows in India & China comparatively and also on the globalization, foreign factors, trends & issues on FDI outflow from India and China.

Khan A.Q. and Siddiqui Ahmad Taufeeque (2011), studied the impact of FDI on Indian economy and a comparison with China & USA. The paper have also been ventured into carving out set of strategies to deal with the issues & problems in attracting FDI for promotion & growth of international trade. The double log model has been used to find elasticity between different factors in this paper. They also highlight the impact of FDI on employment. In this research paper, the discussion between FDI and GDP as to asses that FDI helps in boosting growth of a country.

Bhanagade D.B, Shah A. Pallavi (2011), they said in their paper that the impact of FDI on Indian Economy where they also emphasize on the investments, sectors attracting highest FDI inflows and FDI leads to Generation of Employment opportunities. Therefore the growth of inflow of FDI would lead to positive growth of Gross capital formation. In India, the growth of GDP is largely influenced by FDI.

Chaturvedi Ila (2011), In this paper, analyze the FDI inflows with special reference to sector wise inflows in India. This paper also explore the sector wise distribution of FDI in order to know the dominating sector which has attracted the major share of FDI in India. And to find out the correlation between FDI and Economic Development, It reveals that there is high degree of significance between FDI and economic development.

RESEARCH GAP, SCOPE AND OBJECTIVES

Literature review illustrate that number of studies have been conducted to assess the FDI in India. There are several research papers, articles highlights the impact of sectoral analysis in India. As stated that the numerous studies have been conducted related to FDI in different aspects of areas. The **Blomstrom & kokko (2003)**, **A.Q Khan (2011)**, **D.B. Bhanagade, Dr. Pallavi A. Shah (2011)** directed the study towards the impact of FDI on Indian Economy. **DrMaathaiK. Mathiyazhagan (2005)**, **Jayashree Bose (2007)**, **Ila Chaturvedi (2011)** emphasized on sectors. But none of the studied reviewed by the researchers is in context to the FDI in India and shows that how FDI affecting India's growth and impact of FDI inflows on growth of the economy in terms of different variables like GDP, Export and GDCF (gross domestic capital formation) and altogether discuss the sector's impact in India. Further, in the research paper double log model has been used to find out the elasticity between the different factors.

THE FOLLOWING OBJECTIVES HAVE BEEN PURSUED IN THIS PAPER:-

- To study the FDI in India as to know the growth and development of the country.
- To study the impact of FDI in India in terms of GDP, EXPORT, and GDCF.
- To explore the sector distribution of FDI inflows in order to know the dominating sector.
- To rank the sectors based upon highest FDI Inflows.
- To analyze the impact of sectors attracting highest FDI on GDP in India.

HYPOTHESES AND METHODOLOGY OF THE STUDY

1. **H₀**- The Null Hypothesis assumes that there is no significant impact of FDI on Indian economy in term of **GDP**.
H_a- The Alternative Hypothesis accepts that there is significant impact of FDI on Indian economy terms of **GDP**.
2. **H₀**- The Null Hypothesis presumes that there is no significant impact of FDI on **EXPORT** in India.
H_a- The Alternative Hypothesis assumes that there is significant impact of FDI on **EXPORT** in India.
3. **H₀**- The Null Hypothesis assumes that there is no significant impact of FDI on **GDCF (GROSS DOMESTIC CAPITAL FORMATION)** in India.
H_a- The Alternative Hypothesis presumes that there is significant impact of FDI on **GDCF (GROSS DOMESTIC CAPITAL FORMATION)** in India.
4. **H₀**- The Null Hypothesis presumes that there is no significant impact of FDI Inflows to the sectors on GDP in India.
H_a- The Alternative Hypothesis assumes that there is significant impact of FDI Inflows to sectors on GDP in India.

FOLLOWING STATISTICAL TOOLS HAVE BEEN USED TO TEST THE HYPOTHESIS:

A **log linear regression** function has been applied to know the impact of FDI in India in terms of GDP, EXPORT, GDCF and the impact of sectors attracting highest FDI Inflows on GDP in India. The degree of significance of coefficient of regression verify by the application of '**T**' test. The strength of linear relationship between the dependent variable and independent variable measured by the coefficient of determination. The data analyzed in this paper has been collected from the reliable sources i.e. journals, articles, research papers, economic survey, Ministry of commerce, Handbook of Statistics by the RBI. The data collected is compiled in the form of tables from the dipp fact sheets 2011 and scrutinized through statistical tools & techniques.

ANALYSES AND INTERPRETATIONS

This research paper examine the impact of FDI in India and seeks to discuss the impact of FDI on GDP in order to assess whether FDI is causing growth or growth rate is prerequisite for attracting FDI in India. For examining the impact, a log-linear regression model has been used to find out the level of significance. In order to test the hypothesis the following statistical tools have been used .i.e. log linear regression functions. Table-1 explains that the flow of FDI in respect of the GDP growth rate during the year 2000 to 2011 in India. According to the data of DIPP illustrate that FDI was US\$ 4029 million in the year 2000-01 that increased to US\$ 6130 million with growth rate of 52 % in the year 2001-02. The investment amounted to US\$ 5035 million and US\$ 4322 million with negative growth rate of 18 % and 14 % respectively as it was noticed the downward trend in years i.e. 2002-03 and 2003-04. The reason for negativity was the unfortunate event of 9/11 attack in US leading to cascading effect on almost all the countries of the world. In most of the economies even including India the stock market went into bearish mode. Then the recovery begins from 2004-2005 and 2005-2006 with growth rate of 40% and 48% and investment amounted to US\$ 6051 million and US\$ 8961 million.

In the year 2006-2007, FDI registered skyrocketed growth rate of 146 % with investment amounting to US\$ 22826 million. During this period tremendous growth can be ascertained in Indian economy. This trend of growth goes continued with investment amounting to US\$ 34835 at growth rate of 53% in the year 2007-2008. In the succeeding year i.e. 2008-2009, the growth rate declined to the level of 9%. This is all because of global financial recession but it is satisfactory for India in compare to other countries at least it is positive. Strong economic fundamentals and controlled privatization are able to maintain positive growth rate. The impact of crises adversely affect the Indian economy as it is noticed that in the year 2009-2010 and 2010-2011, the growth rate goes negative at -0.2% and -28% with investment amount of US\$ 37763 millions and US\$ 27024 millions. As in Appendix-2 the financial year wise FDI inflows data as per international practices and the Export data shows not much flexibility but a bit more or less increase in the export in India except aircraft. The data of export based on the results of CEA 2007, 2010-2011 year data is the revised data with 172440 million rupees. Appendix-3 shows the GDCF (Gross Domestic Capital Formation) with 29981 million rupees in 2000-2001 and it increasing year by year that is 79305 million rupees in the year 2010-2011.

TABLE – 1: FOREIGN DIRECT INVESTMENT IN INDIA¹ (2001-2011)

S No	Year	Total FDI Flows (million US\$)	Growth rate (%)
1	2000-01	4029	
2	2001-02	6130	52
3	2002-03	5035	-18
4	2003-04	4322	-14
5	2004-05	6051	40
6	2005-06	8961	48
7	2006-07	22826	146
8	2007-08	34835	53
9	2008-09	37838	09
10	2009-2010	37763	-0.2
11	2010-2011	27024	-28

SOURCE: DIPP (Department of Industrial Policy & Promotion) Fact sheet 2011, Federal Ministry of Commerce and Industry, Government of India.

TABLE- 2: RANKING OF SECTOR WISE FDI INFLOWS IN INDIA SINCE APRIL 2000 – DEC 2010

INDUSTRIAL SECTORS	RANK	SHARE OF FDI
Service Sector	1	32%
Electrical Equipments	2	14%
Telecommunications	3	12%
Real Estate and Housing	4	11%
Construction Activities	5	11%
Power	6	6%
Automobile Industry	7	6%
Metallurgical Industry	8	4%
Petroleum and Natural Gas	9	3%
Chemicals	10	1%

Source: DIPP (Department of Industrial Policy & Promotion) Fact sheet 2011

SECTOR WISE ANALYSES OF FDI INFLOWS IN INDIA

The Sector wise Analysis of FDI in India reveals that maximum FDI has attracted in the service sector including the telecommunication, information technology, travel and many others with 32%. The service sector is followed by the manufacturing sector in terms of FDI. High volumes of FDI take place in electronics and hardware, automobiles, pharmaceuticals, cement, metallurgical and other manufacturing industries. The IT industry is one of the booming sectors on India. At present India is the leading country pertaining to IT industry in the Asia-Pacific region. The telecom industry is of the fastest growing industries in India with 12% FDI inflows as it has the highest growth rate in the world, with a growth rate of 45%. The FDI in Automobile Industry has experienced huge growth in the past few years. Electronic hardware is the major component of several industries such as information as attracting FDI inflows of 14%. The increased FDI inflow to Metallurgical Industries has helped to bring latest technology to the industries that led to the development, expansion and growth of the industries in India with 4% of FDI Inflows. Chemical Industry has helped in the development of the sector in India as ranks 10th with FDI Inflows of 1%. The cumulative FDI inflows reveal that service sector attracts maximum FDI Inflows amounting to Rs. 106992 crores that followed by the Computer Software and Hardware amounting Rs. 44611 crores in India. These both sectors attract more than 30% of the total FDI Inflows in India. As the Real Estate and Housing and the Construction industry are among the new attracting large share of FDI in India.

Thus the Sector wise Inflows of FDI in India shows varying trends but act as a catalyst for growth, development and quality maintenance of Indian Industries to the huge and greater extend. Though the sectors are the major sources of mobilizing FDI in India, plenty of scope exists.

TESTING OF HYPOTHESIS

HYPOTHESIS -1

Ho- The Null Hypothesis assumes that there is no significant impact of FDI in India. **Ha-** The Alternative Hypothesis accepts that there is significant impact of FDI in India. In order to test the hypothesis, the variables have been converted into natural log where FDI has been taken as independent variable and natural log of GDP as a dependent variable. It is stated that independent variable is significant at any level of significance with T value of 7.9 and on the other hand constant i.e. dependent variable is significant at any level of significance with T value of 17.8. It shows that there is clear impact of FDI on GDP and some other unknown factors also plays significant role. In **Table 3**, the 'B' value is 0.34 % which indicates that the elasticity between FDI and GDP is 0.34 %. It resulted that 1 % increase in FDI leads to 0.34 % increase in GDP that helps in boosting growth rate of India. If FDI increases 10 % then it may increase the GDP growth rate by 3.6 %. Therefore Ho is rejected and Ha is accepted as there is significant impact of FDI on GDP in India.

TABLE – 3: IMPACT OF FDI ON GDP

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	8.452	.473		17.859	.000
	LNFDI	.344	.043	.936	7.967	.000

Dependent Variable: LNGDP

Source: Through SPSS, Based on Appendix 1

HYPOTHESIS – 2

H₀- The Null hypothesis is assumes that there is no significant impact of FDI on Export. **H_a**- The Alternative hypothesis is presumes that there is significant impact of FDI on Export. In Table 2, Testing of hypothesis is resulted that T value is 10.182 for independent variable i.e. log of FDI at any level of significance that is more than the 5% level of significance. It shows that there is significant impact of FDI on Export. The B value is 0.26 which shows the elasticity between the FDI and EXPORT is 0.26%. It resulted that 1 % increase in FDI leads to 0.26 % increase in Export that helps in boosting growth rate of India via investment FDI in Export.

TABLE – 4: IMPACT OF FDI ON EXPORT

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	8.831	.275		32.060	.000
	LNFDI	.256	.025	.959	10.182	.000

Dependent Variable: LNEEX

Source: Through SPSS, Based on Appendix-2

HYPOTHESIS - 3

TABLE – 5: IMPACT OF FDI ON GDGF (GROSS DOMESTIC CAPITAL FORMATION)

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	6.757	.456		14.818	.000
	LNFDI(Rs crores)	.372	.042	.948	8.949	.000

Dependent Variable: LNGDCF (Rs million)

Source: Through SPSS, Based on Appendix-3

H₀- The Null hypothesis is assumes that there is no significant impact of FDI on GDGF (gross domestic capital formation). **H_a**- The Alternative hypothesis is presumes that there is significant impact of FDI on GDGF (gross domestic capital formation). Testing of hypothesis is resulted that T value is 8.95 for independent variable i.e. log of FDI at any level of significance in Table 5 that is more than the 5% level of significance. It shows that there is significant impact of FDI on GDGF (gross domestic capital formation). The B value is 0.37 which shows the elasticity between the FDI and GDGF is 0.37%. It resulted that 1 % increase in FDI leads to 0.37 % increase in GDGF that helps in increasing growth rate of India.

HYPOTHESIS – 4

H₀- The Null hypothesis assumes that there is no significant impact of FDI Inflows to service sector on GDP in India where as **H_a**- the Alternative Hypothesis that there is significant impact of FDI Inflows to service sector on GDP in India. In order to test the hypothesis Natural Log of FDI Inflows to service sector has been taken as independent variable and Natural Log of GDP as dependent variable. The value of 'T' is 2.45 at 40% level of significance which is less than the significant value in Table 4. The value is beyond the level of significance states that null hypothesis is accepted. It resulted that there is no impact of FDI Inflows to service sector on GDP.

TABLE – 6: IMPACT OF FDI INFLOWS TO SERVICE SECTOR ON GDP

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	10.792	.604		17.879	.000
	LNFDI	.169	.069	.655	2.454	.040

a Dependent Variable: LNGDP

Source: Through SPSS, Based on Appendix-4

TABLE – 7: IMPACT OF FDI INFLOWS TO TELECOMMUNICATION SECTOR ON GDP

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	11.599	.574		20.198	.000
	LNFDI	.086	.074	.382	1.168	.276

a Dependent Variable: LNGDP

Source: Through SPSS, Based on Appendix-5

TABLE – 8: IMPACT OF FDI INFLOWS TO REAL ESTATE ON GDP

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	12.023	.130		92.608	.000
	LNFDI	.056	.017	.830	3.327	.021

Dependent Variable: LNGDP

Source: Through SPSS, Based on Appendix-6

H_0 - The Null Hypothesis presumes that there is no significant impact of FDI Inflows to telecommunication sector on GDP in India. H_a - The Alternative Hypothesis accepts that there is significant impact of FDI Inflows to telecommunication sector on GDP in India. The hypothesis is to be tested as taking Natural Log of FDI Inflows to Telecommunication as independent variable and the Natural Log of GDP as dependent variable. Table-5 illustrates the result of hypothesis that impact of FDI Inflows to Telecommunication sector on GDP is significant at any level of significance with 'T' value of 1.2 at 27% significance level. The value of 'B' is 0.086 which implies that 1% increase in FDI Inflows to Telecommunication sector leads to 0.086 % increase in GDP. Therefore there is no significant impact of FDI inflows to telecommunication sector on GDP it means null hypothesis is accepted.

H_0 - The Null Hypothesis assumes that there is no significant impact of FDI Inflows to Real Estate on GDP in India. H_a - The Alternative Hypothesis presumes that there is significant impact of FDI Inflows to Real Estate on GDP in India. In Table 6, the hypothesis is to be test on the impact of FDI Inflows to Real Estate on GDP at 'T' value of 3.33 which is less than the level of significance. It resulted the null hypothesis is accepted and it is clear that there is no impact of FDI Inflows to Real Estate sector on GDP in India. 'B' value is 0.056 which indicates that 1 % increase in FDI Inflows to Real Estate sector increases the GDP to 0.056 %

TABLE – 9: IMPACT OF FDI INFLOWS TO CONSTRUCTION SECTOR ON GDP

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1 (Constant)	11.346	.637		17.818	.000
LNFDI	.127	.079	.550	1.613	.158

Dependent Variable: LNGDP

Source: Through SPSS, Based on Appendix-7

H_0 - The Null Hypothesis is assumes that there is no significant impact of FDI Inflows to Construction sector on GDP in India. H_a - The Alternative Hypothesis accepts that there is significant impact of FDI Inflows to Construction sector on GDP in India. As stated in Table-7, the impact of FDI inflows to the construction sector on GDP is to be tested at 5% level of significance with T value 1.613 which is less than the significant value. Therefore the null hypothesis is accepted and clearly proved that there is no significant impact of FDI inflows to construction sector on GDP.

Table- 10: IMPACT OF FDI INFLOWS TO COMPUTER HARDWARE AND SOFTWARE SECTOR ON GDP

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1 (Constant)	12.902	1.007		12.811	.000
LNFDI	-.079	.123	-.221	-.641	.540

Dependent Variable: LNGDP

Source: Through SPSS, Based on Appendix-8

H_0 - The Null Hypothesis assumes that there is no significant impact of FDI Inflows to Computer hardware and software sector on GDP in India. H_a - The Alternative Hypothesis presumes that there is significant impact of FDI Inflows to Computer hardware and software sector on GDP in India. In Table 6, the hypothesis is to be test on the impact of FDI Inflows to Computer Hardware and software sector on GDP at 'T' value of -0.641 at 54% significance level which is less than the level of significance. It resulted the null hypothesis is accepted and it is clear that there is no impact of FDI Inflows to Computer hardware and Software sector on GDP in India with 'B' value is -0.079.

CONCLUSION

Analysis in this research paper illustrate that there has been positive impact of FDI on overall growth of the economy. India has registered tremendous growth in FDI inflows during last decade and total inflows crossed the level of US\$ 30 million. But when it is compared with other countries and continents the figure of FDI inflows are not encouraging. It can be observed from above analysis that sectoral level of the Indian economy, FDI has helped to raise the output, productivity and export in some sectors. In this paper emphases given on the impact of FDI on Indian economy in terms of variables are GDP, EXPORT and GDCF. It resulted that there is significant impact of FDI on GDP, Export and GDCF in India. As the investment in the form of FDI inflows can boost efforts for the development in many ways, for instance boosting export, creating new employment opportunities, increasing technological capabilities and increasing total financial resources for overall development of the economy of the country. The paper also analyzes the impact of FDI inflows to the sectors on GDP in India. The tested hypothesis highlight that there is no impact of FDI inflows to sectors on GDP. There are the sectors having highest attraction of FDI inflows are Service, Telecommunication, Real Estate, Construction and Computer Hardware & Software sector instead of this FDI inflows to sectors are not very much impacting GDP in India. Hence, India needs to have financial resources to accomplish double digit growth rate and overall development of the country. For the openness of trade and favorable environment, FDI play a significant role so as to achieve the desired goals of the economy. This is a wide topic to be researched on. There are many more variables and sectors that can also be analyze as to know the impact of FDI on Indian Economy. And significance relevant toward the economy.

REFERENCES

1. Bhanagade, D.B and Shah, Pallavi A. (2011), "Study of Impact of FDI on Indian Economy", International Referred Research Journal vol-II.
2. Blomstrom and kokko (2003), "The Economic Foreign Direct Investment incentive". Working paper 9489 NBER.
3. Blomstromel.1992, Borensztein, Gregoria and lee 1998, de mello 1999, Gregoria 1992, lin 2001.
4. Chaturvedi, Illa (2011), "Role of FDI in Economic Development of India: Sectoral Analysis", International Conference on Technology & Business.
5. Department of Industrial Policy & Promotion (Dipp) factsheet, Retrieved from http://dipp.nic.in/English/Publications/FDI_Statistics/2011/india_FDI_March_2011.pdf
6. Economic Survey. Retrieved from <http://indiabudget.nic.in>.
7. Handbook of statistical data of Reserve Bank of India. Retrieved from <http://www.rbi.org.in/scripts/AnnualReportPublications.aspx?id=1029> www.rbi.com.
8. Khan.A.Q & Siddiqui Ahmad, Taufeeque (2011), "Impact of FDI on Indian Economy: A Comparison with China & USA". International Journal of Business & Information technology, vol-1 no 1 2011.
9. Maathaik, Mathiyazhagan (2005), ISAS Working paper.

APPENDICES

APPENDIX 1: FOREIGN DIRECT INVESTMENT (FDI) AND GROSS DOMESTIC PRODUCT (GDP)

Year	FDI (Rs crores)	GDP (RM)	LNFDI	LNGDP
2000-01	18406	122410	9.820432	11.71513
2001-02	29235	134392	10.28312	11.80852
2002-03	24376	145055	10.10135	11.88487
2003-04	19860	162291	9.896463	11.99715
2004-05	27188	180908	10.21053	12.10574
2005-06	39674	191393	10.58845	12.16208
2006-07	103367	213444	11.54604	12.27113
2007-08	140180	274316	11.85068	12.52204
2008-09	173741	282003	12.06532	12.54967
2009-10	179059	299129	12.09547	12.60863
2010-11	138462	325228	11.83835	12.69228

Source: Compiled by the Authors from Economic Survey of 2010-2011 & CSO and FDI fact sheet of DIPP from September, 2005 to April, 2011.

LNFDI = Natural Log of FDI Inflow of sector, LNGDP = Natural Log of GDP

APPENDIX 2: FOREIGN DIRECT INVESTMENT (FDI) AND EXPORT

Years	FDI (Rs crores)	Export (Rs million)	LNFDI	LNEX
2000-2001	18406	91369	9.820432	11.42266
2001-2002	29235	89366	10.28312	11.4005
2002-2003	24376	90895	10.10135	11.41746
2003-2004	19860	96466	9.896463	11.47695
2004-2005	27188	112969	10.21053	11.63487
2005-2006	39674	128994	10.58845	11.76752
2006-2007	103367	141187	11.54604	11.85784
2007-2008	140180	145204	11.85068	11.88589
2008-2009	173741	138168	12.06532	11.83623
2009-2010	179059	156945	12.09547	11.96365
2010-2011 ¹	138462	172440	11.83835	12.0578

Source: Same as Appendix-1, Figures of export based on results of CEA 2007, 1- revise data

APPENDIX 3: FOREIGN DIRECT INVESTMENT (FDI) AND GROSS DOMESTIC CAPITAL FORMATION (GDCF)

Years	FDI (Rs crores)	GDCF (Rs million)	LNFDI	LNGDCF
2000-2001	18406	29981	9.820432	10.30832
2001-2002	29235	31075	10.28312	10.34416
2002-2003	24376	36508	10.10135	10.50529
2003-2004	19860	39271	9.896463	10.57824
2004-2005	27188	41111	10.21053	10.62403
2005-2006	39674	51695	10.58845	10.85312
2006-2007	103367	61240	11.54604	11.02256
2007-2008	140180	67529	11.85068	11.12031
2008-2009	173741	74430	12.06532	11.21761
2009-2010	179059	74395	12.09547	11.21714
2010-2011	138462	79305	11.83835	11.28106

Source: Same as Appendix-1

LNFDI=Natural Log FDI, LNGDCF=Natural Log of GDCF

APPENDIX 4: SERVICE SECTOR'S FDI INFLOWS AND GDP OF INDIA

YEARS	FDI INFLOWS (in croreRs)	GDP (RM)	LNFDI	LNGDP
2001-02	1551	122410	7.346655	11.80852
2002-03	1235	134392	7.118826	11.88487
2003-04	1986	145055	7.593878	11.99715
2004-05	2399	162291	7.782807	12.10574
2005-06	21047	180908	9.954513	12.16208
2006-07	10313	191393	9.241161	12.27113
2007-08	28516	213444	10.25822	12.52204
2008-09	20776	274316	9.941554	12.54967
2009-10	15539	282003	9.651108	12.60863
2010-11	2922	299129	7.980024	12.69228

Source: Central Statistical Organization (CSO) and FDI fact sheets of DIPP from September 2005 to April 2011

LNFDI = Natural Log of FDI Inflow of sector, LNGDP = Natural Log of GDP

APPENDIX 5: TELECOMMUNICATION SECTOR'S FDI INFLOWS AND GDP OF INDIA

YEARS	FDI INFLOWS (in croreRs)	GDP (RM)	LNFDI	LNGDP
2001-02	1058	122410	6.964136	11.80852
2002-03	532	134392	6.276643	11.88487
2003-04	570	145055	6.345636	11.99715
2004-05	2776	162291	7.928766	12.10574
2005-06	2155	180908	7.675546	12.16208
2006-07	4232	191393	8.35043	12.27113
2007-08	11727	213444	9.369649	12.52204
2008-09	12338	274316	9.420439	12.54967
2009-10	7546	282003	8.928773	12.60863
2010-11	205	299129	5.32301	12.69228

Source: Central Statistical Organization (CSO) and FDI factsheets of DIPP from September 2005 to April 2011.

LNFDI = Natural Log of FDI Inflow of sector, LNGDP = Natural Log of GDP

APPENDIX 6: REAL ESTATE SECTOR'S FDI INFLOWS AND GDP OF INDIA

YEARS	FDI INFLOWS (in croreRs)	GDP (RM)	LNFDI	LNGDP
2004-05	0	162291	0	12.10574
2005-06	171	180908	5.141664	12.16208
2006-07	2121	191393	7.659643	12.27113
2007-08	8749	213444	9.076695	12.52204
2008-09	12621	274316	9.443117	12.54967
2009-10	13586	282003	9.516795	12.60863
2010-11	5149	299129	8.546558	12.69228

Source: Central Statistical Organization (CSO) and FDI fact sheets of DIPP from September 2005 to April 2011.

LNFDI = Natural Log of FDI Inflow of sector, LNGDP = Natural Log of GDP

APPENDIX 7: CONSTRUCTION SECTOR'S FDI INFLOWS AND GDP OF INDIA

YEARS	FDI INFLOWS (in croreRs)	GDP (RM)	LNFDI	LNGDP
2003-04	696	145055	6.54535	11.99715
2004-05	667	162291	6.50279	12.10574
2005-06	4424	180908	8.3948	12.16208
2006-07	4214	191393	8.346168	12.27113
2007-08	8792	213444	9.081597	12.52204
2008-09	13516	274316	9.511629	12.54967
2009-10	5077	282003	8.532476	12.60863
2010-11	1381	299129	7.230563	12.69228

Source: Central Statistical Organization (CSO) and FDI fact sheets of DIPP from September 2005 to April 2011.

LNFDI = Natural Log of FDI Inflow of sector, LNGDP = Natural Log of GDP

APPENDIX 8: COMPUTER SECTOR'S FDI INFLOWS AND GDP OF INDIA

YEARS	FDI INFLOWS (in croreRs)	GDP (RM)	LNFDI	LNGDP
2001-02	3075	122410	8.03106	11.80852
2002-03	2449	134392	7.803435	11.88487
2003-04	2441	145055	7.800163	11.99715
2004-05	6172	162291	8.727778	12.10574
2005-06	11786	180908	9.374668	12.16208
2006-07	4539	191393	8.420462	12.27113
2007-08	7329	213444	8.899594	12.52204
2008-09	4351	274316	8.378161	12.54967
2009-10	3571	282003	8.180601	12.60863
2010-11	425	299129	6.052089	12.69228

Source: Central Statistical Organization (CSO) and FDI fact sheets of DIPP from September 2005 to April 2011.

LNFDI = Natural Log of FDI Inflow of sector, LNGDP = Natural Log of GDP

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