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LOCAL GOVERNMENT PERFORMANCE AND ITS ASSOCIATED REWARD POLICIES: THE CONSIDERATIONS OF ECONOMIC GROWTH AND ENVIRONMENT PROTECTION

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ABSTRACT

This paper uses eighteen Taiwanese local governments in 2013 as the decision-making units (DMUs) to evaluate their achievements in economic growth and environmental protection. In particular, we propose performance-based reward policy and slack-based reward policy for encouraging the achievements based on the evaluated efficiency scores and output slacks. Different from previous studies, we consider three undesirable outputs (unemployment, garbage generation, and air pollution) to respond the destructions in economy and environment as governments execute their duties. Empirical results show that most of the local governments are inefficient in three efficiency scores and the technical inefficiency mainly comes from scale inefficiency. All the three undesirable outputs are over-produced relative to a given real disposal income per capita. Ignoring the undesirable outputs will result in biased efficiency evaluations and associated reward policies. In addition, the performance-based reward policy provides a smaller standard deviation of reward share than the slack-based reward policy.

KEYWORDS

environmental destruction, reward policy sharpe ratio, super-efficiency model.

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1. INTRODUCTION



One of the most debatable issues in economics is the relationship between economic growth and environmental protection (Guo and Ma 2008). While the debate has led to diverse results, the integration of environmental protection into economic growth has become a major concern for many countries and has entered into policy design over the last few years.

Local governments are the basic executive organizations of a country; therefore, their performance in economic growth and environmental protection influences a country's overall operating performance. To improve their operating performance, developed and developing countries such as the US, UK, Japan, and Taiwan have been actively assessing the economic and environmental efficiency of local governments and devising some schemes to induce them to improve the efficiency. Thus, from the policy point of view, evaluating the efficiency of local governments in economic growth and environmental protection and subsidizing their achievements based on the evaluated efficiency indices are helpful for a country to enhance overall operating performance. The objective of this paper is to investigate these two questions.

To achieve this objective, we have to employ an appropriate efficiency evaluation model to measure the operating efficiency of local governments, and then construct available schemes to reward the achievement in the operating efficiency. Data envelopment analysis (DEA) is a well-known nonparametric technique for estimating the relative efficiency of a given set of similar decision-making units (DMUs). The approach does not need to specify a functional form for the relationship between multiple inputs and multiple outputs, and it can calculate various efficiency indices, which makes it possible to conduct a comprehensive evaluation of performance. Thus, the DEA model has been applied to a wide variety of fields, including governmental organization (Worthington and Dollery 2000, Borge et al. 2008, Geys and Moesen 2009, Pan et al. 2011, Wu et al. 2014, Aristovnik et al. 2014), finance (Cummins et al. 2010, Tziogkidis and Siriopoulos 2010, Tsolas and Giokas 2012), education (Moreno and Tadeballi 2002, Pierre and Valerie 2005), and manufacturing (Sufian and Habibullah 2009, Saeidi et al. 2013).

In performing efficiency evaluations of governmental organization, the conventional DEA models (the CCR and BCC models) consider only desirable outputs that generate positive utility. However, undesirable outputs are frequently accompanied with desirable outputs. For example, the undesirable outputs originated from environmental destruction, such as garbage release and air pollution, are produced together with the increase in income, a representative desirable output of economic growth. Fare et al. (1989) indicate that the performance rankings of DMUs are very sensitive to whether undesirable outputs are included in the DEA models. Thus, in measuring a government's operating performance, we have to consider desirable outputs as well as undesirable outputs.

Various methods have been proposed for dealing with undesirable outputs in the DEA models (Tyteca 1997, Scheel 2001, Seiford and Zhu 2002, Silva-Portela et al. 2004, Amirteimoori 2006, Salnykov 2008). Pan et al. (2011) and Wu et al. (2014) argue that these methods encounter some constraints in empirical applications. First, most of them involve complicated mathematical calculations, which cause the application to be inconvenient. Second, they use methods in which undesirable outputs are directly deducted from a specified constant, or undesirable outputs are regarded as inputs, which may ignore the relative importance of desirable and undesirable outputs. Thus, their evaluated efficiency scores are less persuasive. Most importantly, their approaches cannot measure whether undesirable outputs are over-produced relative to desirable outputs. This is particularly important for a country trying to reduce environmental destruction while maintaining economic growth.

Pan et al. (2011) and Wu et al. (2014) employ the concept of the Sharpe ratio, developed in 1966 by William Sharpe, to resolve the above shortcomings in previous studies regarding undesirable outputs. The Sharpe ratio is calculated by dividing the excess return of an investment portfolio by the standard deviation of the portfolio returns (a proxy of investment risk), and it thus represents an investment portfolio's risk-adjusted performance. The desirable output in DEA model corresponds to the excess return in the Sharpe ratio, and the undesirable output is similar to the portfolio risk for risk-averse investors. Thus, the concept of the Sharpe ratio is appropriate for constructing a modified desirable output variable that contains a desirable output/undesirable output pair for use in measuring DEA efficiency indices.

Employing the concept of the Sharpe ratio to construct modified desirable outputs has the following two advantages. First, it integrates any combination of one desirable output and one undesirable output into a new modified (desirable) output, i.e., a modified (desirable) output is expressed as the amounts of desirable output per unit of undesirable output. Thus, a higher the value of the modified desirable output results in a higher the efficiency value under a specific set of inputs. Second, by combining estimated efficiency scores with initial desirable and undesirable outputs and modified output slacks, researchers can easily examine whether an undesirable output is over-produced relative to a specific desirable output under a given set of inputs.

While Pan et al. (2011) and Wu et al. (2014) have provided a good basis for researchers utilizing the Sharpe ratio to deal with the co-existence of desirable and undesirable outputs in the DEA model, they do not state how to construct corresponding subsidy policies to reward local governments' achievements in both economic growth and environmental protection, based on the evaluated efficiency indices and modified desirable output slacks. This paper fills this gap by devising two set of reward policies.

The procedures used to perform our empirical analysis are as follows. First, this paper uses a super-efficiency DEA model to evaluate the relative achievements among local governments. Following Pan et al. (2011) and Wu et al. (2014), the concept of the Sharpe ratio is used for integrating any combination of one desirable output and one undesirable output into a modified (desirable) output. Thus, three modified (desirable) outputs are constructed, i.e., income over unemployment, garbage generation, and air pollution. In the conventional DEA models, an output slack represents the amount of the underlying output that can be increased without altering the efficiency scores of the evaluated DMUs. Thus, a positive modified desirable output slack means that the underlying undesirable output is over-produced relative to the underlying desirable output in the positive modified output. Second, combining the values of the evaluated efficiency scores, modified (desirable) outputs slacks, original desirable outputs, and undesirable outputs, we design two sets of mechanisms for central government to reward the operating performance of local governments.

The proposed reward policies associated with the operating performance of local governments have three traits. First, they consider the achievements of local governments in both economic growth (measured by real per capita disposable income) and environmental protection (measured by unemployment rate, volume of garbage clearance, and air pollution). Thus, the reward policies can balance the economic growth and environmental protection of local governments. Second, they are associated with the evaluated efficiency values, the modified desirable outputs, and the initial inputs and outputs, which satisfy the criteria of efficiency and fairness in resource use. Lastly, the findings in this paper not only contribute to the methodology of performance measurement but have environmental policy implications for central government. To assess the function of this improvement, we use the newest sample of eighteen Taiwanese local governments in 2013.

The rest of this paper is organized as follows. Section 2 briefly introduces the CCR and super-efficiency DEA models. Section 3 presents two sets of reward policies for encouraging the operating performance of local governments, based on the evaluated efficiency indices and initial data set of inputs and outputs. Section 4 describes the selection of input and output variables, the construction of modified (desirable) outputs utilizing the Sharpe ratio, and data sources. Section 5 presents the empirical results and policy implications, and the final section concludes the paper.

2. THE MODELS

This section introduces the DEA models used to evaluate the operating performance of local governments, including the CCR model and super-efficiency model. In the CCR model, the relationship between inputs and outputs is a constant return to scale, and the efficiency of a DMU can be expressed as the maximum ratio of weighted outputs to weighted inputs, subject to the condition that the same ratio for all DMUs must be less than or equal to one. Thus, the CCR model measures an overall efficiency for each DMU, where pure technical efficiency and scale efficiency are aggregated into a single value.

The efficiency score of each DMU_k in a CCR model can be derived from the following model:

$$\begin{aligned}
 &Max S_k^{CCR} = \theta + \varepsilon \left(\sum_{i=1}^m S_{ik}^- + \sum_{r=1}^s S_{rk}^+ \right) \\
 &s.t. \sum_{k=1}^n \lambda_k x_{ik} + S_{ik}^- = x_{ik}, \quad i = 1, \dots, m \\
 &\sum_{k=1}^n \lambda_k y_{rk} - S_{rk}^+ = \theta y_{rk}, \quad r = 1, \dots, s \\
 &\lambda_k, S_{ik}^-, S_{rk}^+ \geq 0, \quad k = 1, \dots, n
 \end{aligned} \tag{1}$$

where S_k^{CCR} is the relative efficiency score of DMU_k; x_{ik} , $i = 1, \dots, m$ and y_{rk} , $r = 1, \dots, s$ are the i -th input and r -th output of DMU_k ($k=1, \dots, n$), respectively; S_{ik}^- and S_{rk}^+ represent the i -th input slack and the r -th output slack of the DMU_k, respectively; λ_k denotes the intensity variable of DMU_k, which is used to construct the

best practice frontier. ε is an infinitesimal constant. The evaluated unit DMU_k is efficient if the optimal objective value $S_k^{CCR} = 1$, i.e., $\theta=1$, and inefficient if $S_k^{CCR} < 1$.

The BCC model yields a measure of pure technical efficiency that neglects the impact of the scale size by only comparing a DMU to a unit of similar scale. That is, the BCC model extends the original CCR model to account for technologies that exhibit variable returns to scale. Thus, for a DMU to be considered as CCR efficient, it must have both pure technical efficiency and scale efficiency, and the efficiency score obtained using the BCC model is greater than or equal to the score obtained using the CCR model. In addition, the scale efficiency index can be derived by calculating the ratio of CCR efficiency to BCC efficiency.

Andersen and Petersen (1993) develop a super-efficiency model for ranking the efficient units in the CCR and BCC models. Super-efficiency indicates the extent to which the efficient products exceed the efficient frontier formed by other efficient units. That is, the super-efficiency model involves rerunning the traditional DEA models with the procedures of removing, in turn, each efficient unit and recalculating efficiency score of the resulting change. The super-efficiency scores of a DEA model with constant return to scale are derived from the following model.

$$\begin{aligned}
 &Max S_k^{SE} = \sum_{r=1}^s u_r y_{rk} \\
 &s.t. \sum_{i=1}^m v_i x_{il} - \sum_{r=1}^s u_r y_{rl} \geq 0 \quad \text{for } l = 1, \dots, n, \quad l \neq k \\
 &\sum_{i=1}^m v_i x_{ik} = 1 \\
 &u_r \geq \varepsilon \quad \text{for } r = 1, \dots, s
 \end{aligned}$$

$$v_i \geq \varepsilon \quad \text{for } i=1, \dots, m \tag{2}$$

where S_k^{SE} indicates the super-efficiency of DMU_k; the weights, u_r and v_i , are non-negative. In model (2), the value of S_k^{SE} lies in the interval (1, ∞) for the identified efficiency DMUs, with larger values indicating increasing efficiency, and lies in the interval (0,1) for the identified inefficiency DMUs, with smaller values indicating decreasing efficiency. Super-efficiency scores always benchmark the target DMU on its efficient peers, regardless of its own efficiency level. Thus, this paper employs model (2) to rank the performance of the efficient DMUs in conventional CCR and BCC models. In performing model (2), we consider two inputs (labor and capital, m=2), a desirable output (real disposable per capita income), and three undesirable outputs regarding economic growth and environmental destruction, namely unemployment, garbage generation, and air pollution.

3. REWARD POLICIES ASSOCIATED WITH THE EVALUATED PERFORMANCE

In evaluating the operating performance of local governments, this paper allows for the coexistence of desirable and undesirable outputs, not just desirable outputs as in the specification of the conventional CCR and BCC models. Assume that the desirable outputs and undesirable outputs of DMU_k in the super-

efficiency model are y_{jk}^D and y_{hk}^{ND} , $k=1, \dots, 18$, $j = 1$, $h = 1, 2, 3$, respectively. Employing the Sharpe ratio, the modified (desirable) outputs can be expressed

as $y_{hk}^{MD} = y_{jk}^D / y_{hk}^{ND}$, $j = 1$, $h = 1, 2, 3$. According to models (1) and (2), we can generate the efficiency scores (S_k^{SE} or S_k^{CCR}) and the modified outputs

slacks $OS_{hk}^M (\geq 0)$. If the modified outputs slacks are expressed as the form of percentage ($0 \leq POS_{hk}^M \leq 1$), then the optimal undesirable output h relative to

a given specific desirable output j (i.e., the real disposable per capita income in this paper) can be calculated as $y_{hk}^{OND} = y_{hk}^{ND} \times (1 - POS_{hk}^M)$. That is, the original

undesirable output h (i.e., unemployment, garbage generation, or air pollution) is over-produced by the amount of $y_{hk}^{ND} \times POS_{hk}^M$.

The financial resources of the local governments (municipality, county, or city governments) in Taiwan are composed of the distribution of centrally-allotted tax revenues, grants (general grants and projected-based grants), and several taxes. The former two are so-called the non-self-financing resources, and the last one is the self-financing resources. The general grants from central to local governments include the assistance of basic fiscal deficits of local governments, the imputed assistance of education, social welfare, and infrastructure, and the assistance of the interest differentials of preferential deposits of retired officers. Since local governments have limited abilities in tax collection and in term of their power to set tax rates, the main method of central government has been to use non-self-financing resources: grants and centrally allotted tax revenues, to improve the vertical and horizontal equity in the decentralization system (Huang et al. 2014). Thus, part of the general grants from central to local governments can be designed based on the reward policies proposed by this paper.

If the central government of Taiwan provides a specific amount of reward funds (SA) for encouraging the operating performance of local governments, then the

reward policies can be designed based on the evaluated efficiency scores S_k^{SE} and the modified desirable outputs slacks OS_{hk}^M obtained from model (2). Notably, the evaluated operating performance of local governments in this paper considers achievements in both economic growth and environmental protection. This paper provides two sets of reward policies (Policy A and Policy B) for the reference of central government.

Policy A: Performance-based reward policy

In this policy, all the evaluated local governments can obtain central government’s reward based on their relative performance in economic growth and environ-

mental protection of overall local governments. For the k -th local government the amounts subsidized from central government are SA_k^A :

$$SA_k^A = SA \times \left(S_k^{SE} / \sum_{k=1}^{18} S_k^{SE} \right) \tag{3}$$

where SA is total reward budgets provided by the central government; S_k^{SE} is the technical efficiency score of local government k obtained from model (2). Obviously, the higher the performance of local government is, the larger the reward amounts they receive.

Policy B: Slack-based reward policy

This reward policy subsidizes local governments based on the evaluated modified output slacks. For local governments with lower modified outputs slacks, the

amounts of reward to encourage their operating performance are higher. Assume that the modified output slack h of local government k is OS_{hk}^M , then the

subsidy amount of local government k is SA_k^B , i.e.,

$$SA_k^B = r_k^M \times SA \quad k = 1, \dots, 18$$

$$r_k^M = \left(1 / \sum_{h=1}^3 OS_{hk}^M \right) / \left(1 / \sum_{h=1}^3 \sum_{k=1}^{18} OS_{hk}^M \right) \tag{4}$$

where r_k^M is the subsidized ratio of the local government k .

4. SELECTION OF VARIABLES

The DMUs used in the present paper are 18 Taiwanese local governments in 2013, including New Taipei City, Taipei City, Taichung City, Tainan City, Kaohsiung City, Ilan County, Taoyuan County, Hsinchu County, Miaoli County, Changhua County, Nantou County, Yunlin County, Chiayi County, Pingtung County, Hualien County, Keelung City, Hsinchu City, and Chiayi City. The first five cities are the municipalities in Taiwan. The inputs and outputs (including desirable, undesirable, and modified (desirable) outputs) selected are described as follows.

Inputs

In Economics, production factors include labor, capital, land, and entrepreneurship. Pan et al. (2011) indicate that the executive achievement of a local government can serve as a proxy variable for entrepreneurship and is embedded in its operating performance. In addition, the executive domain of a local government can be considered as the proxy variable for land and is less variable; therefore, it is exogenous to the local government. Thus, the inputs used in benchmark model, model

(1), and model (2) to evaluate the operating efficiency of local governments are labor and capital, which are measured by the number of employment (x_{1k}) and the formation of fixed assets (x_{2k}), respectively.

Outputs

Income is typically regarded as a proxy variable to represent the economic level of a country or region and it represents a desirable output in benchmark model,

model (1), and model (2). However, we replace it with real disposable income per capita (y_{1k}^D) to exclude the disturbances of taxation, inflation, and population on (nominal) income. To simultaneously include the outputs that represent economic and environmental destructions as local governments conduct their duties,

we use three undesirable economic and environmental outputs: unemployment (y_{1k}^{ND}), garbage generation (y_{2k}^{ND}), and air pollution (y_{3k}^{ND}).

To assess the relative importance of the desirable output and the undesirable outputs, to assess whether the undesirable outputs are over-produced relative to the desirable output, and to subsidize the operating performance of local governments, we combine the desirable output and three undesirable outputs to form

three modified (desirable) outputs. By employing the concept of the Sharpe ratio, we divide real disposable income per capita (y_{1k}^D) by each of the three undesirable outputs to construct three modified outputs: real disposable income per capita with respect to unemployment, garbage generation, and air pollution, which

are denoted y_{1k}^{MD} (modified output 1), y_{2k}^{MD} (modified output 2), and y_{3k}^{MD} (modified output 3), respectively. All the data come from the National Statistics of Taiwan, and the measures employed are displayed in Table 1.

TABLE 1: DATA MEASUREMENT

Variable	Symbol	Measurement	Unit
Labor	x_1	Number of employment	Thousands of people
Capital	x_2	Formation of fixed assets	Millions of NT dollars
Income	y_1^D	Real disposable income per capita	NT dollars
Unemployment	y_1^{ND}	Unemployment rate	%
Garbage generation	y_2^{ND}	Volume of garbage clearance	Kilos per capita per year
Air pollution	y_3^{ND}	Emissions of ozone and sulfur dioxide	ppm per year

5. EMPIRICAL RESULTS

This section presents the results derived from three constructed DEA models (the benchmark model, model (1), and model (2)) as shown in Table 2. The output used in the benchmark model is the real disposable income per capita, a representative index of economic growth. Three modified outputs in models (1) and (2) are the ratios of real disposable income per capita to unemployment rate, volume of garbage clearance, and air pollution. In addition, technical efficiency can be investigated by decomposing it into pure technical efficiency and scale efficiency.

There are some remarkable findings. First, in the benchmark Model, only Taipei City and New Taipei City reach technical efficiency, whereas Taichung City and Kaohsiung City are the other two local governments with efficiency score over 0.7. These four cities belong to five municipalities in Taiwan. That is, ignoring local governments' undesirable outputs generated from economic growth and environmental destruction, municipalities own the highest operating performance. Second, in the model (1), the average scores of technical efficiency, pure technical efficiency, and scale efficiency are 0.543, 0.799, and 0.651, respectively. That is, most of the city/county governments are inefficient in the three efficiency scores, and the means in the three scores show that the technical inefficiency mainly comes from the scale inefficiency. Third, in model (1), the governments satisfying both technical efficiency and pure technical efficiency are Taipei city, Taoyuan County, and Chiayi City, whereas Hualien County reaches pure technical efficiency. Evidently, once considering the appearance of undesirable outputs and treating the coexistence of desirable and undesirable outputs with the Sharpe ratio, the rankings of efficiency display an extremely different change.

While the evaluation results in model (1) consider the existence of undesirable outputs, the priority rankings of the local governments for both technical efficiency and pure technical efficiency remain unresolved. However, this can be achieved by employing the super-efficiency model, i.e., model (2). From the evaluation results in model (2), we find that Chiayi City has the highest technical efficiency among the three technical efficiency governments. Clearly, the super-efficiency model is useful for ranking the operating performance of local governments with efficiency scores of 1 in the model (1).

TABLE 2: EFFICIENCY SCORES FOR 18 TAIWANESE LOCAL GOVERNMENTS

Evaluation model	Benchmark model	Model (1)			Model (2)
		Efficiency score			Super-efficiency score
DMU	crse	crse	vrse	scale	crse
New Taipei City	1.000	0.715	0.715	1.000	0.715
Taipei City	1.000	1.000	1.000	1.000	1.123
Taichung City	0.751	0.697	0.697	1.000	0.697
Tainan City	0.123	0.078	0.623	0.126	0.078
Kaohsiung City	0.711	0.713	0.713	1.000	0.713
Ilan County	0.065	0.655	0.932	0.702	0.655
Taoyuan County	0.033	1.000	1.000	1.000	1.009
Hsinchu County	0.046	0.249	0.825	0.301	0.249
Miaoli County	0.078	0.244	0.616	0.396	0.244
Changhua County	0.021	0.126	0.612	0.206	0.126
Nantou County	0.038	0.523	0.816	0.642	0.523
Yunlin County	0.019	0.215	0.599	0.358	0.215
Chiayi County	0.094	0.596	0.827	0.721	0.596
Pingtung County	0.020	0.364	0.714	0.510	0.364
Hualien County	0.024	0.849	1.000	0.849	0.849
Keelung City	0.068	0.579	0.806	0.718	0.579
Hsinchu City	0.109	0.163	0.885	0.184	0.163
Chiayi City	0.046	1.000	1.000	1.000	1.636
Average Efficiency	0.236	0.543	0.799	0.651	

Notes: Model (1) is the CCR model, and model (2) is the super-efficiency model. The inputs in the three evaluation models are the number of employment and the formation of fixed assets. The output in the benchmark model is the real disposable income per capita. However, the outputs in models (1) and (2) are the ratios of real disposable income per capita to unemployment rate, volume of garbage clearance, and air pollution, respectively. crse, vrse and scale denotes technical efficiency from constant return to scale DEA, pure technical efficiency from variable return to scale DEA, and scale efficiency (=crse/vrse), respectively.

The modified output slacks evaluated from super-efficiency model (2) are displayed in Table 3. Evidently, three modified outputs should be increased due to their corresponding positive output slacks. According to the definitions of modified output 1, output 2, and output 3, their corresponding output slacks mean that given a (desirable) real disposal income per capita, undesirable unemployment rate, volumes of garbage clearance and levels of air pollution are over-produced. The overproduction problem is especially obvious for four local governments: Tainan City, Changhua County, Hsinchu City, and Yunlin County. Thus, employing the Sharpe ratio to combine desirable and undesirable outputs and construct new modified outputs allows the relative importance of desirable and undesirable outputs and the overproduction of undesirable outputs to be easily assessed.

Based on the evaluation results in Table 2, we can calculate the rewards of local governments from two different reward policies: Policy A and Policy B. The rankings and distributions of rewards in the benchmark model and Model (2) are extremely different. For the benchmark model, the reward distribution of Policy A is rather uneven and mainly concentrates on four municipalities (Taipei City (23.552%), New Taipei City (23.552%), Taichung City (17.687%), and Kaohsiung City (16.745%)). However, for Model (2), the reward distribution of Policy A is quite even and Chiayi City (15.531%), Taipei City (10.661%), Taoyuan County (9.579%), and Hualien County (8.060%) are the top four reward sharing governments. Evidently, in measuring the operating performance of local governments and its associated reward amounts, ignoring the undesirable outputs (i.e., unemployment rate, volume of garbage clearance, and air pollution) results in a biased reward distribution, and four municipalities (Taipei City, New Taipei City, Taichung City, and Kaohsiung City) occupy most of the reward amounts. For model (2), the reward share of reward policy B shows that Chiayi City (29.579%), Taipei City (12.465%), and Taoyuan County (9.554%) share half of entire reward amounts, whereas Hualien County (8.992%), New Taipei City (8.099%), and Kaohsiung City (6.999%) share half of the remaining reward amounts. That is, the remaining twelve local governments share only one-fourth of entire reward amounts.

In summary, the reward distribution measured by using traditional growth performance model (i.e., the benchmark model) and the performance-based reward policy is biased and displays the largest standard deviation. The reason is that the benchmark model focuses on only one desirable output (economic growth) and ignores the undesirable outputs. In model (2), the performance-based reward policy provides a smaller standard deviation of reward share than the slack-based reward policy (3.825% vs. 7.071%), in spite of their similar rankings of reward share.

TABLE 3: PROPOSED REWARD POLICIES FOR 18 TAIWANESE LOCAL GOVERNMENTS

Reward policy	Policy A		Policy B			
	Benchmark model	Model (2)	Output slack (%)			Model (2)
	Reward share(%)	Reward share(%)	Output 1	Output 2	Output 3	Reward share(%)
New Taipei City	23.552	6.788	0.850	0.830	0.820	8.099
Taipei City	23.552	10.661	0.670	0.580	0.430	12.465
Taichung City	17.687	6.617	1.310	1.280	1.150	5.430
Tainan City	2.897	0.740	20.890	21.050	21.220	0.321
Kaohsiung City	16.745	6.769	1.140	0.900	0.890	6.999
Ilan County	1.531	6.218	1.360	1.430	1.460	4.767
Taoyuan County	0.777	9.579	0.720	0.820	0.610	9.554
Hsinchu County	1.083	2.364	9.590	9.720	9.760	0.696
Miaoli County	1.837	2.316	9.710	9.800	9.840	0.690
Changhua County	0.495	1.196	13.780	14.200	14.020	0.482
Nantou County	0.895	4.965	2.850	2.920	2.880	2.340
Yunlin County	0.447	2.041	12.570	11.540	12.400	0.555
Chiayi County	2.214	5.658	1.640	1.700	1.710	4.010
Pingtung County	0.471	3.455	6.110	6.280	6.210	1.088
Hualien County	0.565	8.060	0.730	0.820	0.710	8.992
Keelung City	1.602	5.496	1.990	1.910	1.980	3.444
Hsinchu City	2.567	1.547	13.580	13.890	13.780	0.491
Chiayi City	1.083	15.531	0.510	0.350	0.120	29.579
Standard Deviation	8.331	3.825				7.071

Notes: The reward sharing ratios are calculated from the technical efficiency scores of local governments. The output slack is expressed as the ratio of the output slack of individual local government to the overall output slack of all local governments. In the slack-adjusted DEA model (1), a weakly efficient DMU will be evaluated as inefficient, due to the presence of input and output slacks; therefore, the output slacks in the table are positive.

6. CONCLUSION

This paper employs the super-efficiency model and Sharpe ratio to evaluate the operating performance of 18 Taiwanese local governments and proposes two sets of reward policies (performance-based reward policy and slack-based reward policy) to encourage the performance. In evaluating the performance, we simultaneously consider local governments' achievements in economic growth and environmental protection. Economic growth is measured by real disposable income per capita and unemployment rate, and environmental protection is measured by the volume of garbage clearance and the emissions of ozone and sulfur dioxide. The Sharpe ratio is used for integrating any combination of one desirable output and one undesirable output into a modified (desirable) output.

Empirical results have the following findings. First, most of the city/county governments are inefficient in the three efficiency scores and the technical inefficiency mainly comes from scale inefficiency. Second, for most local governments, undesirable unemployment rate, volumes of garbage clearance and levels of air pollution are over-produced relative to a given real disposal income per capita. Third, in measuring the operating performance of local governments and its associated reward amounts, ignoring the undesirable outputs (i.e., unemployment rate, volume of garbage clearance, and air pollution) will result in a biased reward distribution, which causes four municipalities share most of the reward amounts. In addition, the performance-based reward policy provides a smaller standard deviation of reward share than the slack-based reward policy.

According to the empirical results, this study proposes the following policy recommendations. First, the super-efficiency model and Sharpe ratio provide available approaches to measure the performance of DMUs with efficiency score 1 in traditional DEA model and undesirable outputs. Second, in designing reward policies to encourage local governments' achievements in their duties, central government needs to consider the undesirable outputs such as unemployment, garbage generation, and air pollution. Third, using the evaluated efficiency scores and/or output slacks to construct reward policies is a proper method to reward local governments' achievements in economic growth and environmental protection.

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MEASUREMENT AND EVALUATION OF FINANCIAL PERFORMANCE OF SIYARAM SILK MILLS LIMITED THROUGH Z-SCORE MODEL

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ABSTRACT

The textile industry of India plays a substantive role in the economy. This is one of the largest industries in India in terms of employment generation and earning foreign exchange. Finance is the significant facet of every business and financial analysis can be applied in a wide variety of situations to give business managers the information they need to make critical decisions. Therefore, it is important to monitor the financial position and strength of a company through its financial statement, which throws light on the operational efficiency and financial position of the company. The prediction and prevention of financial distress is one of the major factors, which will help to avoid financial distress. This evaluation should be done very carefully and rationally and it can be done by using various tools, such as ratio analysis, decision theory etc. The result of analysis shows the present performances, but it cannot exhibit whether the company will have any chances of bankruptcy/financial distress in near future or not. Z score is a financial tool, which is used for bankruptcy prediction. It analyses financial data and the result of analysis categorize a company in a zone according to its performance out of three zones; the zones are- bankruptcy, grey and safe zone. This study was undertaken with a view to assess the financial strength of Siyaram Silk Mills Ltd. for five financial years 2009-10 to 2013-14 through the method of ratio analysis. The Z score model has been adopted for analyzing the financial strength of the company. The study reveals that financial strength of Siyaram Silk Mills Ltd. is lies in grey zone and future in this situation is uncertain to predict as per Altman guidelines of Z score.

KEYWORDS

Z score, bankruptcy, financial distress, ratio analysis, trend analysis.

JEL CODE

G33.

INTRODUCTION

The Indian textile industry is one of the largest in the world with a massive raw material and textiles manufacturing base. Our economy is largely dependent on the textile manufacturing and trade in addition to other major industries. The textiles and clothing sector contributes about 14% to the industrial production and 4% to the gross domestic product of the country. Around 8% of the total excise revenue collection is contributed by the textile industry. So much so, the textile industry accounts for as large as 21% of the total employment generated in the economy. Around 35 million people are directly employed in the textile manufacturing activities. Indirect employment including the manpower engaged in agricultural based raw-material production like cotton and related trade and handling could be stated to be around another 60 million. Textile is the largest single industry in India (and amongst the biggest in the world), accounting for about 20% of the total industrial production. Textile and clothing exports account for one-third of the total value of exports from the country. There are 1,227 textile mills with a spinning capacity of about 29 million spindles. While yarn is mostly produced in the mills, fabrics are produced in the power loom and handloom sectors as well. The Indian textile industry continues to be predominantly based on cotton, with about 65% of raw materials consumed being cotton. The manufacture of jute products ranks next in importance to cotton weaving.

Textile is one of India's oldest industries and has a formidable presence in the national economy in as much as it contributes to about 14 per cent of manufacturing value addition, accounts for around one-third of our gross export earnings and provides gainful employment to millions of people. They include cotton and jute growers, artisans and weavers who are engaged in the organized as well as decentralized and household sectors spread across the entire country. The fundamental strength of this industry flows from its strong production base of wide range of fibers / yarns from natural fibers like cotton, jute, silk and wool to synthetic /man-made fibers like polyester, viscose, nylon and acrylic.

SIYARAM SILK MILLS LTD.

Siyaram Silk Mills Ltd. is an Indian blended fabric and garment manufacturer having retail outlets and branded showrooms. It is also called as Siyaram's and as SSM. Siyaram's manufactures and sells fabrics ready-made men's and women's apparel, home furnishing, and yarns. Siyaram's is associated with over 1 lakh retail outlets, and has over 170 branded showrooms spread across the nation. In the March 2014 quarter, the company's annualized net profit was Rs 20.2 Cr. Siyaram's produces over 4 million meters of fabric produced per month; over 60 million meters of fabric annually. Siyaram's brands include J Hampstead, Oxemberg among others.

According to the Economic Times, polyester viscose, derived from crude oil, forms nearly 85% of Siyaram's raw material. In 2014, Siyaram's saw 80% of revenues from fabric sales, 16% from garments, and 4% from yarn. Siyaram's weaving capacity is 8 crore meters; garment capacity is 40 lakh pieces per annum. Like some other textile manufacturers, Siyaram's has entered the ready-made-garment (RMG) sector. Beginning in 2004, it has developed product lines in home furnishing, uniform, children's clothing, and a women's line. On 24th September, 2015, Siyaram's Silk Mills announced its global venture with a prominent Italian brand, Cadin at Sahara Star, Mumbai. The company plans to develop an exclusive range of fabrics in long staple cotton, Giza cotton, linen, wool cashmere, wool-silk-linen, Silk, wool blends, jacketing fabrics in Linen.

IMPORTANCE OF THE STUDY

Finance is the significant facet of every business. Both excessive as well as inadequate finance positions are dangerous from the business point of view. Therefore, finance is the back bone of any business. The financial analyst is responsible to monitor the financial position of the business regularly. As there is an increasing competition from other global players, the management has to initiate appropriate steps to assess the financial strength of the company. Financial strength will

provide valuable insights into its financial performance. Financial soundness of a firm is reflected through various financial parameters. By establishing a close relationship between variables, a firm can analyze its financial performance in terms of liquidity, profitability, viability and sustainability. Distress prediction model will assist a manager to keep track of a company's performance and help in identifying important trends.

A company can continue its operation when it has adequate amount of funds and such funds utilizes in an efficient way. The funds are used to meet short term as well as long term obligations. Short term obligation includes- payment of creditors, salary, wages, interest, dividend etc. and long term obligation includes- acquisition of fixed assets, making investments, acquisition of company etc. Investors provide funds to a company in the way of investment to get some positive return in future. But if they don't get expected return then it will be difficult for the company to arrange funds in next time. So it is the duty of the management to ensure the effective utilization of funds. Different stakeholders (such as- shareholders, creditors, banks, employees, management etc.) analyze the financial information for making various decisions. The result of the analysis shows the present performance and future prospects of the company.

Distressed analysis is a part of financial analysis, which shows whether there is any possibility of bankruptcy of a company in near future or not. Actually bankruptcy refers to the situation when a company is unable to pay its debts. When a company faces financial distress for long period then company's liquidity position, solvency position become very poor. Revenue collection go down due to reduction of sales, as a result company cannot pay its due and cannot earn profit. Thus the amount of net worth gradually reduces and all these things adversely effect on company's share price and goodwill. There are different reasons for the distress of a business entity, such are- lack of finance, lack of demand of the product in the market, conflict between management and employees, lack of managerial efficiencies and some other internal and external problems. If these problems persist for a long period of time in a company, then it can be declared as bankrupt and goes into liquidation. As a result, it reduces employment opportunities, Government earnings, industrial growth etc. and also deeply effects on the surrounding areas where the entity belonged. So it is very clear that prediction of bankruptcy of business firm has a great value to the stakeholders. Because if the result of bankruptcy prediction shows that a firm has the chances of bankruptcy in near future then investors can be concerned about their investment as well as management can be taken remedial actions to avoid it and make the firm in good position. An attempt has been made in the present study to have an insight into the examination of financial strength of the selected company.

LITERATURE REVIEW

The need for reliable financial statement data and the importance of financial ratios for analysis and prediction is well established in the literature. Beginning with Beaver's (1966) contention that standard financial ratios can predict the financial performance of firms, many subsequent studies have attempted to demonstrate the predictive value of various techniques for estimating actual business performance.

Khatik S.K,Varghese Titto (2013) "Financial analysis of steel authority of India limited" states that financial analysis is used to analyze whether an entity is stable, solvent, liquid or profitable enough to be invested in.financial analysis is just like doctor who examine the fitness of the human body. For analysis of the financial position of the SAIL, gross profit ratio, net profit and operating ratio, productivity investment and solvency ratios are calculated.

Marimuthu, K.N (2012) "Financial performance of Textile industry: A study of listed company of Tamil Nadu" states that Coimbatore is known as Manchester of South India. 76% of India's total textile market is from Erode (Tex-City or Loom-City of India) and 56% of knitwear exports come from Tirupur. Each company could invest on the basis of current performance compared with previous year or with other company. Decision making, additional investment, liquidity position changes in working capital depend upon the performance & return of company reports. Funds are highly required for day to-day business operations of the firm and how to utilize it and in what way should avoid loses from the investment are discussed here plus, it happens by ineffective management. The objective of the paper is to analyze the performance of textile industry in the selected companies from Tamil Nadu. In addition, the data collected from the CMIE and used the tools of ANOVA and descriptive statistics.

J.R.Raiyani and Dr. R.B. Bhatasna (2011) "A study on Financial Health of Textile Industry In India; A Z – Score Approach". Concluded that predictive viability of a company's financial health by using financial ratios ultimately predicts a score and determine the financial performance of an industry.

Suriyamarthi and Velavan.M (2010) tested the sample units through Z score and finally concluded that predictive viability of company's financial health using a combination of financial ratio ultimately predicts a score which can be used to determine the financial health of company. Kannadhasan(2007) in his study analysed the financial health of a public limited company using 'Z' score model and found that the company's financial position is healthy, management of working capital was satisfactory, and correlation coefficient of the financial ratios are positive.

Gupta R.L. and Radhaswamy.M, (1995) attempted a refinement of Beavers method with the objective of building a forewarning system of corporate sickness. A sample non parametric test for measuring the relative differentiating power of various financial ratios was used. The study, among 728 textiles and non-textile group of industries, revealed that earnings before depreciation, interest and taxes to sales and operating cash flows to sales had higher degree of sickness. The analysis is based on logistic regression, where the bankrupt event is explained by accounting and market based variables. In accordance with the literature, the liquidity and profitability ratios turned out to be the most important variable in forecasting default followed by the company size and its activity.

Perttunen and Martikainen, (1990) explained some listing of ratios to be aware of in analyzing a Company's balance sheet and income statement. They expressed that these ratios fall into four categories — liquidity, profitability, asset management (efficiency), and debt management (leverage).

Fieldsend, Longford and McLeay, (1987) explained how financial ratios can also give mixed signals about a company's financial health, and can vary significantly among companies or industries over a time. Other factors should also be considered such as a company's products, management, competitors, and vision for the future.

Altman, (1968), "Financial ratio discriminate analysis and prediction of corporate Bankruptcy" analyzed the bankruptcy with five financial ratios for predicting the risk of failure and developed a model as 'Z' score. Altman used multiple discriminate analyses (MDS) in his effort to find out a bankruptcy prediction model. He selected 33 publicly traded manufacturing bankrupt companies between 1946 and 1965 and matched them to 33 firms on a random basis. The result of MDS exercise yielded equations called 'Z' score that correctly classified 94% of the bankrupt companies and 97% of the non-bankrupt companies a year prior to bankruptcy. This percentage dropped when trying to predict bankruptcy two or more years before it occurred. The ratios used in Altman model are working capital over total assets, retained earnings over total assets, earnings before interest and taxes over total assets market value of the equity over book value of total liabilities and sales over total assets.

IMPORTANCE OF THE STUDY

The textile industry holds significant status in the Indian Economy. Textile industry provides one of the most fundamental necessities of the people. It generates massive potential for employment in the sectors from agricultural to industrial. The textile industry is the second largest employer, after agriculture. Sickness and inter-sector contradictions that are regular features of the industry have to be solved through a wise approach and well-calibrated steps, to ensure healthy growth. Therefore, the sector should be analyzed to identify the weakness and find solution for the same.

It is important to measure the financial sustainability and growth in this competitive world for existence and to grow further. If the company monitors the financial strength at regular interval, it can identify the sign of financial distress and thereby avoid bankruptcy. It is also helps to monitor the entry of new players in this field. All the above reviews show the significance of measurement of financial strength. The present study made an attempt to measure the financial strength along with liquidity, solvency with the help of Z score model of selected textile company in India.

RESEARCH METHODOLOGY

The study is concerned with Siyaram Silk Mills Ltd. from textile industry listed in stock exchange. This study is based on the data obtained from the Annual Reports of Siyaram Silk Mills Ltd. for five financial years (2009-10 to 2013-14). The collected data was analyzed with the help of ratio analysis and the Z score model. Financial distress is the event of special interest. Beaver was first to use statistical techniques to predict corporate failure. He found that financial ratios for failed companies deteriorated markedly as failure approached. In similar type of study, Edward I Altman, an economist developed the Z score model for predicting the

financial health of a company. This model uses five financial ratios that combine to form a number. This number called the Z score is a general measure of the corporate financial health. Altman’s Z score model is based on Multiple Discriminate Analyses (MDA); the model predicts a company’s financial health based on a discriminate function of the firm. The specific variable used is explained below and the interpretation of ‘Z’ score value is presented below in a tabular form.

	Z Score	Zones	Remarks
Situation-I	Below 1.80	Not Safe	Failure would likely occur probably within a period of two years.
Situation-II	Between 1.80 and 2.99	Indeterminate	Financial viability is considered to be indeterminate. The failure in this situation is uncertain to predict
Situation-III	3.00 and above	Safe	Financial health is viable and not to fall.

In addition, the study used statistical tools like mean, standard deviation, correlation and t- test.

$$Z = 0.012 X1 + 0.014 X2 + 0.033 X3 + 0.006 X4 + 0.999 X5$$

Where

- X1 = Working capital/total assets.
- X2 = Retained earnings/total assets.
- X3 = Earnings before interest and taxes/total assets.
- X4 = Market value of equity/book value of total liabilities.
- X5 = Sales/total assets.

Based on the above methodology, the following hypothesis has been tested:

- Ho₁: There is no significant relationship between Working Capital (WC) and Total Assets (TA)
- Ho₂: There is no significant relationship between Retained Earnings (RE) and Total Assets (TA)
- Ho₃: There is no significant relationship between Earnings before Interest and Tax (EBIT) and Total Assets (TA)
- Ho₄: There is no significant relationship between Market Value of Equity (MV) and Total Liabilities (TL)
- Ho₅: There is no significant relationship between Sales and Total Assets (TA)
- Ho₆: There is no significant difference between the 5 years average of Z–Score ratio of the standard.

Z-SCORE ANALYSIS OF FINANCIAL RATIOS

TABLE I: Z-SCORE VALUE BASED ON FINANCIAL RATIOS

Ingredients	Financial Ratios	2009-10	2010-11	2011-12	2012-13	2013-14	Mean	Correlation
X1	WC/TA	46.13	41.97	30.06	10.63	18.22	29.40	-0.775
X2	RE/TA	01.03	01.32	02.57	08.76	12.48	04.96	0.985
X3	EBIT/TA	04.96	07.83	12.81	14.74	14.60	10.81	0.927
X4	MV/BVTL	23.69	12.76	46.16	49.31	36.81	33.78	0.766
X5	Sales/TA	01.03	01.27	01.47	01.39	01.36	01.32	0.944
	Z-Score	01.86	01.97	02.48	02.31	02.34	02.19	

WC = Working Capital; TA = Total Assets; RE = Retained Earnings;
 EBIT = Earnings Before Interest and Taxes; MV = Market Value of Equity; and
 BVTL = Book Value of Total Liabilities.

Source: Computed from the Balance Sheet of the Company.

TABLE II: ‘t’ TEST DISTRIBUTION INFERENCES

Relationship	Calculated Value	Table Value @ 5% Confidence	Remarks
Correlation between WC/TA	- 2.1268	2.256	Not Significant
Correlation between RE/TA	7.7562	2.256	Significant
Correlation between EBIT/TA	4.3794	2.256	Significant
Correlation between MV/BVTL	1.9974	2.256	Not Significant
Correlation between Sales/TA	4.8654	2.256	Significant

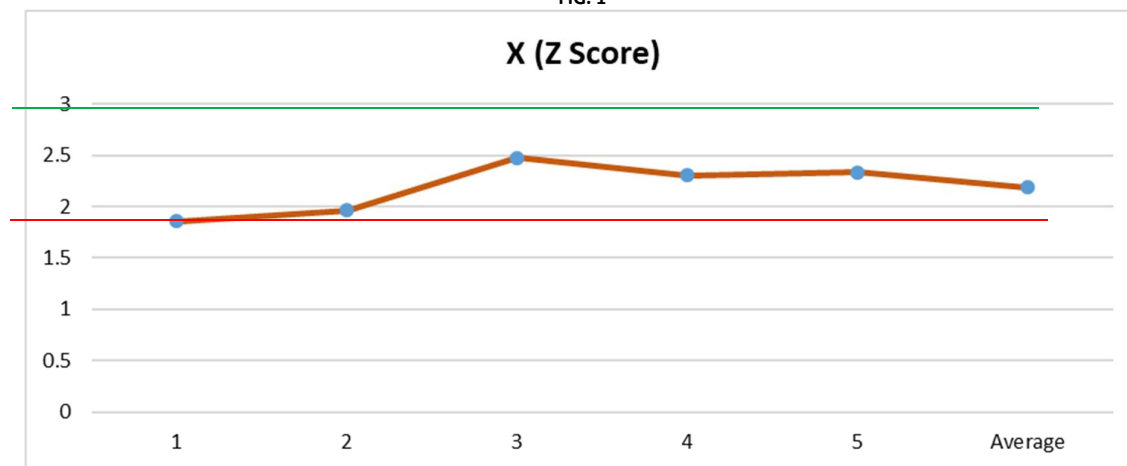
Source: Computed Data.

TABLE III: ‘t’ TEST FOR Z-SCORE ANALYSIS
 (5 Years average of Z Score values to the standard norms as prescribed by Altman)

Year	X (Z Score)	Critical Value	Result
1	01.86	Z Score = In between 1.81 and 2.99	Grey Zone
2	01.97	Z Score = In between 1.81 and 2.99	Grey Zone
3	02.48	Z Score = In between 1.81 and 2.99	Grey Zone
4	02.31	Z Score = In between 1.81 and 2.99	Grey Zone
5	02.34	Z Score = In between 1.81 and 2.99	Grey Zone
Avg	02.19	Z Score = In between 1.81 and 2.99	Grey Zone

Source: Table 1

FIG. 1



From above, we can clearly see that the company had neither been in safe zone nor been in unsafe zone under the period taken for study. The company's z score indicates grey zone for the entire period. As per Altman's guideline, the Company's financial viability is considered to be Indeterminate. The failure in this situation is uncertain to predict.

ANALYSIS

WORKING CAPITAL (WC) TO TOTAL ASSETS (TA)

Working capital is the difference between current assets and current liabilities. This ratio considers liquidity of the company. A company with consistent operating losses will have shrinking current assets in relation to total assets. It can be seen from the Annual Reports of the Company for the last five years that the working capital of the company is fluctuating during the last five years' period; whereas the total assets increased year by year without any proportion to working capital. The correlation coefficient between WC and TA is tested through the hypothesis and the result has been shown in the Table-II.

RETAINED EARNINGS (RE) TO TOTAL ASSETS (TA)

This ratio measures the cumulative profitability over the life of the company. Significant retained earnings mean a history of profitable operation and ability to withstand periods of losses. The Annual Reports of the Company show that the Retained Earnings to Total Asset are very less compared to the conventional ratio of 1:1. The correlation between RE and TA was positive which was tested through the hypothesis and the result has been shown in the Table-II.

EARNINGS BEFORE INTEREST AND TAX (EBIT) TO TOTAL ASSETS (TA)

This ratio measures the productivity of capital or the earning power of the company. The survival of a company depends on its earnings power. EBIT to TA shows the operational performance and earning power of the company. The Annual Report of the Company depicts that the EBIT and TA increased year by year during the last five years i.e. from 2009-10 to 2013-14 but not at the same proportion. The correlation between EBIT to TA tested through the hypothesis and the result has been shown in the Table-II.

MARKET VALUE OF EQUITY (MV) TO TOTAL LIABILITY (TL)

A significant Market Value of Equity signifies investors' belief on the earning power of the company and its solid financial position. Moreover, a company who has significant market capitalization can issue new shares to mobilize funds to overcome the temporary financial difficulties. The Market value of Equity and Total Assets were fluctuating during the last five years. The correlation between MV to TA tested through the hypothesis and the result has been shown in Table-II.

NET SALES (NS) TO TOTAL ASSETS (TA)

This ratio measures how efficiently the company uses its assets to generate sales. It measures the capability of the company in dealing with competitive conditions. It is clear from the tables mentioned above that Sales to Total Asset were increased in the same trend during the last five years. The correlation between Sales to TA tested through the hypothesis and the result has been shown in Table-II.

FINDINGS

(a) The study had made an attempt to analyze the financial strength of Siyaram Silk Mills Ltd. by Z score model. It is clear that the financial strength is not in distress as it did not lie in the unsafe zone during the period under study. In the initial years of the study period, the financial strength showed improvement and in later years it remained range bound. Therefore, it is difficult to predict the future in such situations.

(b) Working capital to total assets ratio has been fluctuating during the period under study. Perhaps, one of the reasons may that the company is not capable of collecting materials on credit and has less credit worthiness in the market.

(c) EBIT and RE of the company has improved over the period under study showing improved performance of the company under study.

(d) Investment in fixed assets has increased year by year, which is considered to be positive sign. The cause may be that the company has taken expansion programme.

(e) There is significant positive correlation between Retained Earnings and Total Assets, EBIT and Total Assets and Sales and Total Assets.

CONCLUSION

Financial strength of the company is a matter of concern for every stakeholder. In this arena Altman's Z score plays an important role in judging the financial soundness of the company. This study reveals that financial strength of Siyaram Silk Mills Ltd. is in grey zone and future in this situation is uncertain to predict as per Altman's guidelines. If the healthy condition is to be sustained in the years ahead it has to strive for improved productivity and optimal utilization of all the resources by following the growth path that it has set for itself.

Since increasing sales of the company had been yielding sufficient earnings to meet the obligation, additional debt will not remain unpaid. The management should depend on low cost debt capital to finance its investment programme. As operating leverage depends on techniques of production it is difficult to change the production system. In market the available cost should be reduced and gross margin is to be improved. The company should try to minimize its cost of goods sold, enhance working capital and convert debt capital into equity capital.

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A PRAGMATIC STUDY ON THE ASSOCIATION OF DEMOGRAPHICS ON INVESTOR'S INVESTMENT DECISION

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ABSTRACT

The revolution in the financial sector made mutual funds a significant gateway for the small investors. Mutual Funds provide a platform for a common investor to participate in the Indian capital market with professional fund management irrespective of the amount invested. The Indian mutual fund industry is increasing its horizon speedily and this is reflected in the extending in assets under management of various fund houses. Mutual fund investment is less risky than directly investing in stocks and is therefore a safer alternative for risk averse investors. This paper makes an attempt to identify which demographic factor has an association with the investor's investment decision. The research aims at finding out the demographic factors affecting investment decision. The findings will help mutual fund companies to identify the areas required for improvement and can also improve their marketing strategies. It will help the MF companies to create new and innovative product according to the orientation of investors."

KEYWORDS

asset management company (AMC), demographic factors, innovation in fund management, perception of investors and distributors, speculation.

JEL CODE

G11.

INTRODUCTION

Mutual fund is a momentous opportunity for the small investors. Mutual Funds gives a chance for a common investor to contribute in the Indian capital market with professional fund management regardless of the amount invested. The research makes an attempt to identify which demographic factor has an association with the investor's investment decision. The findings will help asset management companies to recognize the areas required for progress and can also improve their promotion policy. It will help the mutual fund companies to create new and innovative product dependent on the orientation of investors."

REVIEW OF LITERATURE

"Kumar, V., Bansal, P. in the research "A Study on Investors' Behavior towards Mutual Funds in Rohtak, Haryana" (2014)¹ analyzed the factors such as demographics, investors' knowledge, risk appetite, etc. The factors considered are age, income, occupation, etc. and the researcher also considered various factors like risk appetite of investors, investor's knowledge regarding the schemes and whether the investors are aware about the various risk factors. The results have shown that mutual funds to be proved as a much better style of investment as it gives standard returns and its less riskier. The researcher has also analyzed that the investors' involvement plays a vital role; they should also carry their personal research rather than only relying on the financial advisor. This would help them to safeguard the interest and help in their capital appreciation".

"Ferreira M., Keswani A., Miguel A., Ramos S. in this research "The Determinants of Mutual Fund Performance: A Cross-Country Study" (2013)² examined the performance and factors influencing the performance of mutual funds across the various countries. For this study data of open-end actively managed equity mutual funds gathered from 27 countries. This research concluded that mutual funds underperform the market returns. The result of this study shows important differences in the determinants of fund performance in the USA and other countries across the globe. The US evidence of diminishing returns to scale is not a universal truth as the performance of funds located outside the USA and funds that invest overseas is not negatively affected by scale. The discoveries of this study recommend that the unfavorable scale effects in the USA are related to liquidity constraints faced by funds that, by virtue of their style, how to invest in small and domestic stocks. Country characteristics also make the difference in performance of the funds. Funds located in countries with liquid stock markets and strong legal institutions display better performance. This study delineates that the performance of mutual funds depends on the style of mutual fund, the size of the stock invested by mutual fund companies and performance of mutual funds differs from country to country".

"Karthikeyan, K., Bharath, S., K. Ranjith Kumar. in the research "An Empirical Study on Investors' Perception towards Mutual Fund Products through Banks with Reference to Tiruchirappalli City Tamil Nadu" (2012)³ According to the study financial markets are continuously becoming more efficient by providing more potential solutions to the investors. Therefore, it is high time to recognize and investigate investor's perception and expectations and reveal some tremendously valuable information to support financial decision making of mutual funds. The main purpose of this study was to find out the response of customers towards provision of mutual fund products by banks. This will assist in devising further strategies for the tier-II cities in India to cross sell mutual fund products through the branch network of banks. This research examines the investors' perception towards mutual fund products through banks. For this study data were collected from 108 valued investors of various banks in Tiruchirappalli, Tamil Nadu (India), and convenient sampling is the type of sampling used to collect the data. The researchers have employed the following analysis, namely factor analysis, multiple regression and correlation to find out the logical conclusion. To check whether the sample is reliable, the researchers have used Cronbach's Alpha Reliability Test (0.718). The major findings were derived that will be useful, relevant and significant to the present scenario for marketing of mutual fund products through banks in the Tiruchirappalli zone".

"LEE, T., YUN, T., HALEY, A. in the study "The Interplay between Advertising Disclosures and Financial Knowledge in Mutual Fund Investment Decisions" (2012)⁴ inspects the relationship between financial disclosures and investors' financial knowledge on investor decision making within the context of mutual fund advertising. This research suggests that the impact of advertising disclosure on the outcomes of financial behavior, e.g.: Recall, cognitive response, attitude toward mutual fund and investment intention can be moderated by the level of an investor's financial knowledge. Investors with low financial knowledge were likely to systematically process advertising claims and generate more attribute related thoughts regarding the advertised mutual fund when exposed to advertising disclosures while advertising disclosures had an insignificant effect on attribute related thoughts among investors with high financial knowledge".

"Jain, D., Mandot, N., in the research "Impact of Demographic Factors on Investment Decision of Investors in Rajasthan" (2012)⁵ proposes that the demographic factors such as age, gender, marital status, qualification, occupation, market knowledge, annual income, geographic location plays a key role in while taking investment decisions. The author has gathered the data from the 200 investors from the various cities in the state of Rajasthan. The research paper proposes that the marital status of an investor and risk taking ability shares negative correlation with each other. As per the study age and level of risk taking ability shares

positive correlation. There is a moderate positive correlation between level of income and risk taking ability of an investor, as income increases simultaneously risk increases. The research observes that there is a positive correlation between knowledge and the level of risk taken by investors".

"Vasudevan, R., Peermohaideen. in the study "Investors' Perceptions Of Mutual Fund Risks An Empirical Study" (2012)⁶ analyzed the investors' perceptions of mutual fund risks in the study. According to the findings of the research, 56.58% of the investors have opined that the mutual fund has moderate risk and 63.48% of the unmarried investors have opined that the mutual fund has low risk. The majority of the investors whose age is more than 60 years, 63.33% opined that risk refers to both loss of principal and as well as income. All the investors whose annual income is above Rs. 6 lakhs felt that the risks in Mutual Funds are low. The majority of the investors whose annual income is less than Rs. 1 lakh said that the risks in Mutual Funds are medium. Most of the investors were just satisfied with respect to the return on the Funds".

RESEARCH METHODOLOGY

RESEARCH DESIGN

Descriptive research design is adopted for this research study. "The research design is the empirical outline within which research study is conducted and it builds up the blueprint for the collection and measurement of data, statistical and financial tools for assessment and research of variance.

DATA COLLECTION

Data collected from primary sources. Primary data collected with the help of questionnaire and interviews of respondents.

TYPE OF RESEARCH: Descriptive Research.

SAMPLING FRAME

POPULATION: Geographical area of research is Mumbai City.

SAMPLING UNIT: "Retail Investors of mutual funds

SAMPLING METHOD: Stratified random sampling

SAMPLE SIZE: Mutual Fund Investors: 305

A questionnaire distributed to mutual fund investors and data collected from 305 mutual fund investors.

TOOLS AND TECHNIQUES OF RESEARCH

SPSS (version 20) is software used for the Chi-square technique/tool of analysis. A 5% level of significance would be acceptable for establishing the strength of the hypothesis whether it holds or not.

LIMITATIONS OF THE STUDY

Sample size is limited to 305 Mutual fund investors across the Mumbai city only. The sample size may not adequately represent the national market."

STATEMENT OF PROBLEM

Mutual fund investment is less risky than directly investing in stocks and is therefore a safer option for risk averse investors. "This paper makes an attempt to identify which demographic factor has an association with the investor's investment decision. The research aims at finding out the demographic factors affecting investment decision. The findings will help mutual fund companies to identify the areas required for improvement and can also improve their marketing strategies."

OBJECTIVE OF THE STUDY

To study the demographics affecting mutual fund investors investment decision.

HYPOTHESIS

Research is undertaken with following hypothesis

THERE IS AN ASSOCIATION OF DEMOGRAPHICS ON THE INVESTOR'S INVESTMENT DECISION

H₁: There is no significant relationship between the gender and investor's investment decision.

H₂: There is an impact of different age groups on investor's investment decision.

H₃: There is an influence of occupation on the investor's investment decision.

H₄: There is a significant impact of annual income on the investor's investment decision.

H₅: There is a significant impact of the qualification on the investor's investment decision.

ANALYSIS

HYPOTHESES H₀₁ TO H₅

To find out whether or not there is an association of demographics such as gender, age groups, occupation, annual income and qualification of investors on their investing decision.

From H₀₁ to H₅ all 5 hypotheses are cross tabulated with the help of following statement from the Investor's questionnaire:

{I am satisfied with the returns of Mutual Funds}

Hypotheses H₀₁ to H₅ are cross tabulated by using Chi-Square test to know the association of demographics on the investor's investment decision."

5. "There is an association of demographics on investor's investment decision

H₀₁: There is no significant relationship between the gender and investor's investment decision

TABLE 1.1: SATISFACTION WITH THE RETURNS OF MUTUAL FUNDS AS PER THE GENDER

Gender	0-20% Very Dissatisfied	20-40% Somewhat dissatisfied	40-60% Neither Satisfied nor dissatisfied	60-80% Somewhat satisfied	80-100% Very satisfied	Total
Male	6	11	55	103	47	222
Female	0	6	14	49	14	83
Total	6	17	69	152	61	305

TABLE 1.2: CHI-SQUARE TEST FOR SATISFACTION WITH THE RETURNS OF MUTUAL FUNDS AS PER THE GENDER

Chi-Square Tests			
Description	Value	Df	Sig. Level
Pearson Chi-Square	6.970 ^a	4	0.138
Likelihood Ratio	8.567	4	0.073
Linear-by-Linear Association	0.392	1	0.531
N of Valid Cases	305		

a. 3 cells (30.0%) have expected count less than 5. The minimum expected count is 1.63.

To know whether there is a significant relationship between the gender and investor's investment decision, the satisfaction with the returns of Mutual Funds question is considered and incorporated cross tabulation of the same question with the Gender. Table 1.2 unveiled counts, i.e. frequency data, one variable on horizontal axis and other variable on vertical axis. Row and column total counts recognized as marginal's. Cross tabulations test is one of the sub-test in Chi-square

test category. Cross tabulations are utilized to scrutinize the relationship between two variables. It demonstrates the crossing point between two variables and uncovers how the two connect with each other. Cross tabulation table also known as Contingency table. Chi-square is an investigative tool that can be utilized to search for an association between two variables. The number of observations is 5 hence, the degrees of freedom is 4. The table 1.2 depicts the chi-square value is 6.970. The table shows the 0.138 significance value which is greater than the assumed level of significance, i.e. 0.05. **Hence, the null hypothesis i.e. there is no significant relationship between the gender and investor's investment decision gets accepted.** This means that as per the data collected from 305 retail investors, conclude that gender is not a significant factor in the investor's investment decision. The investment in the mutual funds does not depend on the gender. The investment decision of an investor depends on various factors, but not the gender."

H₂: "There is an impact of different age groups on investor's investment decision

TABLE 2.1: SATISFACTION WITH THE RETURNS OF MUTUAL FUNDS AS PER THE AGE

Age Group	0-20% Very Dissatisfied	20-40% Somewhat dissatisfied	40-60% Neither Satisfied nor dissatisfied	60-80% Somewhat satisfied	80-100% Very satisfied	Total
Below 25 yrs	0	3	20	41	9	73
25 - 35 yrs	3	7	25	53	23	111
36 - 45 yrs	3	1	17	27	10	58
More than 45 yrs	0	6	7	31	19	63
Total	6	17	69	152	61	305

TABLE 2.2: CHI-SQUARE TEST FOR SATISFACTION WITH THE RETURNS OF MUTUAL FUNDS AS PER THE AGE

Chi-Square Tests			
	Value	Df	Asymp. Sig. (2-sided)
Pearson Chi-Square	21.738 ^a	12	0.041
Likelihood Ratio	24.331	12	0.018
Linear-by-Linear Association	1.604	1	0.205
N of Valid Cases	305		
a. 7 cells (35.0%) have expected count less than 5. The minimum expected count is 1.14.			

To know whether there is a significant relationship between the age group and investor's investment decision, the satisfaction with the returns of Mutual Funds question is considered and incorporated cross tabulation of the same question with the different age groups. Table 2.2 unveiled counts, i.e. frequency data. Cross tabulations are utilized to inspect the relationship between two variables. It demonstrates the crossing point between two variables and uncovers how the two connect with each other. Cross tabulations table also known as Contingency table. Chi-square is an important tool that can be utilized to search for an association between two variables. The number of observations is 5 hence, the degrees of freedom is 4. The table 2.2 depicts the chi-square value is 21.738. The table shows the 0.041 significance value which is less than the assumed level of significance, i.e. 0.05. **Hence, the null hypothesis gets rejected.** This means that as per the data collected from 305 retail investors, concluded that age is a significant factor in the investor's investment decision. The investment decision of an investor depends on various factors and age group is one of them. There is an impact of different age groups on investor's investment decision."

H₃: "There is an influence of occupation on the investor's investment decision

TABLE 3.1: SATISFACTION WITH THE RETURNS OF MUTUAL FUNDS AS PER THE OCCUPATION

Satisfaction with the returns of Mutual Funds						
Occupation	0-20% Very Dissatisfied	20-40% Somewhat dissatisfied	40-60% Neither Satisfied nor dissatisfied	60-80% Somewhat satisfied	80-100% Very satisfied	Total
Student	1	1	10	23	5	40
Business	2	2	12	29	8	53
Service	2	12	34	87	34	169
Professionals	1	2	13	13	14	43
Total	6	17	69	152	61	305

TABLE 3.2: CHI-SQUARE TEST FOR SATISFACTION WITH THE RETURNS OF MUTUAL FUNDS AS PER THE OCCUPATION

Chi-Square Tests			
	Value	Df	Asymp. Sig. (2-sided)
Pearson Chi-Square	14.207 ^a	12	0.288
Likelihood Ratio	14.379	12	0.277
Linear-by-Linear Association	0.585	1	0.444
N of Valid Cases	305		
a. 7 cells (35.0%) have expected count less than 5. The minimum expected count is .79.			

To know whether there is a remarkable relationship between the occupation and investor's investment decision, the satisfaction with the returns of Mutual Funds question is considered and incorporated cross tabulation of the same question with the occupation. Table 3.2 unveiled counts, i.e. frequency data, one variable on horizontal axis and other variable on vertical axis. Row and column total counts recognized as marginal's. Cross tabulations test is one of the sub-test in Chi-square test category. Cross tabulations are utilized to scrutinize the relationship between two variables. It demonstrates the crossing point between two variables and uncovers how the two connect with each other. Cross tabulations table also known as Contingency table. Chi-square is a vital tool that can be utilized to search for an association between two variables. The number of observations is 5 i.e. hence, the degrees of freedom is 4. The table 3.2 depicts the chi-square value is 14.207. The table shows the 0.288 significance value which is greater than the assumed level of significance, i.e. 0.05. **Hence, the null hypothesis, i.e., there is no influence of occupation on the investor's investment decision gets accepted.** This means that as per the data collected from 305 retail investors, concluded that the occupation is not a significant factor in the investor's investment decision."

H₄: "There is a significant impact of annual income on the investor's investment decision

TABLE 4.1: SATISFACTION WITH THE RETURNS OF MUTUAL FUNDS AS PER THE ANNUAL INCOME

Annual Income	Satisfaction with the returns of Mutual Funds						Total
	0-20% Very Dissatisfied	20-40% Somewhat dissatisfied	40-60% Neither Satisfied nor dissatisfied	60-80% Somewhat satisfied	80-100% Very satisfied		
Below 3 lakh	2	2	13	33	11	61	
3 - 5 lakhs	3	8	30	53	26	120	
5 - 10 lakhs	1	6	22	47	18	94	
More than 10 lakhs	0	1	4	19	6	30	
Total	6	17	69	152	61	305	

TABLE 4.2: CHI-SQUARE TEST FOR SATISFACTION WITH THE RETURNS OF MUTUAL FUNDS AS PER THE ANNUAL INCOME

Chi-Square Tests			
	Value	Df	Asymp. Sig. (2-sided)
Pearson Chi-Square	6.829 ^a	12	0.869
Likelihood Ratio	7.649	12	0.812
Linear-by-Linear Association	0.655	1	0.418
N of Valid Cases	305		

a. 6 cells (30.0%) have expected count less than 5. The minimum expected count is .59.

To know whether there is a significant relationship between the annual income of investors and investor's investment decision, the satisfaction with the returns of Mutual Funds question is considered and incorporated cross tabulation of the same question with the annual income. Table 4.2 unveiled counts, i.e. frequency data, one variable on horizontal axis and other variable on vertical axis. Row and column total counts recognized as marginal's. Cross tabulations test is one of the sub-test in Chi-square test category. Cross tabulations are utilized to scrutinize the relationship between two variables. It demonstrates the crossing point between two variables and uncovers how the two connect with each other. Cross tabulations table also known as Contingency table. Chi-square is a pragmatic tool that can be utilized to search for an association between two variables. The number of observations is 5 i.e. hence, the degrees of freedom is 4. The table 4.2 depicts the chi-square value is 6.829. The table shows the 0.869 significance value which is greater than the assumed level of significance, i.e. 0.05. **Hence, the null hypothesis gets accepted. This means that as per the data collected from 305 retail investors, conclude that an annual income is not a significant factor in the investor's investment decision.** The investment in the mutual funds does not depend on an annual income. There is no significant impact of annual income on the investor's investment decision."

H₅: "There is a significant impact of the qualification on the investor's investment decision"

TABLE 5.1: SATISFACTION WITH THE RETURNS OF MUTUAL FUNDS AS PER THE QUALIFICATION

Qualification	Satisfaction with the returns of Mutual Funds						Total
	0-20% Very Dissatisfied	20-40% Somewhat dissatisfied	40-60% Neither Satisfied nor dissatisfied	60-80% Somewhat satisfied	80-100% Very satisfied		
Undergraduate	0	0	2	3	3	8	
Graduate	5	7	36	77	31	156	
Post Graduate	1	9	20	57	23	110	
Professionals	0	1	11	15	4	31	
Total	6	17	69	152	61	305	

TABLE 5.2: CHI-SQUARE TEST FOR SATISFACTION WITH THE RETURNS OF MUTUAL FUNDS AS PER THE QUALIFICATION

Chi-Square Tests			
	Value	Df	Asymp. Sig. (2-sided)
Pearson Chi-Square	10.697 ^a	12	0.555
Likelihood Ratio	11.393	12	0.496
Linear-by-Linear Association	0.185	1	0.667
N of Valid Cases	305		

a. 9 cells (45.0%) have expected count less than 5. The minimum expected count is .16.

To know whether there is a significant relationship between the qualification of investors and investor's investment decision, the satisfaction with the returns of Mutual Funds question is considered and incorporated cross tabulation of the same question with the qualification. Table 5.2 unveiled counts, i.e. frequency data, one variable on horizontal axis and other variable on vertical axis. Row and column total counts recognized as marginal. Cross tabulations test is one of the sub-test in Chi-square test category. Cross tabulations are utilized to scrutinize the relationship between two variables. It demonstrates the crossing point between two variables and uncovers how the two connect with each other. Cross tabulations table also known as Contingency table. Chi-square is an experimental tool that can be utilized to search for an association between two variables. The number of observations is 5 hence, the degrees of freedom is 4. The table 5.2 depicts the chi-square value is 10.697. The table shows the 0.555 significance value which is greater than the assumed level of significance, i.e. 0.05. **Hence, the null hypothesis, there is no significant impact of the qualification on the investor's investment decision gets accepted.** This means that as per the data collected from 305 retail investors, conclude that qualification is not a significant factor in the investor's investment decision. The investment in the mutual funds does not depend on qualification. There is no significant impact of qualification on the investor's investment decision."

CONCLUSION

Hypotheses H₀₁ to H₅ the demographic factors such as Gender, Occupation, Annual Income, and Education are not playing any significant role in the investor's investment decision. **The Age group is the only demographic factor which has a significant association with investor's investment decision.** There are various other factors which influence an investor's investing decision, such as Wealth Creation, Tax Saving, Emergency needs, Liquidity, High Return, Professional Management, Diversification, Brand Image, Safety of returns, Convenience of Reinvestment etc.

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SATISFACTION LEVEL OF MIGRANT EMPLOYEES WITH SPECIAL REFERENCE TO TIRUPUR GARMENT INDUSTRY

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ABSTRACT

This study reveals that job satisfaction is the major motivating factor responsible for Quality of work life. Job satisfaction in the organization significantly differs from one organization to the other, one department to the other and even from one unit to the other depending upon the various factors influencing in the organization. Job satisfaction refers to the result of various attitude possessed by a migrant employee. The main objective of doing the study is to understand what job satisfaction means to migrant employees. It helps to understand how good working conditions help migrant employees to work more efficiently. It is all about migrant employee involvement, which consists of methods to motivate migrant employees to participate in decision making. This helps in building good relationships. This paper is a means to appreciate the nitty-gritty involved in migrant employee's relationship with the organization and employers.

KEYWORDS

quality of work life, job satisfaction, workplace stress and quality of life.

JEL CODE

J28.

INTRODUCTION

According to Flippo¹, "human resource management is the planning, organizing, directing and controlling of the procurement, development compensation, integration, maintenance and separation of human resource to the end that individual, organizational and social objectives are accomplished". Satisfaction is a psychological factor. It cannot be seen and cannot quantify. But its expression in human mind is understandable. When a migrant employee is satisfied with his assigned task and can discharge his actions satisfactorily, it is called 'job satisfaction'. Hoppock² has brought the term 'job satisfaction' to limelight. Migration is a process of movement of an individual or a group of people from one region to another. Interstate migration is a livelihood strategy; people have started to cross the boundaries in search of better job opportunities. Today, the textiles industry has an overwhelming presence in the economic life of India. It plays a pivotal role through its contribution to industrial output, employment generation, and the export earnings of the country. Most of the employees in garment sectors are migrants.

STATEMENT OF THE PROBLEM

The study reveals that job is the major motivating factor responsible for satisfaction (or) dissatisfaction of migrant employees in an organization. Job satisfaction in the organization significantly differs from one organization to the other, one department to the other and even from one unit to the other depending upon the various factors influencing in the organisation. Job satisfaction is the most important factor in the organization and it also affects the quantum of migrant employee's turnover, absenteeism, etc.

IMPORTANCE OF THE STUDY

Job satisfaction is of great significance for efficient and profitable functioning of any organization. Satisfied migrant employees are the greatest asset of any organization and dissatisfied migrant employees are the biggest liability. In fact, no organization can successfully achieve its goals unless and until those who constitute the organization are satisfied in their jobs. It is believed that migrant employees dissatisfied with their jobs may be very good in their attitudes towards the management. Here the present study aims to measure the level of job satisfaction of employees in garment industry with special reference to the respective study unit through proper analysis.

OBJECTIVES OF THE STUDY

The prime objective of the study is to assess the satisfaction level of migrant employees. In order to achieve the prime objective the following specific objectives have also been framed and put fourth of the critical evaluation.

1. To study the various factors those are influencing the job satisfaction of migrant employees.
2. To analyse the relationship between the level of job satisfaction of migrant employees and the various socio economic factors.
3. To find out the work environment factors and job security factors those are increase the job satisfaction.
4. To offer valid suggestions to enrich the job satisfaction among the migrant employees of the organization.

SCOPE OF THE STUDY

The present study aims to assess the job satisfaction of migrant employees. The study helps to identify the various factors and their level of satisfaction of migrant employees towards their jobs. Then, bring out the various measures to improve their satisfaction of migrant employees through the management.

¹ Edwin, B. Flippo, Personnel Management, McGraw Hill, New York, 1984, P.5

² R. Hoppock: Job Satisfaction, Harper & Bros: New York, 1935.

RESEARCH METHODOLOGY

The study has conducted on the basis of **descriptive research**. The descriptive research is interchangeable in business research and social sciences. The main characteristic and this method is that the researcher has no control over the variables. It is only record of the feeling of employees towards job satisfaction provided by the organization.

METHOD OF DATA COLLECTION

The task of data collection started after the title of the study has selected and designed. The primary data nature is fresh, for a first time and original in character, i.e. surveyed, migrant employees are the respondents. Both the primary and secondary data were presented in the form of tables and these tables were systematically analysed with the aid of some statistical techniques like percentage, Chi-square test and Henry Garrett Ranking Techniques.

REVIEW OF LITERATURE

In this chapter, an attempt is made to present a brief review of the past studies in the related topics with a view to achieve clarity and comprehensions of the methodological problems of the study:

Hossain (2000)¹, in his investigation on job satisfaction of commercial bank employees in Bangladesh revealed that the employees of public sector banks are more satisfied than private sector banks. Prosperity to quit the job was significantly higher among the private sector bank employees, the majority of the employees in private sector banks are dissatisfied because of job security. He has concluded that there is a positive correlation between performance and job satisfaction and negative correlation between job stress, prosperity and found job satisfaction.

Vandenamani (2001)², conducted a survey on job commitment by women executives, found that women executives gave importance first on salary followed by opportunities for promotion. Pleasant working conditions and opportunity house their skills were ranked third and fourth respectively. Receiving fair treatment from their born was ranked fifth while opportunity for training was given the sixth rank and equality of male and female executives in all respect was seventh. The eight and ninth ranks were given to easy traveling distance from house and incentive schemes respectively. The study also found that there was significant relationship with variables of work experience, marital status, age and job commitment.

Green (2001)³, in his study on 80 persons unit of a large corporation revealed that the factors had significant relationship with job satisfaction which are management leadership, team work, supervision, recognition, pay and benefits and security. The study further revealed that after the effective steps taken with regard to above factors the level of job satisfaction is improved much.

Sharad Kumar and Patnaik (2002)⁴, conducted a survey an organisational commitment, attitude towards work and job satisfaction of post graduate teachers of Goa with five factors pay, security, social satisfaction, supervisory and growth satisfaction. With regard to job satisfaction, there were differences on gender, age and teaching experience. The teachers having more than 12 years of experience feel more secured and satisfied in respect of security. In case of growth satisfaction the male teachers of above 40 years are better than their colleagues. Their analysis show that those who have more organizational commitment are satisfied and those who have possible attitude towards work are also satisfied in their jobs.

Chakraborty (2004)⁵, "job satisfaction does not solely depend upon the nature of job". The study reveals that teacher's job satisfaction also lightly depends on institutional work culture, personal relation among the teachers, salary obtained by the teachers, institution library facilities, communication facility etc.

Selvaraj and Muthu Deivakani (2005)⁶, "Human Resource Development in co-operative milk supply society", study reveals that healthy personality and education is a good sign of having high job satisfaction. Job satisfaction is an important factor related to variable like job involvement, organisation, commitment, etc.

ANALYSIS

DEMOGRAPHIC PROFILE

TABLE 1

S.No	Variables	Classes	Percentage
1.	Age	Below 20 years	19.0
		21 – 40 years	52.0
		Above 40 years	29.0
2.	Gender	Male	45.0
		Female	55.0
3.	Monthly income	Below Rs.5000	58.0
		Rs.5001-Rs.10000	30.0
		Above Rs.10000	12.0
4.	Experience	Below 5 years	52.0
		6-10 years	40.0
		Above 10 years	8.0
5.	Marital Status	Married	58.0
		Unmarried	42.0
6.	Educational Qualification	Illiterate	25.0
		Higher secondary	36.0
		Degree UG / PG	39.0

Source: primary data

- ☞ It is found from the analysis that maximum of the respondents are of age group 21 – 40 years
- ☞ It is observed from the analysis that maximum of the respondents are female
- ☞ It is noted from the analysis that maximum of the respondents salary are Below Rs.5000
- ☞ It is found from the analysis that maximum of the respondents experience Below 5 years
- ☞ It is noted from the analysis that maximum of the respondents are married.
- ☞ It is observed from the analysis that maximum of the respondents are qualified with degree level.

FACTORS AND LEVEL OF SATISFACTION (χ^2 table)

In order to find the relationship between various factors and level of job satisfaction, chi-square test was used and the result of the test is shown in the underneath table.

TABLE 2

Factor	Calculated χ^2 Value	Table Value	D.F	Remarks
Monthly Income	9.936	9.488	4	Significant at 5% level
Experience	19.304	9.488	4	Significant at 5% level
Designation	18.094	9.488	4	Significant at 5% level

Source: primary data

- ☞ It is highlighted from the analysis that maximum level of job satisfaction perceived among the respondents whose income group as Rs. 5001 to Rs. 10000 p.m. and it is proved by the analysis of Chi-square at 5% significance level.

- ☞ Among the percentage of experience level by the respondents, it is evident that, 6-10 years experienced respondents have perceived maximum level of job satisfaction, which confirmed by the result of chi-square test at 5% level of significance.
- ☞ While analysing the designation of the respondents, labour category respondents perceived maximum level of job satisfaction than other groups. It proved by the result of chi-square test by 5% level of significance.

OPINION ABOUT MIGRANT’S JOB SATISFACTION

TABLE 3

S.No.	Factors	Highly Satisfied	Satisfied	Moderate	Dissatisfied	Highly dissatisfied
1.	Present Job	35 (35.0)	46 (46.0)	13 (13.0)	6 (6.0)	0
2.	Training and development	6 (6.0)	61 (61.0)	21 (21.0)	8 (8.0)	4 (4.0)
3.	Grievance handling	18 (18.0)	44 (44.0)	31 (31.0)	7 (7.0)	0
4.	Job sharing method	12 (12.0)	66 (66.0)	13 (13.0)	9 (9.0)	0
5.	Safety measure	30 (30.0)	46 (46.0)	14 (14.0)	10 (10.0)	0
6.	Welfare measures	25 (25.0)	26 (26.0)	42 (42.0)	7 (7.0)	0
7.	Leave facilities	0	43 (43.0)	29 (29.0)	19 (19.0)	9 (9.0)
8.	Resting time	2 (2.0)	44 (44.0)	30 (30.0)	11 (11.0)	13 (13.0)
9.	Incentives	0	36 (36.0)	47 (47.0)	14 (14.0)	3 (3.0)
10.	Bonus	4 (4.0)	12 (12.0)	42 (42.0)	33 (33.0)	9 (9.0)
11.	Motivation	13 (13.0)	47 (47.0)	14 (14.0)	24 (24.0)	2 (2.0)

Source: primary data

- ☞ It is noted from the analysis that majority (46.0%) of the respondents are satisfied with present job.
- ☞ It is found from the analysis that majority (61.0%) of the respondents are satisfied with training and development.
- ☞ It is understood from the analysis that majority (44.0%) of the respondents are satisfied with grievance handling.
- ☞ It is identified from the analysis that majority (66.0%) of the respondents are satisfied with job sharing method.
- ☞ It is noted from the analysis that maximum (46.0%) of the respondents are satisfied with safety measures.
- ☞ It brings from the study that most (26.0%) of the respondents are satisfied with welfare measures.
- ☞ It is found from the analysis that maximum (43.0%) of the respondents are satisfied with leave facilities.
- ☞ It is evident from the analysis that majority (44.0%) of the respondents are satisfied with resting time.
- ☞ It is noted from the analysis that majority (47.0%) of the respondents are neutrally satisfied with incentives.
- ☞ It is observed from the analysis that most (42.0%) of the respondents are satisfied with bonus facilities.
- ☞ It is analysed from the analysis that maximum (47.0%) of the respondents are satisfied with motivation.

OPINION ABOUT THE WORK ENVIRONMENT (HENRY GARRETT RANKING TECHNIQUE)

The migrant respondents have different reasons for satisfying the working environment in the company.

TABLE 4

S. No.	Reason	Total score	Mean score	Rank
1.	Good working environment	6583	65.8	II
2.	Relationship with your co-workers	6656	66.6	I
3.	Relationship with your supervisors	5035	50.4	V
4.	Ventilation facilities	5482	54.8	III
5.	Sanitation facilities	4843	48.4	VI
6.	Recreation Facilities	4575	45.8	VII
7.	Transport facilities	5205	52.1	IV
8.	Recruitment and selection procedure	4319	43.2	VIII
9.	Canteen facilities	3628	36.3	X
10.	Bathroom and water facilities	3674	36.7	IX

Source: primary data

- ☞ It is observed from the above analysis that most of the respondents are satisfied for the reason of good relationship with your co-workers which ranked first by the employee with total score of 6656 points. It is followed by the reasons ‘Good working environment’ and ‘Ventilation facilities’ ranked second and third factors which scored as 6583 and 5482 points.

OPINION ABOUT THE JOB SECURITY (HENRY GARRETT RANKING TECHNIQUE)

TABLE 5

S. No.	Reason	Total score	Mean score	Rank
1.	Present machinery system	5650	56.5	II
2.	Security measures	6009	60.1	I
3.	Medical facilities	5424	54.2	III
4.	Compensation	4891	48.9	VI
5.	Insurance scheme	5114	51.1	V
6.	Reward	3907	39.1	VII
7.	Leave facilities	3881	38.8	VIII
8.	Pay structure	5124	51.2	IV

Source: primary data

It is noted from the above analysis that most of the respondents are satisfied with job security for the reason of security features which ranked first by the employee and total scored as 6009 points. It is followed by the reasons 'present machinery system' and 'medical facilities' ranked second and third factors which scored as 5650 and 5424 points.

SUGGESTIONS

- To promote human relations the work environment of typical organisation should be able to meet the needs of its migrant workers as nature individuals, these needs are minimum control and supervision, opportunity for maximum expression of one's abilities and skills, detailed knowledge about one self and about job.
- The quality of the organisation functions will be improved, when its members functions as groups under participative management.
- Migrant employee's problems can be solved by grievance procedure. It provides migrant employees a formalized means of emotional release for their dissatisfactions. Even if a worker does not use the grievance system for his own emotional release in a particular situation, he feels better because he knows the system is there to use if he wants to do so. It builds within him a sense of emotional security.
- During the production the supervisors can ask migrant workers about their own ideas in doing the particular work apart from the regular process followed in the organisation, it leads to the migrant workers to be loyal to the management.
- If the organisation provides the refreshments to the migrant workers, then 20 minutes can be save per day, by avoiding the slow starting of the works.
- Job rotation offers a potential of dealing with the problem of work dissatisfaction caused by over-structuring. It allows employees to diversify their activities and offset the occurrence of boredom.
- Performance appraisal method can be followed for evaluating the employees. It can be measured by individual performance, team work, sectional productivity, etc.
- Giving awards and rewards to the workers for their best performance can do motivation.
- Tours and picnics should be arranged in every years will increase the employee and employer relation and also mind relaxation for both the peoples.
- Welfare facilities like bus facilities, housing facilities and recreational facilities should be provided to the workers.

SCOPE FOR FURTHER RESEARCH

This Research work made an attempt to study the satisfaction level of migrant employees in Tirupur garment industry. Also, it is possible to extend the research for migrant male and migrant female employees, concentrating on each gender by analyzing the migration impact on their life separately. There is a wide scope for the further migration study from the people moving from villages to cities, cities to states, states to countries, national to international level and vice versa. The impact of garment industry in the psychological, physiological, Welfare and social well-being of the migrant employees, the role of migrant employee participation in the concerned industry for the economic development of our country and the global economic impact for the same could be considered in detail for further analysis and Research.

CONCLUSION

A study on job satisfaction is the degree to which the migrant employees in an organisation feel safe with various factors. It helps the organisation to develop the facilities through which job satisfaction will increase. Job satisfaction is a pleasant or positive emotional state resulting from the appraisal of one's job or job experience. Generally it is believed that satisfied migrant employees are productive employees. A number of factors influence the level of job satisfaction among the migrant employees. In the present study, some of the factors are found, which affecting the job satisfaction among the employees and some valid suggestions are given to the management to improve and job satisfaction level and increase the workers performance level.

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CORPORATE SOCIAL RESPONSIBILITY IN INFORMATION TECHNOLOGY SECTOR – A STUDY WITH REFERENCE TO SELECT (IT) INDUSTRY IN CHENNAI

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ABSTRACT

India is the first country in the world to enshrine corporate giving into law. Corporate Social Responsibility (CSR) is referred as a corporate initiative to assess and take responsibility for the company's effects on the environment and impact on social welfare and to promote positive social and environmental change. It efforts that go beyond what may be required by regulators. The income is earned only from the society and therefore it should be given back. Further as per the CSR Rules, the provisions of CSR are not only applicable to Indian companies, but also applicable to branch and project offices of a foreign company in India. Many of the leading corporations across the world had realized the importance of being associated with socially relevant causes as a means of promoting their brands. Cause related marketing and corporate social responsibility has provided companies with a new tool to compete in the market. CSR refers to the corporation's obligation to all the stake holder. It seems from the desire to do well and get self satisfaction in return as well as societal obligation of business. This could be a strategic marketing activity a way for a company to do well by doing good, distinct from sales promotion, corporate philanthropy, corporate sponsorship, corporate Samaritan acts and public relations.

KEYWORDS

CSR (corporate social responsibility), The ministry of corporate affairs, company's act 2013, CSR committee.

JEL CODE

L89.

INTRODUCTION

India has become one of the fast growing economies of the world. It is growing at the rate of 9 per cent per annum. As an emerging market all are looking at India from an international perspective. At the stage when India is set to acquire a global position, it is essential to measure whether the economic growth is due to successful business operations. Organizations must realize that government alone will not be able to get success in its endeavor to uplift the downtrodden of society. The present societal marketing concept of companies is constantly evolving and has given rise to a new concept termed as Corporate Social Responsibility (CSR).

Under Companies Act, 2013 any company with a

1. net worth of the company to be Rs 500 crore or more or
2. turnover of the company to be Rs 1000 crore or more or
3. net profit of the company to be Rs 5 crore or more.

has to spend **at least 2%** of last 3 years average net profits on CSR activities as specified in Schedule VII and as amended from time to time. The rules came into effect from 1 April 2014.

- Further, the qualifying company will be required to constitute a CSR Committee consisting of 3 or more directors.
- The CSR Committee shall formulate and recommend to the Board, a policy which indicates the activities to be undertaken, allocate resources and monitor the CSR Policy of the company.
- If the company did not spend CSR, it has to disclose the reason for not spending. Non-disclosure or absence of the details will be penalised from Rs 50,000 to Rs 25 lakh or even imprisonment of up to 3 years

It is assumed to be responsibility of the business house too. Nothing builds brand loyalty among today's increasingly hard to please consumers, like a company's proven commitment to a worthy cause. Other things being equal, many consumers would do business with a company that stands for something beyond profits. In nutshell, CSR and cause related marketing results in increased sales, visibility and consumer loyalty and enhanced company image along with media coverage. On the other hand, a non-profit organization is an organization, which exists for providing some benefit or assistance or a sort of self-help group. Like the name suggests, the organization will have all the properties of a profit making organization i.e., a mission statement, a vision, offices, infrastructures etc., but the objective will not include making a profit out of its operations. However, to run any organization, funds are needed and this has to come in to the non-profit in terms of financial i.e., grants, subsidies, donations etc., or services in terms of staff support or infrastructure support. The sources for these funds could be individuals, the government or other charitable institutions and finally companies. These business houses through their CSR initiatives contribute to the mission of social progress and growth of India.

CORPORATE SOCIAL RESPONSIBILITY

Definitional issues regarding "CSR have been debated since many years. Early CSR models were initiated in the early 1960's. It showered the "Social aspect of CSR as referring directly to those responsibilities above and beyond economic and legal obligations. Many considered corporate social responsibility synonymous with voluntary and philanthropic acts by business organizations which are designed to alleviate social ills or in order to benefit a disadvantaged group chosen by the corporation's managers. The World Business Council for Sustainable Development in its publication "Making Good Business Sense" by Lord Holme and Richard Watts, used the following definitions. "Corporate Social Responsibility is the continuing commitment by business to behave ethically and contribute to economic development while improving the quality of life of the workforce and their families as well as of the local community and society at large".

The Ministry of Corporate Affairs enforced the Companies Act, 2013 "Act" and the Companies (Corporate Social Responsibility Policy) Rules "CSR Rules" from 1 April 2014. By doing so, India has become one of the first country to have a legal requirement to comply with CSR Rules. Since India was one of the first countries across the world to mandate Corporate Social Responsibility (CSR), there is a growing interest among various stakeholders to see how the scenario is progressing. "CSR is about capacity building for sustainable livelihoods. It respects cultural differences and finds the business opportunities in building the skills of employees, the community and the government. "CSR is about business giving back to society. Traditionally, CSR has been defined much more in terms of a philanthropic model. Companies make profits, unhindered except by fulfilling their duty to pay taxes. Then they donate certain share of the profits to charitable causes. It is seen as training the act for the company to receive any benefit from the giving. In other words of Philip Kotler, "Corporate Social Responsibility": "Doing the most good for your company and the cause" does a terrific job for describing the range of corporate social initiatives and suggests best practices for choosing, implementing and evaluating them.

ACTIVITIES CARRIED ON BY VARIOUS COMPANIES

CSR is a commitment to support initiatives that measurably improve the lives of underprivileged by one or more of the following focus areas as

- Eradicating hunger, poverty & malnutrition
- Promoting education
- Improving maternal & child health
- Ensuring environmental sustainability
- Protection of national heritage
- Measures for the benefit of armed forces
- Promoting sports
- Contribution to the Prime Minister’s National Relief
- Slum area development etc.

INDIA’S CSR REPORT SURVEY 2016

India’s CSR reporting survey 2016 analyses and brings together findings from CSR reporting of the top hundred (N100) listed companies as per market capital as on 31 March 2016. All these companies are required to comply with the requirements of the Act. CSR policy, CSR committee, disclosure on CSR in the Annual Report, CSR spends, and others were reviewed based on their availability in the public domain as on 30 September, 2016. A comparative analysis has also been presented to track progress as compared to the previous year. During the current year, 70 per cent of companies have disclosed the direct and overhead expenditure towards CSR projects. There is almost a 50 per cent increase in clearly disclosing the direct and overhead expenses as compared to the previous year, which indicates an increase in better financial monitoring of projects by companies. Eleven per cent of companies have spent more than 5 per cent of their total spends towards administration, which is not in line with the requirement of the Act.

The health, sanitation and education sector accounts for the 63.74 per cent (INR 4155 Cr.) of the total spends on CSR against 50 per cent (INR 2592 Cr.) in last year, an increase by 14 per cent. CSR spent on rural development sector has considerably increased from INR 443 Cr. (8.84 per cent) in 2014-15 to INR 804 Cr. (12.34 per cent) in 2015-16. Certain Schedule VII areas such as National Heritage, Support to War Veterans, PM Relief Fund, Sports, Technology Incubators, Slum Development, put together, accounted for merely 3 per cent (INR 154 Cr.) of the total spends this year as well (INR 153 Cr. last year).

The Roles and Responsibilities of the Board and CSR committee is being tabulated below in Table 1.

TABLE 1: ROLES AND RESPONSIBILITIES OF BOARD AND CSR COMMITTEE

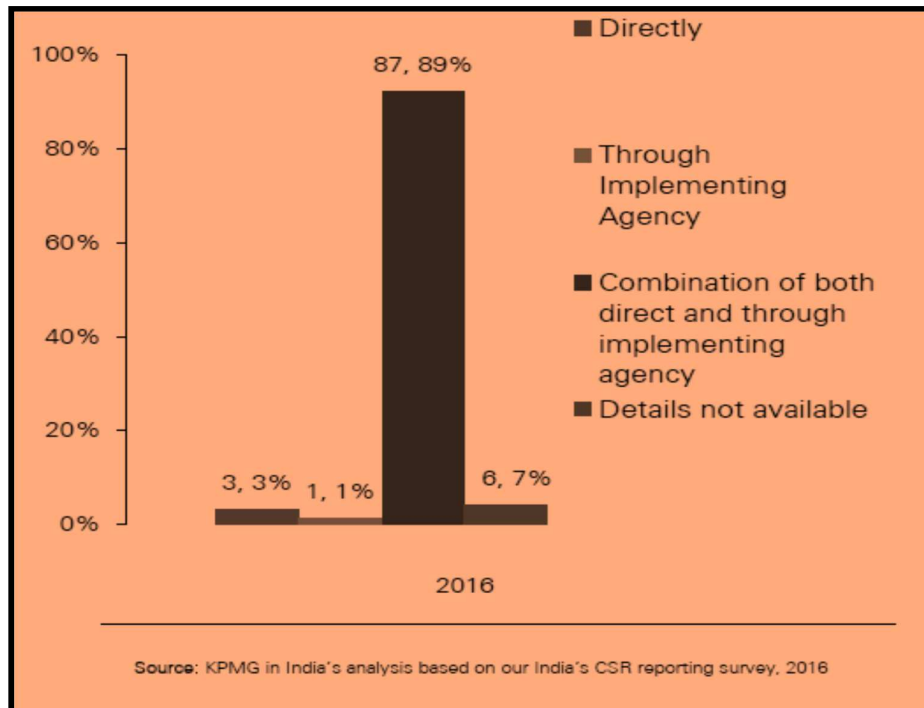
Board	CSR
<ul style="list-style-type: none"> • Constitute CSR committee • Approve CSR policy • CSR disclosure in Directors’ Report and company website • Ensure compliance to the Act with regards to CSR spends and disclosures • Ensure concurrence of CSR initiatives listed out in CSR policy and actual implementation. 	<ul style="list-style-type: none"> • Formulate CSR policy and recommend the same to the board for approval • Recommend projects which are in alignment to the Schedule VII of the Act • Recommend budget amounts to be incurred for project implementation • Institute a monitoring mechanism for CSR projects • Periodically monitor the CSR policy and projects.

Source: KPMG annual report

DISCLOSURE ON THE MODE OF IMPLEMENTATION IN CSR POLICY

Disclosing details regarding mode of implementation is a mandatory requirement of the Act. Over 89 per cent companies have disclosed their mode of implementation in the CSR policies, no change as compared to the previous year. The role of NGOs is well reflected here. Most of the corporate do collaborate with NGOs for the implementation of their projects as the graph alongside reflects.

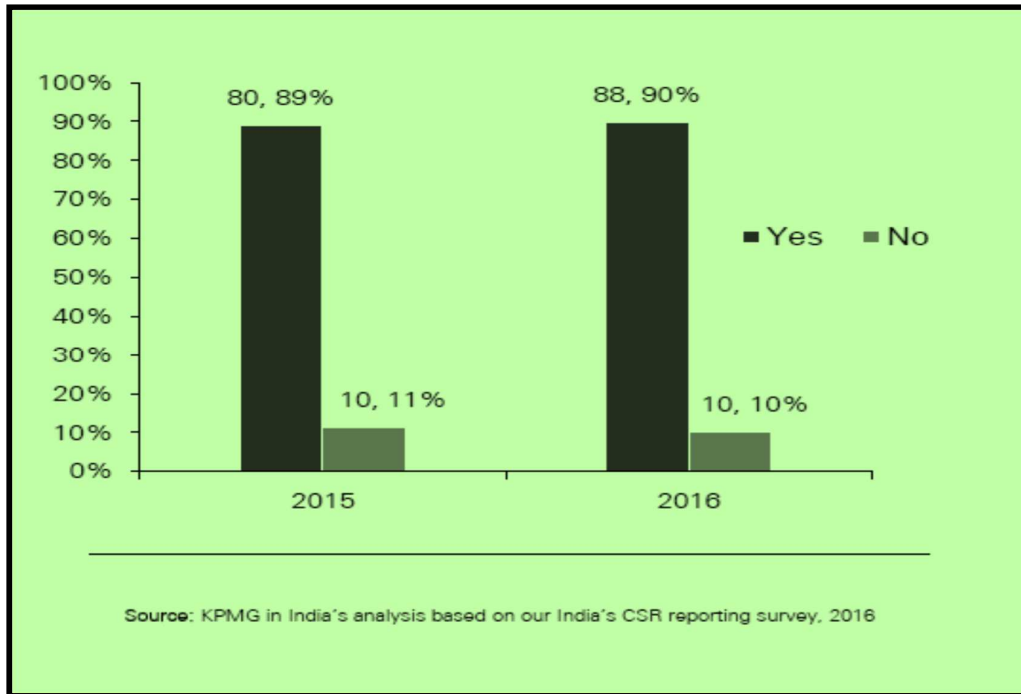
FIGURE 1: DISCLOSURE ON THE MODE OF IMPLEMENTATION IN CSR POLICY



COMPANIES WITH A STAND-ALONE CSR COMMITTEE

Companies are mandated to have a board level CSR committee. Out of the total companies disclosing their details, 88 companies have stand-alone CSR committee as compared to 80 last year.

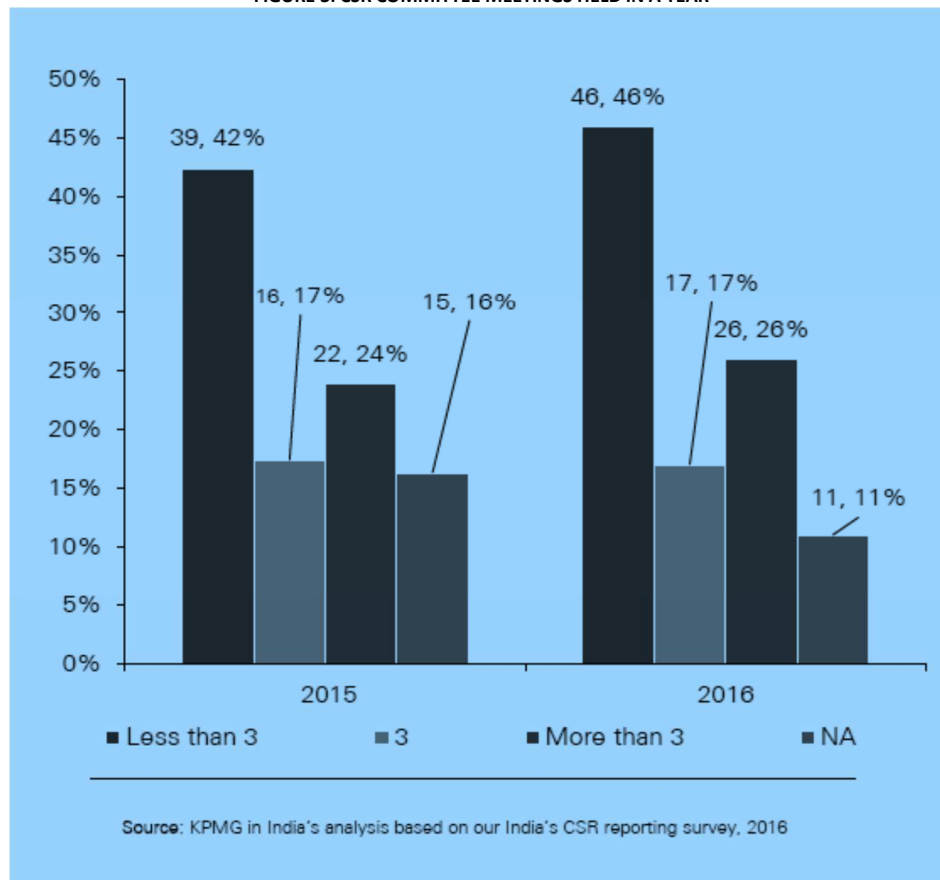
FIGURE 2: COMPANIES WITH A STAND-ALONE CSR COMMITTEE



CSR COMMITTEE MEETINGS HELD IN A YEAR

89 companies have disclosed details regarding CSR committee meeting as part of their Corporate Governance section, compared to 77 companies last year, not a mandatory requirement. 43 per cent of companies had three or more CSR committee meetings which indicate an active committee.

FIGURE 3: CSR COMMITTEE MEETINGS HELD IN A YEAR



REVIEW OF LITERATURE

Bhattacharyya & Chaturvedi (2012), article entitled "CSR looks set to emerge as an independent stream with measurable output" on India CSR site, stated about the proposed bill of CSR that how the bill will affect the company's policies. The researchers presented their views and said that due to this bill, company's activities will change a lot the companies who has not engaged in CSR activities till now, will start investing on society. Further, who has already engaged in these areas will get a strong foundation or bond with the society.

An article presented on India CSR entitled "Is CSR all Bullshit?" depicted that companies neither have a strong will power to invest in social activities nor they aware about the areas in which comes under CSR. The reason of this problem is ignorance about the concept of CSR and not any legal framework. The researcher also presented the solution of this problem that knowledge should provide in the institutions through training, induction programmes and through other teaching programmes. If needed, foreign experiences should be used in India for Indian society welfare.

Bibhu Parshad (2012), article presented that CSR is the face of industry face of doing trade. Bibhu said that today, corporate houses took CSR as a medium fulfillment of profit greed of corporate houses. Further the article explored that companies today invests in a lot of areas like child labour, ground water, food, education, employment etc. but nobody is aware about the essential need of world's poor. The article suggested that profit earning is a natural fact of companies but CSR is beyond the natural and statutory obligation of the companies. At last it was concluded in the article that sustainable development is the development of society as well as the company in a balanced way.

Bansal, Parida, Kumar (2012), paper entitled "Emerging trends of Corporate Social Responsibility in India" in KAIM Journal of Management and Research analyzed 30 companies of 11 sectors listed in the Bombay Stock Exchange with the help of their annual reports. Some of these sectors were Transport Equipment sector, Finance and Metal Mining sector, IT & Power, Capital goods, Telecom, Housing, FMCG, Oil & Gas and Cipla. The paper considered the nature and areas of society in which the companies are investing. By considering all those areas it was concluded in the paper that today companies are not working only to earn profit but also have realized the importance of being social friendly. So, on the basis of the paper it can be said that social responsibility has now started taking a turn in the new direction.

The Economic Times (11 Jan.2013), news highlighted about the company Dell's strategy of motivating its employees in initializing CSR. The news discussed that company's employees are the power that forced the company to do more for the society. Company with its employees has engaged in social responsibility activities in the areas of education, environment and employee's welfare. Beside Dell Company, the news also discussed about other companies like Maruti and Gogrej that these companies also provide induction training to its employees for preparing them for community services. Maruti Company run a program named e- parivartan for a group of employees to make them aware about community problem and their solution.

NEED FOR THE STUDY

The basic aim of the study is to gain familiarity or formulating a problem or to achieve new insights into it. In this particular study, an attempt has been made to comprehend and gain insight into behavior or the attitude of companies towards various aspects of social contribution. This study deals with the behavior of the corporate. It tries to identify the complex behavior and set patterns in it. The present study relates to the attitude of 25 companies in Chennai so as to predict the behavior.

Why will any company give funds or services to a non-profit? The government will provide for funds and or services as it is responsible for the social welfare of the people. Similarly a charitable institution will do the same as it is their objectives to help the social cause. An individual may donate to a non profit due to reasons of Philanthropy (Charity) or in memory of some person etc., but why does a commercial organization contribute for a social cause? The basic objective of a commercial organization is to make profits. Why will it divert substantial funds to a non profit if there is no return on that investment?

The objective of the study was to try to try and understand why an organization contributes to a social cause and what it expects to gain in the process. It is philanthropy, is it a feeling of obligation to the society in general or is for financial benefits in terms of tax exemptions etc.,

STATEMENT OF THE PROBLEM

India needs is large-scale social innovation and systems change and mandatory spending achieves a little in this direction. It also deflects pressure on companies to change their business practices. CSR should be more inclusive by which an organization should think about and evolve its relationships with stakeholders for the common good, and demonstrate its commitment by adopting appropriate business processes and strategies. A set of national voluntary guidelines to spell out what responsible business should look like and set out that CSR is more than just charitable giving should be formalized. This motivated the researcher to undertake a study on Corporate Social Responsibilities.

OBJECTIVES OF THE STUDY

The objectives of the study are

1. To know the concepts and framework of CSR
2. To identify the contributions made by Information Technology industry in Chennai.
3. To critically analyze the success / failure of the CSR

HYPOTHESIS

There is a relationship between the designation of the respondents and the objective of the company towards customer satisfaction.

RESEARCH DESIGN

To understand the reason why an organization contributes to a social cause, it was necessary to get an insight into the organizations view of the business, its views, its policies, the reasons why it contributes and its objectives and relationships with all its stakeholders i.e., employees, customers, suppliers, shareholders and society. The questionnaire was designed accordingly to get the relevant information from the respondents. In this study the researcher has adopted convenience sampling. Population of study includes companies located in Chennai.

SOURCES OF DATA COLLECTION

The research consists of the application of both primary and secondary data. Primary data was collected by administering questionnaire. The secondary data was collected through websites and from various journals and magazines. Reasons for contribution to CSR by organizations were a sensitive issue. The questionnaire was administered to various companies HR. Anonymity of the responses was promised. The responses were obtained through the human resource departments of the company directly or indirectly through the concerned department or official handling the area.

FINDINGS

The various findings of the study are listed below

VIEW TOWARDS BUSINESS

Eighty two point four percentage of the respondents of the companies seem to strongly agree that business means maximizing benefits, making money and doing your work well. No company disagrees on this point. 17.6% more agree than disagree to the same. 76.5% says that business is making money. 88.2% strongly agree as well as agree that it is all about social responsibility while 17.8% more disagree.

PLACE FOR ETHICS IN BUSINESS

Eighty-three point three percentage, believe that there is place for ethics in business. However, a small majority, 11.8% strongly feel that there is no place for ethics in business.

BUSINESS & ECONOMIC ATTITUDE

Eighty two point three percentage, believe that business needs only an economic attitude while 17.7% respondents felt that business does not need an economic attitude, however, what is needed is balance feel.

CUSTOMERS

Forty seven point one percentage, have their objective towards the customer as satisfying them by providing quality, and within this 50% them their relationship as friendly. Another 29.4% objective is to give good value and satisfactory service.

SHAREHOLDERS

Among the total respondents, 41.2% objectives are more towards good returns and 35.3% express the real picture of the company, while 23.5% assure profit to its shareholders.

EMPLOYEES

Out of the total respondents, 64.7% feel that their objective towards the employees is to motivate to achieve goals and rewards, 23.5% satisfy by fulfilling need while 5.9% feel that their relationship is that of family feeling and another 5.9% provide them with an opportunity for self-development.

COMMUNITY

Over 52.9% of the companies have social welfare as the objective towards the community. 11.8% companies have stated that their relationship with the community is that of a family member so as to provide help to the target group who needs it and 17.6% have stated that their relationship is cordial and friendly. They are sensitive to the needs of the community and another 17.6% include community welfare in the objectives of the company.

CHI SQUARE TEST

HYPOTHESIS

- Ho - There is a relationship between the designation of the respondents and the objective of the company towards customer satisfaction.
- Ha- There is no relationship between the designation of the respondents and the objective of the company towards customer satisfaction.

TABLE 2: OBSERVED FREQUENCY TABLE

Designation	Company's objectives towards customer satisfaction				
	Quality	Friendly relationship	Good value	Satisfactory service	Total
Team Member	4	15	6	2	27
Team Leader/ Project Manager	5	8	7	3	23
HR Manager	4	4	1	1	10
Total	13	27	14	6	60

Source: Primary Data

TABLE 3: EXPECTED FREQUENCY TABLE

Designation	Company's objectives towards customer satisfaction				
	Quality	Friendly relationship	Good value	Satisfactory service	Total
Team Member	5.85	12.15	6.3	2.7	27
Team Leader/ Project Manager	4.98	10.35	5.37	2.3	23
HR Manager	2.17	4.5	2.33	1.0	10
Total	13	27	14	6	60

Source: Primary Data

The calculated value (5.04828) is less than the Table value (7.05). Hence the hypothesis is accepted. Therefore it is known that, there is a relationship between the designation of the respondents and the objective of the company towards customer satisfaction.

LIMITATIONS

1. The sample size being very small, the result of the study may not represent the whole population.
2. The respondents were reluctant to respond.
3. The result cannot be generalized.
4. The study was restricted to limited area and time.

SCOPE FOR FURTHER RESEARCH

The researcher has done the research with reference to Information Technology industries alone, hence

- o Research can be done with textiles industry, or any sector of the researcher's interest.
- o A comparative analysis of contribution made by any two sectors.
- o Research can be conducted to know the impact of CSR in Tamilnadu.

CONCLUSION

The study was conducted to find out the company's reasons towards corporate social responsibility on cause related and its impact on the company's brand image and sales. The important factors that influence the company to contribute are: Customer oriented, Humane oriented. Financial benefits in terms of tax benefits also are important, though the responses to this issue seem to be guarded. Companies must generated awareness to the various stakeholders regarding its contribution to corporate social responsibility through its affiliation with social cause through event management (Marathon events, Eye camp) and company websites as it is directly related to increase in sales and brand loyalty. India being a developing country with over 250 million strong middle class families has a large potential for any marketer and at the same time it can support quiet a good number of causes which benefits the society at large. For example, due to operation of CRY 89244 children lives were permanently transformed 1013 communities experienced 100% school enrollment, 159 primary health care centres began functioning and long term rehabilitation program were initiated in almost 100 tsunami affected villages in Tamilnadu, Andhra Pradesh and Kerala. Earth quake relief and rehabilitation programs were initiated in 11 villages in Jammu and Kashmir. So it may be concluded that corporate social responsibility and cause related marketing is beneficial both for company and the society.

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PERFORMANCE OF MGNREGS IN KERALA: A SPECIAL REFERENCE AT KADAPLAMATTOM GRAMA PANCHAYATH

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ABSTRACT

Mahatma Gandhi National Rural Employment Guarantee Act (MGNREGA) is a job guarantee scheme for rural Indians. It was enacted by legislation on 25 August 2005. The scheme provides a legal guarantee for at least 100 days of paid employment in every financial year to adult members of any household willing to do unskilled manual work related to public work at statutory minimum wages of 240 per day in 2017 prices. The MGNREGA has affirmative impact on empowerment pattern of women. Women have benefited both as individual and community. Women are benefitted individually because they are capable to earn separately, spend some money for their requirements, contribute in family expenditure etc...During this project, the majority of the respondents are satisfied with MGNREGS programme and they are fully aware about the remuneration pattern, working facilities provided by MGNREGS scheme.

KEYWORDS

MGNREGS, women empowerment, awareness level, socio-economic development, employment status.

JEL CODE

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INTRODUCTION

MGNREGA is a novel and well distinguished scheme as it focuses on the grass root level which is the backbone of the country like India. The scheme was introduced with an aim of improving the purchasing power of the rural people, primarily semi or unskilled work to people living below poverty line in rural India. It attempts to bridge the gap between rich and poor in the country. An Act to provide for the enhancement of livelihood security of the households in rural areas of the country by providing atleast one hundred days of guaranteed wage employment in every financial year to every households who adult members volunteer to do unskilled manual work and for matters connected there with or incidental there to. The law was initially called the National Rural Employment Guarantee Act (NREGA) and was renamed with the prefix "Mahatma Gandhi" on 2 October 2009, Gandhi's birth anniversary. In the year of 2011, the program was commonly criticized as no more effective than other hardship decrease programs in the country of India. Mahatma Gandhi National Rural Employment Guarantee Act as an element of unemployment and eradicating the poverty in the life of below poverty lines.

REVIEW OF LITERATURE

MGNREGS is an employment guarantee scheme. It was enacted 2005. **Soumya ohanty [2012][2]** the says that MGNREGA is a good scheme for eradicating unemployment and poverty, and how this scheme has provided alternative source of livelihood which reduces the migration, and ask rural people in villages self sustained. (**kareemulla, 2013**)The scheme aims at the development of the rural poor by giving employment to both men and women and considers gender equality. This scheme creates employment opportunities, among the people, improves the standard of living of the rural people, empowerment of women, creates infra-structural development in rural areas, prevents the migration of the rural people to urban area and largely participates in the financial inclusion process by opening bank or post office accounts. (**Saraswanth, 2011**) MGNREGA has been successful in self-selecting rural poor into participation and households participating longer in the programme have been able to borrow more from formal sources. This paper also provides evidence that, increases in productivity of economics activities for participants, due to work in MGNREGA Acts as link between longer participation and increased access to formal credit. This study highlights some important features of MGNREGA, which enables a typical Employment Guarantee Scheme to have a multidimensional positive impact on lives of rural poor, including better access to formal credit. It is observed that MGNREGA has been successful in efficiently targeting rural poor, which ensures the availability of transfer benefits only for the targeted population. It should be scrutinized periodically at implementation and budgetary fronts to ensure fairness and efficiency. (**Suman Pamecha, 2015**)MGNREGA is an ambitious scheme providing employment to rural people of India. The basic aim of Mahatma Gandhi National Rural Employment Guarantee Act is to enhance livelihood security of household in rural area. By this scheme Govt. gives assurance of employment to unskilled rural labourers for 100 days. With better implementation such type of scheme may be an effective weapon to fight against poverty. It also aims at transforming the rural areas by improving the socio-economic conditions of people. Rural economy is the back-bone of Indian economic development.

MATERIALS AND METHODS

The study is descriptive and analytical in nature and has adopted the following methodology:

The population for the study was 990 workers of MGNREGS who availed benefit from MGNREGS scheme. Data were collected from the beneficiaries residing in Kadaplamattom Grama Panchayath. Purposive sampling was used as the sampling technique. Sixty beneficiaries were identified. Both primary data and secondary data were used for the study. Primary data were collected through structure questionnaire. The questionnaire elicited information relating to the profile of the workers, their current status, level of awareness, evaluation of role of panchayath and changes in economic and social status. The primary data were also collected through interview held with MGNREGS workers. The study also used secondary data in order to ascertain the success in the working of MGNREGS programmes. The tools used for collection primary data were structure questionnaire for MGNREGS beneficiaries. The publications which constituted the secondary sources of information were annual reports of MGNREGS in Kerala. All data collected were tabulated to facilitate interpretation.

SAMPLE PROFILE

Out of 60 respondents, majority of the respondents came under female category and majority belonged to the age group 46-55 and 91.8 percent respondents are married. About 45.9 percent respondent having educational qualification upto SSLC. It means the respondents are having low educational qualification. About 80 percent respondent got 100 days of work, 78.3 percent respondent are worked 6-8 hours under MGNREGA.

INFERNENTIAL ANALYSIS

Analysis regarding the satisfaction level of respondents.

TABLE 1: ANALYSIS REGARDING THE SATISFACTION LEVEL OF RESPONDENTS

Item	Highly satisfied (%)	Satisfied (%)	Neutral (%)	Dissatisfied (%)	Highly dissatisfied (%)
Wage	26.2	48.3	16.7	8.3	0
Method of payment	19.7	39.3	31.1	8.2	0
Quality of work	31.1	36.1	29.5	1.6	0
Behaviour of administrative	34.4	41.0	23.0	0	0
Availability of work	23.0	44.3	24.6	4.9	1.6
Nature of job	26.2	44.3	21.3	4.9	1.6
Updation of record	45.9	37.7	11.5	3.3	0
First aid facilities	49.2	39.3	8.2	1.6	0

Source: Primary data

The table shows that the satisfaction level of beneficiaries under MGNREGS. With regard to the wage, method of payment, quality of work, behaviour of administrative, availability of work, and nature of job, the respondents are highly satisfied. And they are highly satisfied with the updation of record and first aid facilities

TABLE 2: AWARENESS LEVEL OF THE RESPONDENTS

Factor	Fully aware (%)	Aware (%)	Not aware (%)
Aware about remuneration	63.9	32.8	1.6
Aware about payment method	60.7	36.1	1.6
Aware about equipment provided by the authority	72.1	23.0	3.3
Aware about of duration of work	37.7	45.9	14.8
Aware about unemployment allowances	23.0	39.3	36.1
Aware about social audit	41.0	32.8	24.6
Aware about job card should be issued within 15 days of application	52.5	39.3	6.6
Aware about employment will be given 15 days of application for work	62.3	31.1	4.9
Aware about accident provision	59.0	32.8	6.6

Source: primary data

The table shows the awareness level of beneficiaries under MGNREGS. The table clearly says that, majority of the respondents are highly aware about the given above factors except unemployment allowances and duration of work. With regard to duration of work and unemployment allowance, majority of the respondents are aware.

SCOPE FOR FUTURE RESEARCH

The future scope of this work is to carry out the analysis by using various other suitable methods and by using other data mining techniques. Its scope for future work can also be extended in the part of gathering data from the implementing officials from their perspective and analyze. Hence the data collected in this paper is collected from the workers point of view. (S.prakasam, 2015)

The NREGA is a new life line of the rural people who earn their livelihood as wage earners. It also gears up the social relationship among the rural people which is a pre requisite condition to build a strong society or a nation. It also reduces the gender difference for some works which are in practice in rural areas. It is also observed that female workers, both urban and rural, receive lesser wages than their male counterparts for doing the same jobs. The Act of the MGNREGA removed the gender difference in wages. The right to participate in works for women was made compulsory as per the Act of MGNREGA that there must be at least 33% participation for women. Some suggestions are incorporated here on the basis of literature observations.

1. All the programmes under MGNREGA must be well planned well ahead of time with a definite time frame for completion.
2. State MGNREGA has much more to do to strengthen the *Panchayati* Raj System, curtailment of direct intervention of other departments or agencies associated with it, would be a welcome step in this regard. The village administration should be brought down to *Taluk* level or lower level so that all the development programmes under MGNREGA can reach the villages situated at a distance from Development Block.
3. Present target of 100 days employment per house hold should be ensuring strictly.
4. Wage rate should have parity with outside rate and ongoing price hike which would reduce the migration of labour from village to nearby township or city.
5. More transparency is needed about the sanctioned work and financial involvement therein.
6. Auditing may be done through an extra government agency in addition to *Gram Panchayat* to check mishandling of fund.
7. *Panchayat* should be empowered financially and job responsibility should be distributed to all the elected members.
8. Any kind of political intervention should be stopped.
9. Strengthening active citizenship is a must.
10. Build large scale citizen's awareness campaigns for generating demand side of NREGA.
11. Improve institutional capacities of *Gram Panchayat*.
12. Financial Inclusion – Banks & Insurance network must be extended.
13. People's participation through *Gram Sabhas* needs to be ensured.
14. Social Audits for transparency and accountability is a must.
15. Access to Information at every stage of implementation is quite necessary.
16. IT platform for placing all information in public domain.
17. Innovative use of ICT for development of financial products needs to be implemented.
18. An effective grievance redressal mechanism needs to be evolved.
19. A partnership with Academia, Media, Legal Fraternity and Financial Institutions is quite necessary. (Das, 2013)

CONCLUSION

Thus, from the above discussion we can conclude that the government is now more serious about the poverty eradication from India. The government of India has also taken significant steps towards enhancing the participation of grass root bodies in the implementation of poverty alleviation programmes. The socio-economic programmes are now more target oriented and putting direct assault on poverty. Programmes like MGNREGA should be given in the planning process; so that the poverty from villages can be reduced to great extent. The success and effectiveness of these programmes will depend upon the sustained, intelligent and enthusiastic involvement and cooperation of the village community. (sharma, 2013). The MGNREGA has affirmative impact on empowerment pattern of

women. Women have benefited both as individuals and community. Women are benefited individually because they are capable to earn separately, spend some money for their requirements, contribute in family expenditure etc. The gained benefits of women as society can be understood by increased presence in the grama sabha, increasing number of women in speaking out in the meeting, increasing ability of interaction etc. but the poor implementation across the nation accrued the gender sensitiveness of this act mainly in north-eastern states. Certain initiatives and changes should be taken to get rid of these barriers. The precious gains should not be derailed for poor implementation.

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A COMPARATIVE ANALYSIS OF THE ROLE OF AGRICULTURAL POLICIES AS DRIVERS OF GROWTH AND DEVELOPMENT OF THE AGRICULTURAL SECTOR IN NIGERIA, 1981-2014

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ABSTRACT

A comparative analysis of the role of agricultural policies and programmes in driving growth and development of the agricultural sector in Nigeria between 1981 and 2014 was done in this study. This paper divided the study period into four policy periods starting from 1981 and ending in 2014. The paper used the periods of implementation as the basis for grouping the policy or policies. Graphs, descriptive statistics, and ANOVA were adopted as the tools for data analysis. It was found that successive agricultural policies has impacted positively on a majority (i.e. four out of six) of the agricultural growth and development indicators. But when compared with other sectors and indicators like the industrial sector and food import, the study found that the agriculture sector despite the various agricultural policies performed poorly. The study concluded that, though the policies and programmes has had significant impact on the selected agricultural growth and development indicator, it has not been able to make the agricultural sector outperform the industrial sector and produce enough food to make the nation food sufficient. It was therefore recommended that that the appropriate authorities should dedicate more funds to the agricultural sector and also strategically improve on existing agricultural policies and programmes.

KEYWORDS

agricultural policy, agricultural growth, agricultural development.

JEL CODE

Q18.

1. INTRODUCTION

Mathew and Mordecai (2016) has highlighted the importance of the agricultural sector as the provider of food and capital good (e.g., raw materials) when the sector is performing optimally and efficiently. But the performance of the agricultural sector is predicated, among other factors, on the design and effective implementation of well-conceived agricultural policies and programmes. In the opinion of Mitchel (2005), the growth and development of the agricultural sector is often preceded by the implementation of policies/programmes that has the capacity of improving (in terms of growth and development) every segment or sub-sector of agricultural sector. Dating back to the 1960's, series of successive policies and programmes have been designed and implemented in Nigerian agricultural sector with the aim of addressing challenges and problems evident in the sector. Each of these policies/programmes have least one of increasing output, provision of raw materials for the industrial sector, and employment generation in the sector as their objective(s). Olayemi (1998) categorized the different agricultural policies and strategies peculiar to Nigeria as (i) exploitative; (ii) agricultural market; (iii) direct government production; and (iv) integrated rural development. These policies are aimed at establishing a system of sustainable agricultural financing schemes capable of providing macro and micro credit facilities. Despite numerous laudable agricultural programmes like National agricultural and development authority (NALDA), National Fadama Development Projects (NFDP), the Agro Youth Centre and others, productivity seems not to have improved significantly. But this paper therefore found it worthy to investigate the extent to which the growth and development of the agricultural sector has been influenced by successive policies. In specific terms, this paper examined the relative effect of successive policies in the sector on:

- i. growth in agricultural activities as evident in the contribution of the sector to the aggregate output;
- ii. increase in foreign exchange earnings from export of agricultural raw material and food; and
- iii. development of agricultural sector as evident in the use of machinery, import of agricultural raw materials, and growth in value added by the agricultural sector.

Hypotheses will also be tested to examine the existence or non-existence in significant variation in the selected agricultural growth and development indicator during the different periods of some selected agricultural policies. It is worthy of mention that choice of agricultural policies examined in this paper was determined by the data constraint. This paper is further organized into literature review, method of study, results and analysis from data collected, and conclusion/recommendation.

2. LITERATURE REVIEW

Theoretical Review: Revolution in agriculture, according to Eicher and Witt (1964), predated productivity and economic development in most economies of the world. David Ricardo, in his principle of political economy and taxation, extensive discussed capital and the role agriculture plays in its formation. Ricardo maintained that slow or poor growth in agricultural productivity will eventually affect the output from the non-agricultural sector which will by extension affect the

process of capital formation. Citing Kuznets (1965), Wilson (2002) asserted that the emergence and growth of other sectors and expansion in international trade in an economy depends on agriculture.

Conceptualizing Agricultural Policies: Klein (1974) defined policy as a governmental course of action designed to influence the future behaviour of the economy. In a mixed economy like Nigeria, different government agencies are saddled with the responsibility of formulating and implementing policies. These policies involve a host of separate decision that conflict with each other. Agricultural policies represent public action taken to improve the well-being and economic opportunities of farmers and well the economy. The Agricultural Research Council of Nigeria (ARCN) also defined agricultural policy as a document borne out of the synthesising of various frameworks and government action plans intended to spur growth and development in the agricultural sector. In specific terms, the major aim of agricultural policies is to achieve self-sustaining growth that is capable of structurally transforming the agricultural sector as well as its sub-sectors and also improve general living condition in Nigeria. Pass, Lowes and Davies (1999) defined agricultural policy as a policy concerned both with protecting by subsidizing farm prices and incomes and with promoting greater efficiency by encouraging farm consolidation and mechanization.

A simple definition of policy serves a limited purpose, policy has a general common sense meaning and it is also used in a technical sense by scholars. It is utilized in at least four different ways. First, as a philosophical concepts or distance that justifies the action at a community, organization political agencies or the state in their respective efforts to set the framework for solution to common problem. This policy idea captures the public corporate or private spheres or domains of action. The second usage is rather pragmatic. Policy is viewed as an end product consisting of either document or conclusion drawn by responsible authorities which clearly expresses their views on problem demanding action and how they plan to deal with them with available resources. We have in recent years heard of number of pronouncement by government on many public issues; and also seen the publication on policy documents is wild range of fields including agriculture. A third usage is strategic. The policy idea keys emphasis on the fundamental process through which an organization provides stability and orderly change while planning to capture future desired goals. Finally, policy is used as the end result in the sense that, policy is a guide for the achievement of defined goal. In Nigeria context agricultural policy falls in the second stage although the intention of the government has always been in the fourth stage usage of the term policy (Uchendu 2000).

Sub-policies that acts as growth facilitator in the sector forms a support base of agricultural policies. Each of the factors of production are addressed by different sub-policies in every agricultural policy. For instance, just as a sub-policy covers issues related to farm mechanization another takes care of credit and insurance issues. Policy implementation in the agricultural sector are not done in isolation. Rather they are moderated by other macroeconomic policies which provides an enabling environment for simultaneous growth of the sector and other existing sectors. Institutions, according to Okezie et al. (2013), are also integral part of agricultural policies and programmes. The establishment of agricultural research institutes like the National Cereals Research Institute and the Cocoa Research Institute of Nigeria were integral part of plans as imbedded in an agricultural policy (Okezie et al., 2013). A summary of successive agricultural policies that has been implemented in Nigeria between 1980 and 2014 was done by Iwuchukwu and Igbokwe (2012). They are as follows:

- (i) Green Revolution (GR): inaugurated in April 1980, this agricultural programme was designed to increase food and raw material production. Also, the programme was aimed at enhancing livestock and fish production to the extent of adequately attending to household needs and export of surplus for earning foreign exchange.
- (ii) Directorate for Food Road and Rural Infrastructure (DFRI): Initiated in January 1986, the directorate was established as part of effort to domesticate the World Bank's implemented SAP programme in Nigeria. Improvement in standard of living and quality of life of Nigerian with special focus on rural dwellers was the major aim of the directorate.
- (iii) National Agricultural Land Development Authority (NALDA): Established more lately than the Land Use Decree and Act (in 1978 and 1979 respectively) in 1992, the authority was established to promote better use of rural lands in Nigeria. With respect to agricultural growth and development, the authority has as use of land for food security and sufficiency as its aim. By this, the authority is aimed at achieving improvement in standard of living and increase in job opportunity for the larger population of Nigerian residing in rural areas.
- (iv) Family Support Programme (FSP)/ Family Economic Advancement Programme (FEAP): While the FSP was established in 1996, the FEAP was earlier in 1994. Though it focuses on other sectors of the economy like health and education, the programmes paid special attention to agricultural development with focus on women as the vulnerable group.
- (v) National FADAMA Development Project (NFDPP): This agriculture intervention project was implemented in phases. The phase I (i.e. FADAMA I) of the project was designed and implemented in 1993 and was concluded in the year 1999. Jointly financed by the Federal Government of Nigeria and the World Bank, FADAMA I, FADAMA II & III (which were implemented between 1999 and 2013) were aimed at increasing crop yield through well irrigated expanded farms, improving capacity of farmers, increase livestock production, and value addition to agricultural output through agro processing. Poverty reduction and income generation was the expected outcome of the projects.
- (vi) National Economic Empowerment and Development Strategy (NEEDS): Initiated in 1999, this strategy made provision for key sectors of the economy including the agricultural sector. The assistance rendered to these sectors under this strategy is with the intent of boosting aggregate output, generate employment, and improve standard of living of citizens of the nation. Hence some targets such as 6% growth rate in agricultural output through investment in irrigation infrastructure and machinery were set by the strategy to be realized in the year 2007. As complements to NEEDS, state governments and local governments also established state (SEEDS) and local (LEEDS) strategies to reduce the rate of rural-urban migration and enhance rural development.
- (vii) National Special Programme on Food Security (NSPFS): Launched nationwide in 2002, this agricultural programme was also designed to boost food output and reduce the level of poverty in rural areas of the country. Providing assistance (through trainings, extension services, etc.) to rural farmers to help increase their crop production and income generation was the objectives of the programme.
- (viii) Root and Tuber Expansion Programme (RTEP): The RTEP came into full implementation in the year 2003 but only in 26 states of the federation. Increase in food production, achieve food security and reduction in rural poverty was the target of the RTEP. Moreover, a stimulation of nationwide demand for cheaper staple food (e.g. cassava and yam) as against the rising demand for other expensive foods (e.g. rice) was also one of the key objectives. Hence, the planned introduction of different improved varieties of roots and tubers to approximately 350,000 farmers.

EMPIRICAL REVIEW

Jose et al (2013) used a supply-side approach to analyse the role of agricultural spending on vulnerability to food insecurity investigating food security in Bolivia. The study found that levels of public agricultural spending on infrastructure and research are positively associated with high vulnerability.

Monye-Emina (2009) examined various revival efforts over the years in the Nigeria agricultural sector. Using historical analysis the author found that, despite these efforts, the once dominant sector has since been dominated by oil and gas sector. The author identified socio-economic, institutional, structural, and political factors as the impediments to achievement of the goals of the different revival policies. Hence, the insignificant effect of these revival efforts in the agricultural sector.

Ugwu and Kanu (2012) examined how reform strategies (i.e. exploitative, agricultural market, direct government production, and integrated rural development) has affected key indicators like increase in food and raw material production, increase in receipts of foreign exchange due to export of crops and raw materials, and increased investment in the agriculture sector. The authors found that, despite the various reforms, the agriculture sector has performed poorly as against the set targets.

Ojeka et al (2016) used time series data to examine the constraints to agricultural sector growth in Nigeria between 1970 and 2010. From the estimated ECM model, rainfall, exchange rate and lag one of food export were the significant predictors of agricultural output in Nigeria. However, among other, food imports was one of the factors impeding the growth and development of the agricultural sector.

Muftaudeen and Abdullahi(2014) estimated a multivariate VECM to examine the effect of macroeconomic policies (both monetary and fiscal) on crop production between 1978 and 2011. The study found that crop production responded to a shock in government spending (fiscal policy), agricultural credit, interest rate and exchange rate (monetary policy). An expansionary fiscal policy mixed with a realistic exchange rate was recommended.

3. METHOD OF STUDY

Data used in this paper are collected from the CBN statistical bulletin of 2015 and the World Bank data repositories. This paper only considered agricultural policies and programmes that were implemented between 1981 and 2014. In effort to compare the effect of the different implemented policies and programmes, this paper divided the study period into four different periods based on the existence or simultaneous existence of policies and programmes during a particular period. Data collected were analysed using graphs and descriptive statistics (i.e. mean, maximum and minimum). Test of hypotheses is done using the statistical tool of analysis of variance (ANOVA). The four groups of agricultural policies and programmes are as follows:

- i. Group A (GR) : 1981-1985;
- ii. Group B (DFR1): 1986-1992;
- iii. Group C (NALDA, FSP&FEAP, and FADAMA I): 1993-1999; and
- iv. Group D (NEEDS, NSPFS, RTEP, and FADAMA II&III): 2000-2014.

Data on the following agricultural sector growth and development indicator were collected and used in this paper:

- i. Percentage Contribution of the Agricultural Sector to GDP;
- ii. Increase in Agricultural Activities;
- iii. Mechanization of Agricultural Activities;
- iv. Agriculture Value Added;
- v. Agricultural Raw Material Export;
- vi. Food Export;
- vii. Percentage Contribution of the Industrial Sector to GDP;
- viii. Industrial Value Added; and
- ix. Food Import

4. RESULTS AND ANALYSIS

4.1 AGRICULTURAL POLICIES AND THE CONTRIBUTION OF THE AGRICULTURAL SECTOR TO THE GDP

FIGURE 1: PERCENTAGE CONTRIBUTION OF THE AGRICULTURAL SECTOR TO NIGERIA’S GDP, 1981-2014

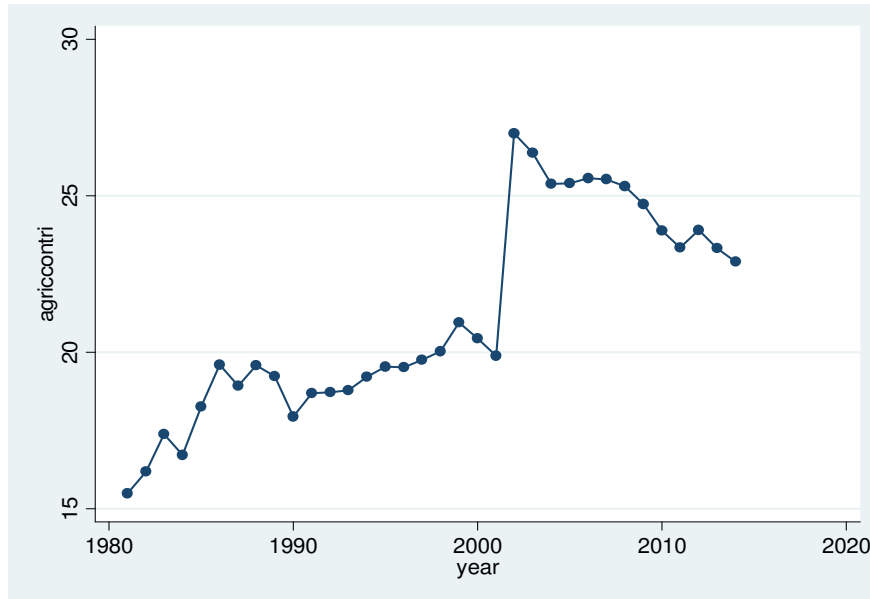


Figure 1 above shows that there was inconsistency in the percentage contribution of the agricultural sector to the GDP in Nigeria between 1981 and 2014. But the period covering 1993 to 1999 (i.e. period of simultaneous implementation of National Agricultural Land Development Authority, NALDA, FSP&FEAP, and FADAMA I) proved to be different as the graph showed that, though the great rate was slow, the percentage contribution of the agricultural sector increased consistently. The highest percentage contribution of the agricultural sector to the GDP was recorded in the period covering 2000-2014 (i.e. period of simultaneous implementation of NEEDS, NSPFS, RTEP, and FADAMA II&III).

TABLE 1: AGRICULTURAL POLICIES AND PERCENTAGE OF CONTRIBUTION OF AGRICULTURAL SECTOR TO GROSS DOMESTIC PRODUCT IN NIGERIA, 1981-2014

Agric. Policy/Policy Periods	Mean	Min.	Max.	Analysis of Variance (ANOVA): <i>F-Stat.</i>
Green Revolution (GR) (1981-1985)	16.81	15.50	18.26	42.78*** [2.92] (0.00)
DFR1 (1986-1992)	18.96	17.95	19.60	
NALDA, FSP&FEAP, and FADAMA I (1993-1999)	19.69	18.79	20.95	
NEEDS, NSPFS, RTEP, and FADAMA II&III (2000-2014)	24.20	19.89	26.99	

Source: Authors' Computation

Values in [...] and (...) are the F-critical and probability statistics. ***implies statistical significance of the F-statistics.

Tables 1 above shows that the mean percentage contribution of the agricultural sector to the GDP was highest and lowest during the periods 2000-2014 and 1981-1985 at 24.20% and 16.81% respectively. The minimum and maximum percentage contribution of the agricultural sector to the GDP were recorded during the periods 1981-1985 and 2000-2014 at 15.50% and 26.99% respectively.

The hypothesis of no significant variation in the percentage contribution of the agricultural sector to the GDP under the different agricultural policy periods can be rejected. The F-statistics (i.e. 42.78) from the analysis of variance (ANOVA) also result presented in Tables 1 is statistically significant. Hence, there is a significant variation in the percentage contribution of the agricultural sector to the GDP under the different agricultural policy periods.

FIGURE 2: AGRICULTURAL LAND AS PERCENTAGE OF THE TOTAL LAND IN NIGERIA, 1981-2014

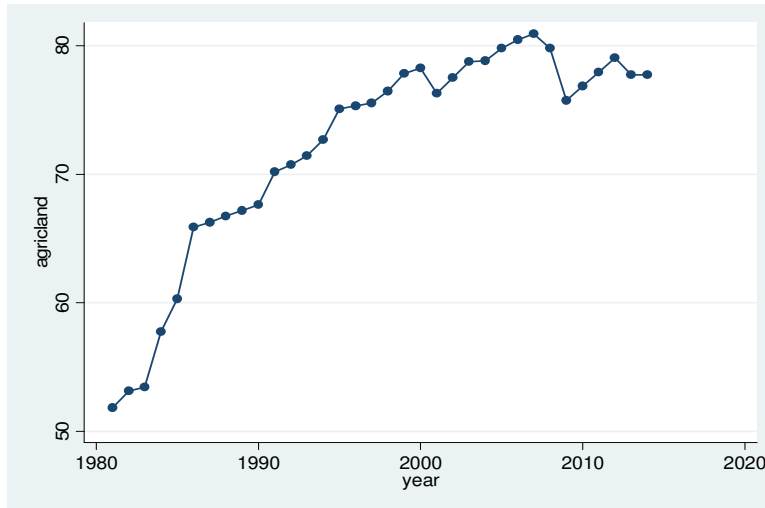


Figure 2 above shows that the percentage of the agricultural land increased consistently from 1981 to 1999. Though there were some instances of a reduction in the percentage of the agricultural land during the policy period covering 2000 to 2014 (i.e. period of simultaneous implementation of NEEDS, NSPFS, RTEP, and FADAMA II&III), a greater part of the period was characterized by increase in percentage of the agricultural land. The highest percentage of the agricultural land was also recorded in the period covering 2000-2014.

TABLE 2: AGRICULTURAL POLICIES AND SHARE OF AGRICULTURAL LAND IN NIGERIA, 1981-2014

Agric. Policy/Policy Periods	Mean	Min.	Max.	Analysis of Variance (ANOVA): <i>F-Stat.</i>
Green Revolution (GR) (1981-1985)	55.30	51.85	60.31	164.81***
DFR1 (1986-1992)	67.80	65.88	70.76	[2.92]
NALDA, FSP&FEAP, and FADAMA I (1993-1999)	74.92	71.44	77.85	(0.00)
NEEDS, NSPFS, RTEP, and FADAMA II&III (2000-2014)	78.39	75.76	80.92	

Source: Authors' Computation

Values in [...] and (...) are the F-critical and probability statistics. ***implies statistical significance of the F-statistics.

Tables 2 above shows that the mean percentage of the agricultural land was highest and lowest during the periods 2000-2014 and 1981-1985 at 55.30% and 78.39% respectively. The minimum and maximum percentage of the agricultural land were recorded during the periods 1981-1985 and 2000-2014 at 51.85% and 80.92% respectively.

The hypothesis of no significant variation in the percentage of the agricultural land under the different agricultural policy periods can be rejected. The F-statistics (i.e. 164.81) from the analysis of variance (ANOVA) result also presented in Tables 2 is statistically significant. Hence, there is a significant variation in the percentage of the agricultural land under the different agricultural policy periods. This shows that there is a significant increase in agricultural activities under the different agricultural policy periods.

4.3 AGRICULTURAL POLICIES AND MECHANIZATION OF AGRICULTURAL ACTIVITIES

FIGURE 3: TOTAL NUMBER OF AGRICULTURAL MACHINERY IN NIGERIA, 1981-2014

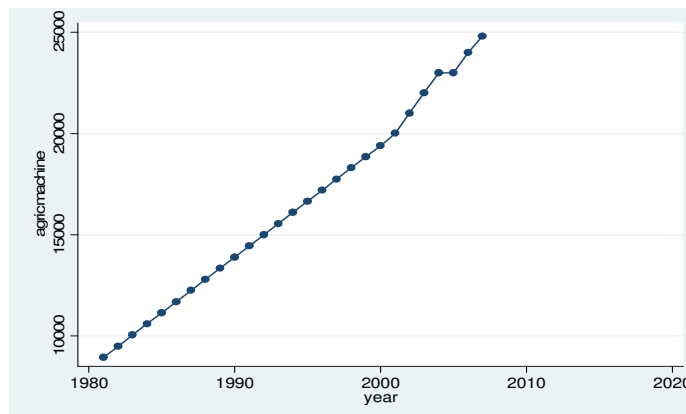


Figure 3 shows that the number of agricultural machinery, though remained unchanged between 2011 and 2012, increased consistently from 1981 to 2014. The highest number of agricultural machinery was recorded in the period covering 2000-2014.

TABLE 3: NUMBER OF AGRICULTURAL MACHINERY IN NIGERIA, 1981-2014

Agric. Policy/Policy Periods	Mean	Min.	Max.	Analysis of Variance (ANOVA): <i>F-Stat.</i>
Green Revolution (GR) (1981-1985)	10050	8950	11150	90.55***
DFR1 (1986-1992)	13350	11700	15000	[3.03]
NALDA, FSP&FEAP, and FADAMA I (1993-1999)	17200	15550	18850	(0.00)
NEEDS, NSPFS, RTEP, and FADAMA II&III (2000-2014)	22151	19400	24800	

Source: Authors' Computation

Values in [...] and (...) are the F-critical and probability statistics. ***implies statistical significance of the F-statistics.

Tables 3 above shows that the mean number of agricultural machinery was highest and lowest during the periods 2000-2014 and 1981-1985 at 22,151 and 10,050 respectively. The minimum and maximum number of agricultural machinery were recorded during the periods 1981-1985 and 2000-2014 at 8,950 and 24,800 respectively.

The hypothesis of no significant variation in the number of agricultural machinery under the different agricultural policy periods can be rejected. The F-statistics (i.e. 90.55) from the analysis of variance (ANOVA) result also presented in Tables 3 is statistically significant. Hence, there is a significant variation in the number of agricultural machinery under the different agricultural policy periods. This shows that there is a significant increase in the mechanization of agricultural activities under the different agricultural policy periods.

4.4 AGRICULTURAL POLICIES AND AGRICULTURAL SECTOR VALUE ADDED

FIGURE 4: AGRICULTURE VALUE ADDED GROWTH RATE IN NIGERIA, 1981-2014

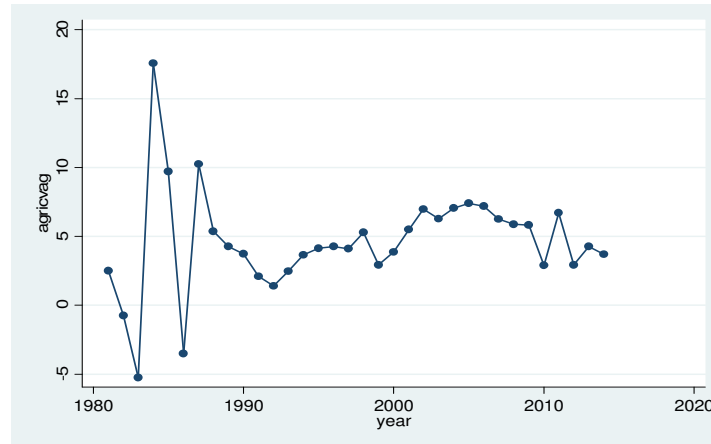


Figure 4 shows that there was inconsistency in the agricultural sector value added growth in Nigeria between 1981 and 2014. The growth rate majorly low and concentrated around a particular growth rate as shown in the graph. But the policy period covering 1981 to 1985 proved to record the highest agricultural sector value added growth rate as also shown by the graph.

TABLE 4: AGRICULTURAL VALUE ADDED GROWTH RATE IN NIGERIA, 1981-2014

Agric. Policy/Policy Periods	Mean	Min.	Max.	Analysis of Variance (ANOVA): <i>F-Stat.</i>
Green Revolution (GR) (1981-1985)	4.77	-5.24	17.58	0.58
DFR1 (1986-1992)	3.38	-3.50	10.27	[2.92]
NALDA, FSP&FEAP, and FADAMA I (1993-1999)	3.84	2.47	5.29	(0.63)
NEEDS, NSPFS, RTEP, and FADAMA II&III (2000-2014)	5.52	2.92	5.52	

Source: Authors' Computation

Values in [...] and (...) are the F-critical and probability statistics. ***implies statistical significance of the F-statistics.

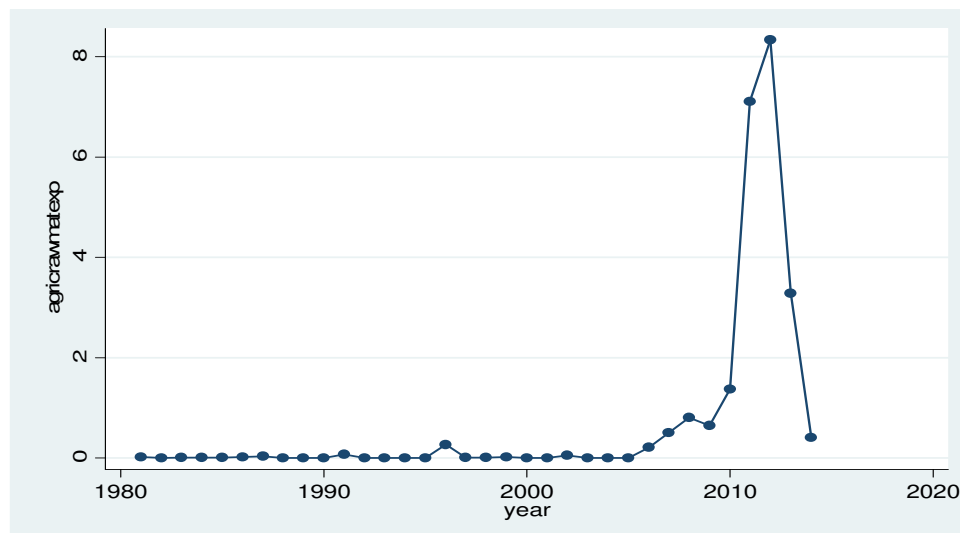
Tables 4 above shows that the mean agricultural sector value added growth rate was highest and lowest during the periods 2000-2014 and 1981-1985 at 22,151 and 10,050 respectively. The minimum and maximum number of agricultural sector value added growth rate were recorded during the period 1981-1985 at -5.24% and 17.58% respectively.

The hypothesis of no significant variation in the agricultural sector value added growth rate under the different agricultural policy periods cannot be rejected. The F-statistics (i.e. 0.58) from the analysis of variance (ANOVA) result also presented in Tables 4 is statistically significant. Hence, there is no significant variation in the agricultural sector value added growth under the different agricultural policy periods. This shows that there is a significant increase in the agricultural sector value added growth rate under the different agricultural policy periods.

4.5 AGRICULTURAL POLICIES AND AGRICULTURAL RAW MATERIAL EXPORT

Figure 5 shows that agricultural raw material export was consistently low for most part of the period 1981-2014. Agricultural raw material export only increased for some part of the period covering 2000-2014. Also, the policy period covering 2000 to 2014 proved to record the highest agricultural raw material export as also shown in the graph.

FIGURE 5: AGRICULTURAL RAW MATERIAL EXPORT IN NIGERIA (\$US BILLION), 1981-20



Tables 5 shows that the mean agricultural raw material export value was highest and lowest during the periods 2000-2014 and 1981-1985 at N1.51 billion and N0.01 billion respectively. The minimum agricultural raw material export value was recorded during all the periods; as and maximum agricultural raw material export value was recorded during the period 2000-2014 at N8.34 billion.

The hypothesis of no significant variation in agricultural raw material export under the different agricultural policy periods cannot be rejected. The F-statistics (i.e. 1.87) from the analysis of variance (ANOVA) result also presented in Tables 5 is statistically significant. Hence, there is no significant variation in agricultural raw material export under the different agricultural policy periods. This shows that there is a significant increase in agricultural raw material export under the different agricultural policy periods.

TABLE 5: AGRICULTURAL RAW MATERIAL EXPORT IN NIGERIA, 1981-2014

Agric. Policy/Policy Periods	Mean	Min.	Max.	Analysis of Variance (ANOVA): <i>F-Stat.</i>
Green Revolution (GR) (1981-1985)	0.01	0.00	0.02	1.87 [2.92] (0.17)
DFR1 (1986-1992)	0.02	0.00	0.07	
NALDA, FSP&FEAP, and FADAMA I (1993-1999)	0.04	0.00	0.26	
NEEDS, NSPFS, RTEP, and FADAMA II&III (2000-2014)	1.52	0.00	8.34	

Source: Authors' Computation

Values in [...] and (...) are the F-critical and probability statistics. ***implies statistical significance of the F-statistics.

4.6 AGRICULTURAL POLICIES AND FOOD EXPORT

FIGURE 6: FOOD EXPORT IN NIGERIA (\$US BILLION), 1981-2014

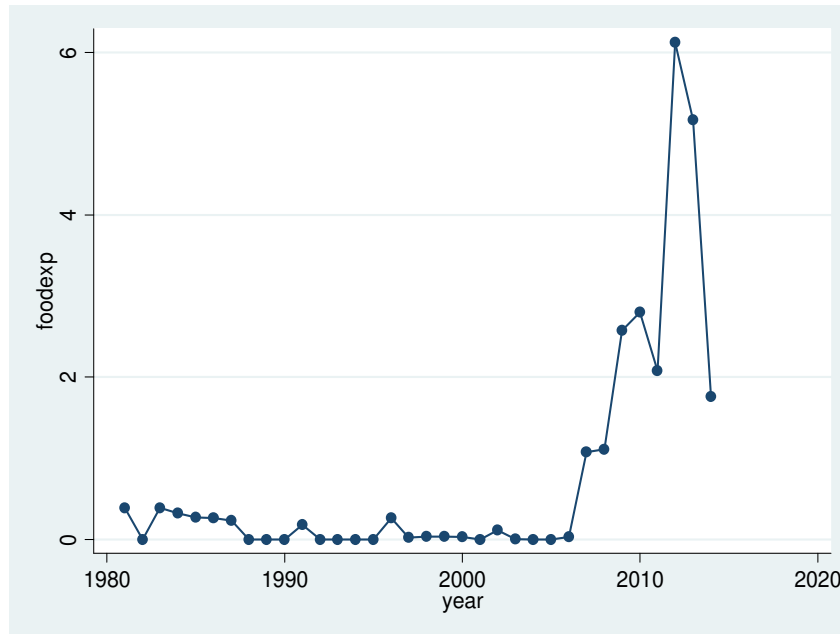


Figure 6 shows that food export was consistently low for most part of the period 1981-2014. Food export only increased for some part of the period covering 2000-2014. Also, the policy period covering 2000 to 2014 proved to record the highest food export as also shown in the graph.

TABLE 6: FOOD EXPORT IN NIGERIA, 1981-2014

Agric. Policy/Policy Periods	Mean	Min.	Max.	Analysis of Variance (ANOVA): <i>F-Stat.</i>
Green Revolution (GR) (1981-1985)	0.28	0.00	0.39	3.07*** [2.92] (0.04)
DFR1 (1986-1992)	0.10	0.00	0.26	
NALDA, FSP&FEAP, and FADAMA I (1993-1999)	0.05	0.00	0.27	
NEEDS, NSPFS, RTEP, and FADAMA II&III (2000-2014)	1.53	0.00	6.12	

Source: Authors' Computation

Values in [...] and (...) are the F-critical and probability statistics. ***implies statistical significance of the F-statistics.

Tables 6 shows that the mean food value was highest and lowest during the periods 2000-2014 and 1993-1999 at N1.53 billion and N0.05 billion respectively. The minimum food export value was recorded during all the periods; as and maximum food export value was recorded during the period 2000-2014 at N6.12 billion.

The hypothesis of no significant variation in agricultural raw material export under the different agricultural policy periods can be rejected. The F-statistics (i.e. 3.07) from the analysis of variance (ANOVA) result also presented in Tables 6 is statistically significant. Hence, there is a significant variation in food export under the different agricultural policy periods. This shows that there is a significant increase in food export under the different agricultural policy periods.

4.7 EXAMINING THE PERFORMANCE OF THE AGRICULTURAL SECTOR: A COMPARATIVE ANALYSIS

4.7.1 Comparing the Contribution of Agricultural and Industrial to GDP

FIG. 7: AGRICULTURAL SECTOR VS INDUSTRY SECTOR CONTRIBUTION TO GDP, 1981-2014

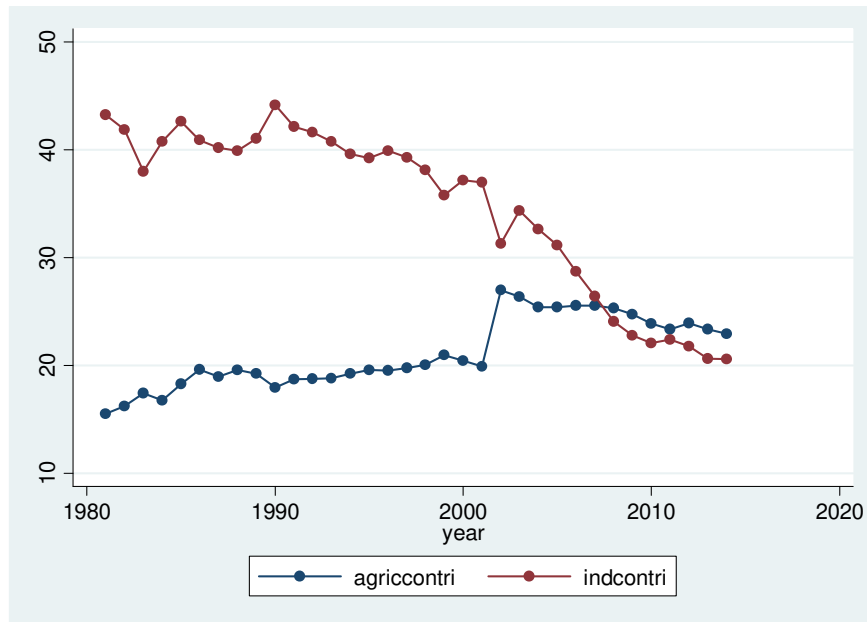


Figure 7 above shows that the percentage contribution of the agricultural and industrial sectors to the GDP of Nigeria during the period 1981-2014. The blue and brown connected line graph represents the percentage contribution of the agricultural and industrial to the GDP. Figure 7 shows that, for most part of the period, the percentage contribution of the agricultural sector to the GDP was way below percentage contribution of the industrial sector to the GDP. But the percentage contribution of the agricultural sector to the GDP rose above the percentage contribution of the industrial sector to the GDP between 2008 and 2014. This implies that the effect of agricultural policies/programmes implementation only started making agricultural sector outperform the industrial sector from 2008 to 2014. Moreover, Tables 7 shows that the mean percentage contribution of the agricultural and industrial sectors are 21.11% and 34.77% respectively. While the least minimum percentage contribution to the GDP was made by the agricultural sector at 15.50%, the maximum percentage contribution to the GDP was made by the industrial sector at 44.19%. Thus, we can say that the industrial sector, during the period under consideration, has dominated the agricultural sector as far as percentage contribution to the GDP is concerned.

TABLE 7: AGRICULTURAL AND INDUSTRIAL SECTOR CONTRIBUTION TO GDP, 1981-2014

Real Sectors	Mean	Min.	Max.
Agricultural Sector	21.11	15.50	26.99
Industrial Sector	34.77	20.54	44.19

Source: Authors' Computation

4.7.2 Comparing the Agriculture and Industry Value Added Growth Rate

FIG. 8: AGRICULTURE VALUE ADDED GROWTH VS INDUSTRY VALUE ADDED GROWTH, 1981-2014

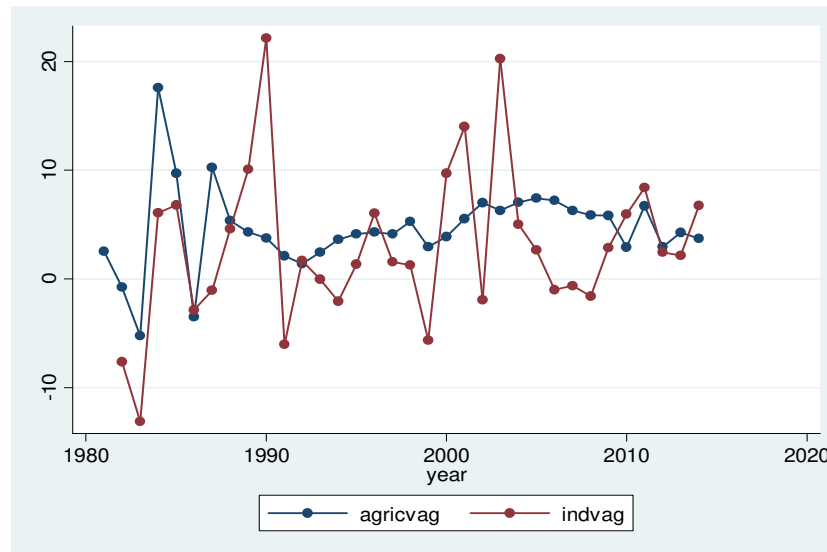


Figure 8 above shows the agriculture and industry value added growth rate during the period 1981-2014. The blue and brown connected line graph represents the agriculture and industry value added growth rate respectively. Figure 8 shows that, for most part of the period, the agriculture value added growth rate was above the agriculture value added growth rate. But the graph also shows that the industry value added growth rate recorded the highest when compared with the agriculture value added growth rate. This implies that industry value added growth rate was still highest despite the various agricultural policies/programmes implemented over the years.

Moreover, Tables 8 shows the mean agriculture and industry value added growth rate. The least minimum value added growth rate was evident in the industrial sector at -13.09%; as the highest maximum value added growth rate was also evident the industrial sector at 22.12%. We can therefore say that though the

agriculture value added growth rate dominated the industry value added growth rate for most part of the period, the highest value added growth rate was recorded in the industrial sector.

TABLE 8: AGRICULTURAL AND INDUSTRIAL SECTOR VALUE ADDED GROWTH RATE, 1981-2014

Real Sectors	Mean	Min.	Max.
Agricultural Sector	4.63	-5.24	17.58
Industrial Sector	2.97	-13.09	22.12

Source: Authors' Computation

4.7.3 Comparing Food Export and Food Import

FIG. 9: FOOD EXPORT VS FOOD IMPORT, 1981-2014

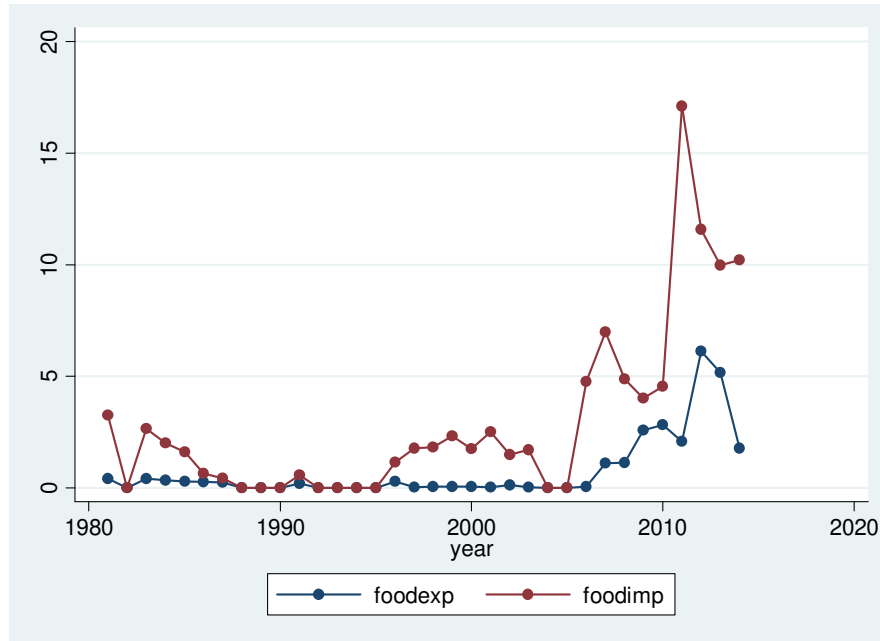


Figure 9 above shows food export and import during the period 1981-2014. The blue and brown connected line graph represents the food export and import respectively. Figure 8 shows that, for most part of the period, food import was above food export. But the graph also shows food export only equalled food import in some years. This implies that the monetary value of food import is still higher than the monetary value of food export despite the various agricultural policies/programmes implemented over the years.

Moreover, Tables 9 shows the mean food export and import. While the mean of food export was N2.97 billion, the mean of food import was N0.75 billion. Both food export and import recorded the minimum value of N0.00 billion. The value of food import rose to as high as N17.11 as the highest monetary value of food export recorded during this period is N6.12 billion. We can therefore say that foreign exchange earned from export of food falls way below what was spent in importing food. Despite the various agricultural policies implemented, food import still outweighs food export implying that Nigeria is yet to attain food sufficiency.

TABLE 9: FOOD EXPORT AND IMPORT IN NIGERIA, 1981-2014

International Trade (Food)	Mean	Min.	Max.
Food Export	0.75	0.00	6.12
Food Import	2.97	0.00	17.11

Source: Authors' Computation

CONCLUSION

A review of the different agricultural policies and programmes implemented over the years shows a variation in objectives. These varying objectives are not unconnected with efforts to revitalize the agricultural sector based on findings from appraisal of previous policies and programmes. The preceding conclusion is evident in the result and analysis presented in this work. From our analysis, we can conclude that the successive implementation of policies and programmes has had great impact on the growth and development of the agricultural sector. While the some various successive policies or policies mix did not significantly impacted on agriculture growth and development indicators like agricultural raw material export and agriculture value added growth rate respectively; these policies had obvious impact on the contribution of the agricultural Sector to the GDP, engagement in agricultural activities, mechanization of agricultural activities, and food export. Successive policies or policies mix increased contribution of the agricultural Sector to the GDP, engagement in agricultural activities, mechanization of agricultural activities, and food export. Lastly, this study concludes that, though the policies and programmes has had significant impact on the selected agricultural growth and development indicator, it has not been able to make the agricultural sector outperform the industrial sector and produce enough food to make the nation food sufficient. It is therefore pertinent that the appropriate authorities should dedicate more funds and also strategically improve on existing agricultural policies and programmes

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SATISFACTION LEVELS OF THE CUSTOMERS IN TELECOM SERVICE PROVIDERS – A STUDY IN ANANTAPURAMU DISTRICT

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ABSTRACT

Satisfaction levels of the customers play a vital role in developing any sector; particularly in telecom sector, the competition between the service providers is very high. From last 15 years or more telecom service providers are providing telecom services to their customers but still they are not in a position to satisfy 100% to their customers, due to this reason the customers of one service provider attracted to another service provider and finally decided to use second sim service from different service provider. The important service providers in the study area are 1. Airtel, 2. BSNL, 3. Idea, 4. Vodafone, 5. Reliance, 6. Tata Docomo and 7. Uninor.

KEYWORDS

Airtel, BSNL, Idea, Vodafone, Reliance, Tata Docomo, Uninor, satisfaction levels of customers, customer care, network facility, value added service, cost effectiveness of service and promotional schemes.

JEL CODE

M31.

1. INTRODUCTION

The variables considered for the profile of the customer respondents are Age, Sex, Education, Occupation, Income, and Name of the service provider. These variables have their own influences on purchase decision of a particular service provider. Further information on important reasons and period of acquiring the telephone, monthly expenditure on telephone bill, awareness of CRM etc. change of service providers 1st and 2nd SIM holders and reasons are also collected from the customer respondents.

2. OBJECTIVES OF THE STUDY

1. To analyse new telecom sector policies and their impact on growth and structure of telecom service providers in telecom sector.
2. To assess the customer satisfaction level in subscribers of telecom service providers adopted CRM.
3. To estimate the attrition rate in telecom service providers subscriber base and
4. To evaluate the role of CRM in telecom service providers success.

3. METHODOLOGY – DATABASE

3.1 Primary data: Present study is based on both primary data and secondary data. The researcher has collected primary data by canvassing schedule from 1000 customers and 100 officials working in various telecom organizations on random basis. The customers includes business man, professionals, employees in govt. and private organizations, self employed persons, students, un-employees, house wives and persons working in un-organized sectors in Anantapuramu District.

3.2 Secondary data: The researcher has collected the secondary data from the reports of various telecommunication companies, journals and newspapers, important web sites of the various leading telecom companies and other service providing companies also have been used to collect the recent data. Libraries of various universities in the state were visited to collect the secondary data. The reports of the Department of Telecommunication of India and Telecom Regulatory Authority of India have been also made use of. The officials of various telecom companies were contacted to elicit information about the CRM strategies assisted in their organizations. The web sites of DoT, TRAI and COAI were also extensively used.

Text books of national and international standards were made use of to collect and analyze the secondary data. Various journals, newspapers and reports were referred to gather information on the subject entitled. The report on the economic survey of the government of India was used to elicit information about population and tele-density at various stages of growth of our country.

3.3 Statistical tools employed: Statistical tools such as percentages, averages and graphs were adopted to analyze the relationship between the growth of the customer base, the revenues and the market share of each company. Customer satisfaction levels has been measured with the use of six parameters i.e. Purchase level, Customer care level, Value Added services, Network, Cost/ Price and Promotional schemes.

4. LIMITATIONS OF THE STUDY

Like any research of social science this research topic entitled 'Customer Relationship Management; the study of the telecommunication sector at Anantapuramu District' is also not free from limitations. The main limitation includes:

1. No doubt the topic CRM and telecom are at the macro level but this research has been confined to the geographical boundaries of Anantapuramu District only.

5. REVIEW OF THE LITERATURE

The existing literature can be categorized into two parts (1) Conceptual Studies on CRM and (2) Research studies based on data on effects of CRM. Further the research studies conducted have been categorized into Foreign and Indian studies.

5.1 Conceptual studies related to evolution, concept meaning and advantages of CRM have been published in number of books and journals. The important among these are as follows.

CRM has been described, defined and conceptualized in several ways reflecting a variety of viewpoints of different authors. Some have defined it as a process; others as a strategy, a philosophy, a capability, or as a technological tool advocated by academicians and marketing authorities like kotler (1972)¹ Hankinson(1982)², Berry (1983)³, Dwyer, Schurr, and oh (1987)⁴, Paul(1988)⁵, O'Neal (1989)⁶ etc, for the success of business organizations. In the 90's and 00's, greenrooms (1990), MC Kenna (1991), Vavra (1992), Morgan and hunt (1994), sheath and Sisodia (1995), Ganesan (1997). Willcocks and Brown (2000), Croteau and Li, 2001), Clay comb and Martin, (2002) Zeithaml and Bitner, (2003) Payne and Frow (2004), Chan, (2005) Dimitriadis and Boulding et al. (2005). Meltzer (2006) Pathak and Rastogi (2007) Stevens, (2008) Croteau and Li (2009) Babatunde and Ajayi (2010)⁷ Nguyen and Papadopoulos (2011)⁸ Peppers and Rogers (2011)⁹ Nguyen & Mutum, (2012)¹⁰. Mahshid et al., (2012)¹¹ used the term 'Relationship marketing' and 'Customer Relationship Management' interchangeably according to convenience. But, in this Information age, organizations dealing with customers through suppliers and distribution channels have realized the need and advantages of meeting the customers face to face. Over the Past few years, customer's expectations have risen by leaps and bounds. Customers have become more demanding and desire

maximum value from products and service. The product life cycle has also been shortened drastically due to the fast changes in technology. Therefore companies require adequate strategies for moving information and products quickly throughout their supply Chain network.

5.2 FOREIGN STUDIES

1. **Richard A. Spreng, Scott B. Mackenzie and Richard W. Olshaysky et. al (1996)**¹² in their study empirically tested a comprehensive model of the determinants of consumer satisfaction. The model main conclusion states feelings of over-all satisfaction arise, when consumers compare their perceptions of performance to both their desires and satisfaction as the key determinants of over-all satisfaction. Further the model provides a better understanding of the mechanism that produces consumer satisfaction.
2. **Mithas & et.al., 2005, p.p. 201-209**¹³ in their study assessed the effect of CRM on customer knowledge and the customer's satisfaction. Data was collected from the senior managers of Information Technology in more than 300 institutions working in the USA. Results showed that the applications of CRM have a positive effect as they contribute to improve the knowledge of the customer and enhance the customer's satisfaction.
3. **Christopher Bull (2010)**¹⁴ paper offers some relatively rare insights on the use of CRM systems and the strategic impact on the processes of intermediation and disintermediation in order to improve customer service. The author adopted case study from April 2007 to 2008 using an interpretative approach. The research highlights some design characteristics and philosophical insights regarding CRM system approaches and also offers some useful practical insights on the impact of CRM in changes to the deployment of some intermediaries.
4. **Krishna and Khatri (2008)**¹⁵ in their study analyzed the antecedents of customer relationships in the telecommunication sector and observed that mobile industry is witnessed exceptional growth rates and amidst growing competition but in order to survive mobile operators have to provide value added services and understand what will lead customers to enter into a long term relationship with them. The results of the survey show Seven Desired Value Added Services (7DVAS), viz variety of services, price, advertisements, employee behaviour, and customer service, accuracy in billing and timely information help in building long term relationship with customers.
5. **Helen Cunha**¹⁶ for the purpose of her Ph.D dissertation undertook a study on Customer Relationship Management-a case study of telecom sector at Bangalore during 2005-06. The main objective of the study was to assess the impact of CRM in telecom sector in luring customers, customer satisfaction, retention and loyalty of customers. The researcher collected data from 2500 customers using telephone services on random basis though administering structured questionnaire. The researcher also collected data from 150 employees of telecom service providers based on stratified sampling method from the Bangalore city. The study shows that, the telecom service providers are successful in acquiring large number of subscribers because vast potentiality of untapped market in India by adopting CRM technology but failed in satisfying customers and identifying and retaining loyal customers for long. The main factors led to dissatisfy the customers are poor network availability, lack of initiative promotional services, poor customer care services, billing and payment facilities, cost effective and value added services.
6. **Uma Sankar Mishra, Bibhuti B. Mishra and Swagat Praharaj (2011)**¹⁷ Indian banking sector faces enormous challenges of attracting and retaining customers. The author revealed that the public banks are ahead of the private banks in attracting and retaining customers because of good personal relationship with the customers. Reasons for opening accounts with a bank by the customers are factors like convenient location, overall reputation, etc.

6. SATISFACTION LEVELS OF THE CUSTOMERS

To analyse the satisfaction levels of customers in telecom sector, I was conducted an empirical study in Anantapuramu district of Andhra Pradesh. For this purpose I selected 1000 mobile customers of different telecom service providers and 90 land line customers. In this study I observed one interesting factor that among 1000 mobile customers, 730 mobile customers were using second sim card for utilizing huge no of telecom services from different telecom service providers.

TABLE 1

Service Providers	Landline	Percentage to total	Mobile		% to total	
			M-1	M-2	M-1	M-2
BSNL	90	100	196	47	19.6	6.43
Airtel	--	--	466	168	46.6	23.01
Idea	--	--	76	72	7.6	9.86
Vodafone	--	--	108	67	10.8	9.19
Reliance	--	--	24	26	2.4	3.56
Tata Docomo	--	--	32	132	3.2	18.09
Uninor	--	--	98	218	9.8	29.86
Total	90	100	1000	730	100	100.00

Source: Primary Data

The above table reveals that, the data on a particular service provider chosen by the customer reveal that 90 (9%) of 1000 sample customer respondents have chosen BSNL for land line connections. All are post-paid customers. No other customer had chosen the other service provider regarding land line connection. All land line sample customers have chosen BSNL only. This clearly indicates that BSNL has its monopoly and still a market leader even in the wake of deregulation in the land line telephone market in the backward areas. This can be attributed to the familiarity, brand loyalty and infrastructure advantage enjoyed by the BSNL over the other land line service providers in backward areas. Respondents also use cell phone along with the land line connection.

All the 1000 sample customer respondents have first SIM card cell phone connections from different service providers. But at the same time 730 (73%) of 1000 sample customers had taken second SIM cards from different service providers.

Among 1000 sample respondents who have cell phone with first SIM cards i.e. large portion (47%) of sample customers prefer Airtel cell service provider, followed by BSNL (20%), Vodafone (11%), Uninor (10%) and Idea (8%). Only 6% of sample customer's chosen Tata Docomo and Reliance. (All are pre-paid customers). In the cell phone market Bharthi Airtel is the most preferred brand for its quality of service. It enjoys pan India status (market share from secondary data) by having network facility in all 22 circles of the country and use of GSM technology also contributes to the brands loyalty. Further the Airtel entered into the market early compared to other service providers. Students and low salaried employees, government employees of lower level and low income group people who work in the un-organized sector, daily wage earners and very small business vendors prefer Uninor, Vodafone and BSNL due to low tariff rates.

Among 730 second SIM card holders a significant portion of customers prefer Uninor (30%) as a second cell phone service provider followed by Airtel (23%), Tata Docomo (18%), Idea (10%) and Vodafone (9%). Only 7% second SIM card holders prefer BSNL.

TABLE 2: REASON FOR SELECTING SECOND SIM ALONG WITH FIRST SIM

Reasons	No. of Respondents	% of Total
Voice clarity is very good	47	6.43
Network available in all areas	198	27.12
Satisfied Promotional schemes	155	21.23
Low Cost to Compare with others	263	36.03
Necessary Value added services	39	5.34
Other reasons	28	3.85
Total	730	100.00

Source: Primary Data

The reasons mentioned for using second SIM cards along with first SIM card by the sample customers are as follows. Low cost (37%), network availability (28%) and satisfied promotional schemes are dominant reasons for using second SIM card along with first SIM cards. The main reason for choosing Uninor, Tata Docomo and Idea are the low cost, low tariff availability of low value pre-paid cards and new promotional schemes. Customers prefer Airtel for the purpose of good network availability and voice clarity.

7. SATISFACTION OF CUSTOMER'S SERVICE PROVIDER WISE

This has been explained and analyzed in the following pages by analyzing individual service providers share among 1st and 2nd SIM card holders, reasons for having second SIM cards, percentage share of gain/ loss by different service providers in the change of service providers in the past by – attrition rate, growth of subscriber base of different service providers both at National and AP circle level and opinion of the employees share of customer satisfaction levels in six parameters.

7.1. Airtel: Airtel is leading the total sample customers of the present study first position by accounting 47% of first SIM card holders (1000) and second position by accounting for 23% of second SIM card holders (730). The data on macro level both at National and Andhra Pradesh circle level also reveals the same thing. The Airtel has been maintaining leading position since 2000's and acquired pan India brand image. Generally, middle and higher income group people such as Business men, professionals, and higher salaried employees of both government and private organizations and self employed choose Airtel mainly for the purpose of quality in service, network coverage with voice clarity. The data on reasons for having second SIM card reveals that better network coverage with voice clarity is the main reason after low cost. The same is also observed from the data on rationale for change of service provider in future. Airtel stood third among the percentage share of satisfied customers with 68% satisfied customers on network coverage service after Reliance (75%) and BSNL (72%). Airtel and BSNL are the main competitors (these two service providers constitute two thirds of total sample) with regard to network coverage service. The customers prefer BSNL to Airtel in network coverage in rural areas particularly in backward regions because it has established infrastructure (towers) compared to others. But in urban and semi urban areas Airtel is number one service provider in providing network coverage compared to any other service provider and hence customers prefer Airtel to BSNL. Particularly in peak hours the network coverage of BSNL is very weak because of lack of modern technology in cell towers though Airtel charges higher tariff rates (higher cost) compared to BSNL and others. With regard to cost effective and lower price services in customer's satisfaction level the Airtel stood middle position by having 71% of satisfied customers. Whereas BSNL, Reliance, Uninor and Tata Docomo have 96%, to 100% satisfied customers. This also implies that Airtel charges higher rates (cost) compared to BSNL, Uninor and Tata Docomo.

The above phenomenon is reinforced from the data on second SIM card holder's preference of a particular service provider. 466 customers (47% of total sample customers) uses Airtel as first SIM card but at same time 168 of 466 first SIM card holders of Airtel uses second SIM cards of the other service providers. 55% and 17% of (168) second SIM card holders of Airtel uses Uninor and Tata Docomo respectively because of low tariff rates. At the same time 42% and 21% of second SIM card holders of Uninor and Tata Docomo respectively uses Airtel as second SIM card for the purpose of network coverage. In another way also we can observe that more than 60% of 198 second SIM card holders who have chosen second SIM card for the purpose of network coverage are from Airtel. In this context, attrition rate in the event of change of service providers, Airtel lost only 7% of customers to other service providers. But at the same time it gained more customers (more than double of loss) from other service providers.

Further Airtel has 91% to 95% of satisfied customer's in terms of promotional schemes and Value added services ahead of BSNL, Idea and Vodafone. However the other factors might have contributed for the success of Airtel, such as that Airtel entered the market very early, acquired and utilized modern technology and developed infrastructure particularly in metropolitan, urban and semi urban areas by entering into joint collaboration with foreign multinational company and invested heavily.

On the whole it can be concluded that Airtel is highly successful in acquiring and retaining profitable loyal customers with the help of CRM practices and strategies. This is because with the help of CRM technology Airtel identified the needs, desires and expectations of new and loyal customers and accordingly it has developed its own marketing strategies. That is Airtel focused on services such as network coverage, promotional, VAS and Customer care services even though charging higher tariff charges compared to the other competitors. Thus we can also say CRM is not just technology but doing marketing strategies. (Table No 3)

7.2 BSNL: The data reveals that BSNL constitutes 20% of total first SIM card holders but it constitutes only 6% of second SIM card holders. Generally lower middle class, lower salaried employees of government and private organizations and subscribers in rural areas choose BSNL for its low cost and network coverage services. As already mentioned above, with regard to network BSNL has an edge over Airtel in rural areas but at the same time it lags behind Airtel in urban and semi urban areas particularly network coverage is weak in peak hours due to lack of modern technology in cell towers though it has 72% satisfied customers in network coverage service. In cost factor, it has 100% satisfied customers but failed to compete with Uninor and Tata Docomo in cost factor. However BSNL also adopted attractive and innovative promotional and VAS because it has 91% to 92% satisfied customers. BSNL also adopted CRM strategies since beginning and identifying loyal customers and offering special incentives individually. Adoption of CRM is major reason that BSNL has 91% to 95% satisfied customers in promotional and VAS. BSNL has other disadvantages such as failure in adoption of intensive distribution strategy, bureaucratic nature of employees, high salaries resulting high cost and lack of modern technology. In spite of these disadvantages, BSNL is surviving and competing other multinational company's service providers, because BSNL has bandwagon of loyal customers in rural and backward area. In terms attrition rate – change from one service provider to another service provider BSNL lost 13% of customers to other service providers but at the same time it gained 15% of customers from other service providers. In cost effectiveness also it offer low cost services compared to Airtel, Vodafone and Idea. If the BSNL had not adopted CRM strategies the present subscriber base would have been less and losses would have been higher. (Table No 4)

7.3 Uninor: Uninor accounted for 10% of first SIM card holders but occupied first position by accounting for 30% of second SIM card holders. It is very strong in cost and promotional services having 96% to 100% satisfied customers. The main reason for the second SIM card holder's to choose Uninor is only for the low cost services. First SIM card holders of Airtel, Vodafone, BSNL and Tata Docomo who use second SIM cards ranging from 33% to 50% have chosen Uninor. It provides services of free talk time without any limit from Uninor to Uninor. As a result customer by purchasing two SIM cards one for himself and one for family member and can talk freely with their family member without any time limit and spend much time. Uninor also has 100% satisfied customers in promotional aspects. It indicates, it is offering number of incentives to retain loyal customers individually. Further Uninor started purchase service by opening retail outlets in the streets and there very popular by providing hassle free purchase and luring and attracting new customers very fastly. Uninor focused only on low cost, attractive promotional and hassle free purchase services where CRM played an important role in developing successful marketing strategies. As a result, though Uninor entered lately in the market around late 2000's and acquired high growth rate in subscriber base and retaining the loyal customers. It is a worldwide successful multinational company and its business and marketing strategies are highly successful. (Table No 5)

7.4 Tata Docomo: Tata Docomo accounted for nearly 20% of second SIM card holders and very negligible portion in first SIM card holders. The main reasons are cost, promotional and VAS factors. It has 100% to 88% satisfied customers on these three factors respectively. Tata Docomo introduced first time in India "one pause per second pulse rate" even before Uninor came into existence. As a result customers prefer Tata Docomo as a second SIM card because of low cost services. BSNL and Idea first SIM card holders, who have purchased ranging from 25% to 33%, second SIM cards are from Tata Docomo. Tata Docomo also offered attractive promotional and VAS service having 88% to 100% satisfied customers. This indicates CRM strategies adopted by Tata Docomo are also successful. (Table No 6)

7.5 Vodafone and Idea: These two service providers constitute around 10% each in both first and second SIM card holders of total sample. Vodafone is a second largest company entered in India after 2006 by acquiring Hutch. Idea is a Birla Group of company and collaboration with an international V S Corporation. This indicates these two service providers are strong in technology and funds. These two service providers are giving tough competition to Airtel by providing equally better network coverage with voice clarity. They are also offering attractive and innovative promotional and value added services. But these two service providers are providing all services with higher cost/ price compared to other five service providers. They have only 59% to 64% satisfied customers in cost effective services. This indicates they are mainly concentrating on providing network, promotional and value added services to acquire and retain loyal customers by adopting CRM strategies. (Table No 7 and Table No 8)

8. CONCLUSION

On the whole from the analysis of customers opinions on independent variables considered for measuring the satisfaction levels/experiences, it can be conducted that most of the customers are happy and satisfied, because 79 to 97% of customer respondents on the above said four out of six service variables opined and expressed excellent and good and 63% and 64% of customer respondents expressed their satisfaction excellent and good in two variables i.e. Customer care centre and Network facility. It means, still the service providers needs to enhance the customer care services and to establish a good network infrastructure technology for luring and retaining customers. All land line customers selected BSNL and all 1000 sample customers have first SIM card and 73% (730 of 1000) have second SIM cards. This implies no single service provider-single SIM card is able to satisfy the customers to the present level of satisfaction and also the second SIM card facility had not been available the customers satisfaction level would have been lower.

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ANNEXURE

TABLES

TABLE 3: PURCHASING SERVICE – CUSTOMER SATISFACTION

Services	Grades	BSNL	Bharthi Airtel	Vodafone	Idea	Reliance	Tata Docomo	Uninor	Total
Landline service	Excellent	43 (47.78)	-00-	-00-	-00-	-00-	-00-	-00-	43 (47.78)
	Good	47 (52.22)	-00-	-00-	-00-	-00-	-00-	-00-	47 (52.22)
	Average	-00-	-00-	-00-	-00-	-00-	-00-	-00-	-00-
	Poor	-00-	-00-	-00-	-00-	-00-	-00-	-00-	-00-
	Very poor	-00-	-00-	-00-	-00-	-00-	-00-	-00-	-00-
	Total	90 (100)	-00-	-00-	-00-	-00-	-00-	-00-	90 (100)
Cell Phone service	Excellent	115 (58.67)	264 (56.65)	71 (65.74)	39 (51.32)	13 (54.17)	25 (78.13)	71 (72.45)	598 (59.8)
	Good	74 (37.76)	191 (40.98)	32 (29.63)	33 (43.42)	11 (45.83)	07 (21.87)	25 (25.51)	373 (37.3)
	Average	07 (3.57)	11 (2.37)	05 (4.63)	04 (5.26)	00	00	02 (2.04)	29 (2.90)
	Poor	00	00	00	00	00	00	00	00
	Very poor	00	00	00	00	00	00	00	00
	Total	196 (100)	466 (100)	108 (100)	76 (100)	24 (100)	32 (100)	98 (100)	1000 (100)

Source: Primary Data

TABLE 4: CUSTOMER CARE – CUSTOMER SATISFACTION

Services	Grades	BSNL	Bharthi Airtel	Vodafone	Idea	Reliance	Tata Docomo	Uninor	Total
Land line service	Excellent	12 (20.68)	---	---	---	---	---	---	12 (20.68)
	Good	21 (36.20)	---	---	---	---	---	---	21 (36.20)
	Average	13 (22.44)	---	---	---	---	---	---	13 (22.44)
	Poor	01 (1.72)	---	---	---	---	---	---	01 (1.72)
	Very poor	11 (18.96)	---	---	---	---	---	---	11 (18.96)
	Total	58 (100)	---	---	---	---	---	---	58 (100)
Cell Phone service	Excellent	46 (35.11)	125 (32.64)	18 (20.45)	20 (32.25)	08 (40.00)	11 (44.00)	28 (38.88)	256 (32.77)
	Good	31 (23.66)	135 (35.25)	25 (28.41)	18 (29.03)	08 (40.00)	05 (20.00)	11 (15.28)	233 (29.83)
	Average	19 (14.50)	46 (12.01)	30 (34.09)	15 (24.19)	04 (20.00)	09 (36.00)	22 (30.55)	145 (18.57)
	Poor	25 (19.08)	59 (15.40)	12 (13.63)	06 (9.67)	--	--	10 (13.89)	112 (14.34)
	Very poor	10 (7.65)	18 (4.70)	03 (3.42)	03 (4.86)	--	--	1 (1.40)	35 (4.49)
	Total	131 (100)	383 (100)	88 (100)	62 (100)	20 (100)	25 (100)	72 (100)	781 (100)

Source: Primary Data

TABLE 5: NET WORK FACILITY – CUSTOMER SATISFACTION

Services	Grades	BSNL	Bharthi Airtel	Vodafone	Idea	Reliance	Tata Docomo	Uninor	Total
Landline service	Excellent	82 (91.11)	-00-	-00-	-00-	-00-	-00-	-00-	82 (91.11)
	Good	08 (8.89)	-00-	-00-	-00-	-00-	-00-	-00-	08 (8.89)
	Average		-00-	-00-	-00-	-00-	-00-	-00-	00
	Poor		-00-	-00-	-00-	-00-	-00-	-00-	00
	Very poor		-00-	-00-	-00-	-00-	-00-	-00-	00
	Total	90 (100)	-00-	-00-	-00-	-00-	-00-	-00-	-00-
Cell Phone service	Excellent	76 (38.77)	195 (41.84)	30 (27.77)	21 (27.63)	06 (25.000)	05 (15.62)	22 (22.44)	355 (35.5)
	Good	65 (33.16)	118 (25.32)	35 (32.41)	24 (31.57)	12 (50.00)	10 (31.25)	21 (21.42)	285 (28.5)
	Average	37 (18.87)	102 (21.88)	15 (13.89)	19 (25.00)	06 (25.00)	04 (12.50)	10 (10.20)	193 (19.3)
	Poor	18 (9.20)	51 (10.96)	18 (16.67)	04 (5.26)	--	03 (9.37)	16 (16.32)	110 (11.0)
	Very poor	--	--	10 (9.26)	08 (10.54)	--	10 (31.26)	29 (29.62)	57 (5.7)
	Total	196 (100)	466 (100)	108 (100)	76 (100)	24 (100)	32 (100)	98 (100)	1000 (100)

Source: Primary Data

TABLE 6: VALUE ADDED SERVICES – CUSTOMER SATISFACTION

Services	Grades	BSNL	Bharthi Airtel	Vodafone	Idea	Reliance	Tata Docomo	Uninor	Total
Landline service	Excellent	26 (57.77)	-00-	-00-	-00-	-00-	-00-	-00-	26 (57.77)
	Good	--	-00-	-00-	-00-	-00-	-00-	-00-	--
	Average	--	-00-	-00-	-00-	-00-	-00-	-00-	--
	Poor	--	-00-	-00-	-00-	-00-	-00-	-00-	--
	Very poor	19 (42.23)	-00-	-00-	-00-	-00-	-00-	-00-	19 (42.23)
	Total	45 (100)	-00-	-00-	-00-	-00-	-00-	-00-	45 (100)
Cell Phone service	Excellent	16	85	18	11	04	04	14	152 (19.04)
	Good	111	305	46	29	20	18	35	564 (70.67)
	Average	---	07	16	02	--	03	09	37 (4.64)
	Poor	05	09	---	09	---	---	05	28 (3.50)
	Very poor	03	05	02	---	---	---	07	17 (2.15)
		Total	135	411	82	51	24	25	70 (100)

Source: Primary Data

TABLE 7: COST EFFECTIVENESS – CUSTOMER SATISFACTION

Services	Grades	BSNL	Bharthi Airtel	Vodafone	Idea	Reliance	Tata Docomo	Uninor	Total
Landline service	Excellent	12 (66.67)	---	---	---	---	---	---	12 (66.67)
	Good	06 (33.33)	---	---	---	---	---	---	06 (33.33)
	Average	--	---	---	---	---	---	---	--
	Poor	--	---	---	---	---	---	---	--
	Very poor	--	---	---	---	---	---	---	--
		Total	18 (100)	00	00	00	00	00	00
Cell Phone service	Excellent	78 (49.68)	102 (25.00)	31 (37.35)	25 (35.71)	08 (40.00)	18 (72.00)	61 (67.78)	323 (37.86)
	Good	79 (50.32)	186 (45.58)	18 (21.67)	20 (28.57)	12 (60.00)	07 (28.00)	25 (27.78)	347 (40.67)
	Average	--	33 (8.08)	16 (19.28)	12 (17.14)	00	--	04 (4.44)	65 (7.62)
	Poor	--	13 (3.18)	--	13 (18.58)	--	--	--	26 (3.05)
	Very poor	--	74 (18.16)	18 (21.70)	--	--	--	--	92 (10.80)
		Total	157 (100)	408 (100)	83 (1000)	70 (100)	20 (100)	25 (100)	90 (100)

Source: Primary Data

TABLE 8: PROMOTIONAL SCHEMES – CUSTOMER SATISFACTION

Services	Grades	BSNL	Bharthi Airtel	Vodafone	Idea	Reliance	Tata Docomo	Uninor	Total
Landline service	Excellent	36 (65.45)	---	---	---	---	---	---	36 (65.45)
	Good	12 (21.81)	---	---	---	---	---	---	12 (21.81)
	Average	07 (12.74)	---	---	---	---	---	---	07 (12.74)
	Poor	--	---	---	---	---	---	---	--
	Very poor	--	---	---	---	---	---	---	--
		Total	55 (100)	--	--	--	--	--	--
Cell Phone service	Excellent	78 (48.45)	174 (47.67)	33 (41.77)	38 (52.77)	12 (50.00)	22 (70.96)	61 (64.21)	418 (50.55)
	Good	69 (42.85)	159 (43.56)	38 (48.10)	25 (34.72)	08 (33.33)	09 (29.04)	34 (35.79)	342 (41.35)
	Average	14 (8.70)	32 (8.77)	08 (10.13)	09 (12.51)	04 (16.67)	--	--	67 (8.10)
	Poor	--	--	--	--	--	--	--	--
	Very poor	--	--	--	--	--	--	--	--
		Total	161 (100)	365 (100)	79 (100)	72 (100)	24 (100)	31 (100)	95 (100)

Source: Primary Data

ACCOUNTING METHODOLOGY OF SARVA SHIKSHA ABHIYAN PROJECT WITH SPECIAL REFERENCE TO GUJARAT STATE

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ABSTRACT

Sarva Shiksha Abhiyan project is a centrally sponsored programme by Ministry of HRD Government of India to be implemented by the respective state government. In Gujarat State, it is functioning from 2000-2001 onwards. This research paper titled "Accounting Methodology of Sarva Shiksha Abhiyan Project with special reference to Gujarat State" is aimed to review financial and accounting aspect of the SSA project functioning in the Gujarat State by studying accounting policies and practices of accounting by the project. The paper describes significant accounting policies and accounting procedures adopted by SSA in Gujarat State and review thereof.

KEYWORDS

Gujarat, Sarva Shiksha Abhiyan project.

JEL CODE

M41.

ABBREVIATIONS

BRC	Block Resource Centres
CRC	Cluster Resource Centres
DPO	District Programme Office
MHRD	Ministry of Human Resource Development
MOU	Memorandum of Understanding
NCERT	National Council of Educational Research and Training
PAB	Project Approval Board
SMC	School Management Committee
SPD	State Project Director
SSA	Sarva Shiksha Abhiyan

INTRODUCTION

Sarva Shiksha Abhiyan (SSA) is a programme sponsored by Ministry of HRD, Government of India. SSA is functioning from the year 2000-01 in Gujarat. The objectives of this programme are being implemented in a missionary mode by a society called Gujarat Council of Elementary Education formed under the Societies Registration Act in partnership with the State Governments and Local Self-Governments; SSA aims to provide useful and relevant education to all children in the 6-14 age groups by 2010. Sarva Shiksha Abhiyan is an effort to universalize elementary education by community-ownership of the school system. It is a response to the demand for quality basic education all over the country. The SSA programme is also an attempt to provide an opportunity for improving human capabilities to all children, through provision of community-owned quality education in a mission mode.

AIMS OF SARVA SHIKSHA ABHIYAN

The Sarva Shiksha Abhiyan is to provide useful and relevant elementary education for all children in the 6 to 14 age group by 2010. There is also another goal to bridge social, regional and gender gaps, with the active participation of the community in the management of schools.

Useful and relevant education signifies a quest for an education system that is not alienating and that draws on community solidarity. Its aim is to allow children to learn about and master their natural environment in a manner that allows the fullest harnessing of their human potential both spiritually and materially. This quest must also be a process of value based learning that allows children an opportunity to work for each other's wellbeing rather than to permit mere selfish pursuits.

Sarva Shiksha Abhiyan realizes the importance of Early Childhood Care and Education and looks at the 0-14 age as a continuum. All efforts to support pre-school learning in ICDS centres or special pre-school centres in non ICDS areas will be made to supplement the efforts being made by the Department of Women and Child Development.

PROCEDURE FOR RELEASE OF FUNDS

Under the programme of Sarva Shiksha Abhiyan, the districts will prepare their proposals through a community owned Pre-Project phase, based on the Broad Framework for Implementation. The State level Implementation Society for Sarva Shiksha Abhiyan will forward these proposals to the National Mission of Sarva Shiksha Abhiyan for release after appraisal by a joint team.

The Central government will release funds to the State government. The State government would be expected to transfer this to the State Implementation Society within thirty days. After preparation of the District Elementary Education Plans, the perspective as well as the Annual Plans will be jointly appraised by a team of experts constituted jointly by the National and the State level implementation Society.

The National Sarva Shiksha Abhiyan Mission will approve the Annual Plan on the basis of the appraisal report, the recommendation of the State Implementation Society, the availability of Central Plan funds, and the commitment of the State government regarding financial resources.

OBJECTIVES OF THE STUDY

1. To review Sarva Shiksha Abhiyan Project in Gujarat State.
2. To understand Accounting perspective of the Project.
3. To suggest better Accounting Practises to be adopted by the SSA Project.

REVIEW OF RELATED LITERATURE

To carry out research in captioned subject following literature are important to have a sight over it.

Prof. Veenaben Patel et al.1 (2012), in the research project of SSA, Study of Teachers Feedback and their needs regarding Teacher Training, studied education efficiency of SSA Project. According to report by EdCiI,2 a Research Evaluation and Studies Unit Technical Support Group of SSA under the title of "Progress Overview of Research" pointed out various completed researches over SSA at national level. Sonal V. Neha 3 (2008) in her study "A study of Accounting Practices of Municipal Corporations of Gujarat State" studied Accounting Practices of Municipal Corporations in Gujarat with objective to know government Accounting System, Fund Management or Capital Income, Accounting Practices, and ancillary objectives

RESEARCH METHODOLOGY

To carry research over accounting policies and practices adopted by Sarva Shiksha Abhiyan, secondary source of data have been taken in to account, that includes web resources, annual statements and reports prepared and maintained by State Project office of Sarva Shiksha Abhiyan. As research is descriptive in nature, design of research is descriptive. Survey of related data and fact finding inquiries applied.

REVIEW OF ACCOUNTING PRACTICES ADOPTED BY SARVA SHIKSHA ABHIYAN

A. Significant Accounting Policies

Accounting Policy related to Basis of Accounting

The project accounts are prepared on historical cost convention and cash basis of accounting. Income or grants are accounted for when they are actually received and expenses are recognized as and when they are actually paid. Disbursements made to sub-district level are treated as expenses at the time of payment. The grant received, grant returned, undisbursed grant of previous years, bank interest, tender fees received and various other incomes are taken as income and amount expended under various activities of this programme are treated as expenditure including disbursement for construction and acquisition of fixed assets.

Accounting Policy related to Fixed assets

Fixed assets acquired or created by state project office or at field levels for different programmes have been treated as expenditure at the time of release of payment. Project civil works relating construction of schools, additional classrooms, boundary wall and so forth, are being charged to the income and expenditure as expenses.

Accounting Policy related to Inventory

Inventories of consumables and other distributable are not being valued on ending of year, cost of these items are treated as expenditure and accounted on cash basis during the year.

Accounting Policy related to Investment

There are no investments made by Sarva Shiksha Abhiyan other than the balance maintained in the saving accounts of the banks.

Accounting Policy related to Government grant

Government grants to the project are recognized on receipt basis.

Accounting Policy related to Grant return

Grant amount disbursed under a particular budget head in the current financial year and returned as unspent or unutilized in the current financial year are reversed in that same budget head itself. And the grant amount disbursed under particular budget head in the previous financial years and returned as unspent or unutilized in the current financial year are considered as grant returned and treated as income

Accounting Policy related to Utilization of Grant-in-Aid

The utilization of funds received as grant in aid have been accounted on the basis of utilization certificate received from blocks or clusters or districts.

B. Accounting Procedures

As prescribed in the Financial Management and Procurement Manual of Sarva Shiksha Abhiyan, Complete accounts in respect of the monetary transactions of the State Implementation Society in the Headquarters' office as well as the Subordinate Offices are maintaining in the same manner as required in a State Government Office. However, the "double entry method based on mercantile system" of accounting is suggested to be followed under SSA.

Maintenance of Accounting Records

The books of accounts and registers prescribed to be maintained by the Sarva Shiksha Abhiyan office are Cash Book, Ledger, Journal, Register for Journal / Magazines / News Papers, Register of Advances, Register of Bank drafts received, Cheque issue register, Register of remittances made into the Bank, Bank Pass Book/Bank statement, Register of bank drafts dispatched, Bill Register, Establishment Register, Stock Register, Register of grants of advances to mobilizing agencies/NGOs/Voluntary Agencies, Fixed Assets Register, Register of Investments, Dispatch Register, File Register and other any other books which may be considered necessary are maintained with approval of State Project Director (SPD).

Books of accounts is required to be maintained as per State Government Accounting policy, if some of books are not maintained by State Government than, it will be prepared with in form provided with the approval of State Project office. Expenditure statement is also required to be prepared and submitted to the State project office, which further be submitted to the concerned department of Central Government.

Quarterly consolidated account showing the total income and expenditure during the quarter under respective heads of account with opening and closing balances will be prepared and submitted to the Education department of the State and School Education and literacy department of Government of India. The head-quarter of the State will maintain Asset Register in the format given by MHRD. Further the same register will also be maintained by the subordinate offices like BRC, CRC and DPO.

Advance Register

All advances are to be entered in the advance register to be maintained as per specimen given in prescribed format in the Financial Management and Procurement Manual.

All other advances should be adjusted on the basis of utilization certificate. It should be ensured that utilization certificates on these advances are obtained immediately after the expiry of the prescribed period.

Monitoring of advances

The next higher authority above the authority who released the advances will strictly monitor the progress of adjustment of advances and take remedial measures required for the speedy adjustment of advances within the time limit prescribed above.

All functionaries should ensure that only actual be treated as expenditure and not the normative costs in accounting.

Account Head

The Account head and account code is similar to the budget head and budget code. This should correspond to the interventions and the norm number prescribed in the SSA framework. If any sub-head or sub-code is considered necessary, the same shall be operated accordingly.

Cash Book

Cash book as a principal record of cash transaction; it is required to be maintained under double entry system. However, as an exception, Cluster and School level functionaries are exempted to maintain double entry system mandatorily. Although, subordinate offices are required to maintain separate cash book for SSA and other programs. Each entry in the cashbook should be attested by the Head of Office/Drawing and Disbursing Officer (DDO). In case computerized accounting software is in use, the cash book need not be maintained manually. However, print out of the daily cash transactions should be taken and attestation is made before competent authority.

- **Journal**

Journal is one of the important account books required to be maintained by the project. Its use is restricted to only recording adjustment entries other than cash transactions. Vouchers shall support each adjustment entry passed through a Journal. Brief narration of each entry shall be given in the voucher and it shall be signed by the Head of Office. The Accountant will check each entry of the Journals with the vouchers and put dated initials against the entries checked.

- **Ledger**

With effect of dual entry accounting system all the entries recorded are settled in the ledger accounts in computerized system. If manual accounting system is followed than, ledger of corresponding accounts are required to be created. All the Ledger accounts will be closed at the end of the month. Monthly account of receipts and payments shall be prepared after closing of the accounts for the month.

- **Bank Reconciliation**

It is provided to maintain Bank reconciliation statement on monthly basis and reconcile balance as per bank and balance as per bank book.

CONCLUSION AND SUGGESTIONS

Sound financial management is a critical input for decision making and for programme success. Timely and relevant financial information provides a basis for better decisions, thus speeding up the physical progress of the programme and the availability of funds and reducing delays and bottlenecks.

The financial management system should produce timely, relevant and reliable financial information that would allow programme managers and State/Central governments to plan and implement the SSA, monitor compliance with agreed procedures, and appraise progress toward its objectives. To meet these requirements, the system should include the following features:

- A system to identify the needs to achieve the programme objectives, evolve strategies and approaches to address them and take up suitable interventions and activities.
- A system to identify the short-term activities necessary to achieve the programme objectives and express these activities in financial terms.
- Systems to track, analyze, and summarize financial transactions so that efficient accounting practices can be possible.
- Appropriate arrangements to receive funds from all sources and disburse them to the agencies involved in programme implementation.
- A system that would produce sufficient detailed information to manage the programme, and provide each level of SSA management with regular consolidated financial Statements for decision making.
- Arrangements including internal audit, to provide reasonable assurance that (i) operations are being conducted effectively and efficiently and in accordance with SSA financial norms (ii) financial and operational reporting are reliable; (iii) laws and regulations are being complied with; and (iv) assets and records are maintained.
- Arrangements for conducting annual external audit of the programme on Terms of Reference agreed upon with the Government of India, through a statutory audit. Audit through Comptroller and Auditor General of India is also mandatory.
- A system should be developed to carry out procurement of goods, works and services keeping in mind the efficiency, transparency and equal opportunities to all.
- Appropriately qualified financial management staff, including accounting and internal audit staff, with clearly defined roles and responsibilities to conduct financial management activities.
- Bank reconciliation at SPO and DPO level should be maintained regularly
- Proper accounting methodology and internal control system regarding utilization and allocation of funds should be established at DPO level.
- Separate accounts for expenses incurred from the separate grant are to be maintained, so that transparency can be maintained in records.

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DEMONETIZATION AND ITS IMPACT ON INDIAN ECONOMY

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ABSTRACT

Demonetization of currency means to discontinue with the said currency and issuing new currency by replacing the old one. In any economy, demonetization refers to an act of government of nation who pulls or discontinues the circulation of one or more than one currency. The money is pulled from circulation, often to replace by new notes or discontinued permanently. Prior to last year demonetization i.e. (year 2016) that high notes of rupee 500 and 1000 ceases to be a legal tender, there were two similar instances in India i.e. in the year 1946 and in the year 1978 when an ordinance was proclaimed formally that rupee 1000, 5000 and 10000 would stop being a legal tender. This article explores the advantages and impact of demonetization and its role in uplifting the economic growth of Indian economy.

KEYWORDS

advantages and limitations, cashless economy, demonetization of currency, impact on Indian economy, objective of demonetization.

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1. INTRODUCTION

Demonetization refers to devastating a currency unit of its status to be a legal tender. It occurs when government want to make a change in currency either by replacing old notes with new one or discontinuing particular currency permanently. According to Forbes "**Modi's Demonetization is a cure worse than disease in India**". Prior to the year 2016 demonetization, two similar instances took place. In India it has been done in

- 12 January 1946, Where Indian rupee 1000 and 10000 were withdrawn.
- 16 January 1978, where Indian Rupee 1000, 5000 and 10000 were withdrawn.

2. A REVIEW OF DEMONETIZATION IN INDIA

◆ Year 1946

The impact of demonetization in 1946 was minimal as higher denomination notes (which ceases to be a legal tender; demortized currency) constituted only 3% of the Indian economy.

◆ Year 1978

The second demonetization was done by Finance Minister H.M. Patel in budget speech on 16 January, 1978 discontinuing Indian Rupee 1000 and 10000. The reason for demonetization aims at controlling illegal transactions and to determine anti-social elements. Reserve bank of India was mostly against this exercise and lastly its impact was not much. (Source: Reserve Bank of India- history 1967-1981, RBI currency and finance report)

◆ Year 2016

The third demonetization was done on 8 November 2017. Discontinuing Indian Rupee 500 and 1000 and issuing new notes of 500 and 2000. This demonetization led to drastic change in economic growth and affected many sectors of Indian economy as 86% of Indian currency was in circulation all during 2016.

Thus, we can conclude that the first demonetization was a case of conversion, second was a case of cumulation and third was a case of more of conversion!

3. OBJECTIVES OF THE STUDY

1. To study the Historical precedent of demonetization in India.
2. To study the impact of demonetization on various sectors of Indian economy.
3. To study the advantages and disadvantages of Demonetization.

4. RESEARCH METHODOLOGY

Descriptive design has been used in this research, which is based on secondary data. Secondary data has been taken from various government and non-government publications on demonetization and from articles related to it published electronically or otherwise. Data is also collected from journals, articles from newspapers and from relevant websites available on internet.

5. PURPOSE OF DEMONETISATION

1. **To Curb Terrorist Funding:** Indian money is primarily used to fund operation within Indian borders, provide finance to separatist movement.
2. **War on Black Money:** Black money is the money that has been earned illegally and not declaring them at the time of tax purposes. Black money is used in the form of real estate, foreign exchange, gold etc. Black money leads to cancerous growth in the country's economy which will surely lead to ruination.
3. **To Promote Cashless Transaction:** The main purpose of demonetization was to promote cashless transactions. Cashless transactions can be done through various banking instruments like internet banking, debit card, credit card etc.

Statistics have shown Belgium, where 90% payment is done cashless followed by France 92%, Canada 90%, UK 89% and Sweden 89%, where in India only 22% is non-Cash payment. This proves that there is strong negative correlation between India and other countries with reference to online transaction. A cashless society would discourage money laundering and terrorism.

6. THE SECTORIAL IMPACT

POSITIVE IMPACT

- E-Commerce
- Digital Payments
- Mobile Wallets
- Net Banking Payments
- Electronic Market.

NEGATIVE IMPACT

- Traditional Retail Business
- Commodities

- Real Estate
- Luxury Goods
- Agriculture

7. IMPACT ON VARIOUS SECTORS OF INDIAN ECONOMY

- ❖ **Real Estate:** 40%-plus drop in key markets in India. Dealers in secondary market have to stand still. Home buyers waiting for big price reduction. After demonetization real estate industries will be more transparent in the years to come. 7% buyers shifted from "Buying" now to "Renting" now.
- ❖ **Jobs:** Hiring Experts say jobs at senior level are not and won't be impacted. Overall hiring is right down as managers seek to protect revenue/profit targets. The sectors most affected are retail, consumer goods, real estate, infrastructure logistics and building.
- ❖ **Tourism:** Peak tourism period badly hit during demonetization. Tourism business in metro cities gone down by 10%.
- ❖ **Telecom:** Mobile phone shipment fell by 26%. Big seller who does card and online transaction less badly hit. Sales for feature phone gone down by 25%
- ❖ **Agriculture:** Unfavorable impact of input and output channels in agriculture. Distribution break in supply chains etc.
- ❖ **Information Technology:** The demonetization had a very less or negligible impact on IT sector.

8. ADVANTAGES OF DEMONETIZATION

1. **Tracking Black Money:** A major achievement of demonetization is that it has helped the government in tracking black money. The Indian government claim that large sum of black money were hidden by tax payers. It helps the government to track people who are having large sum of unaccounted cash or cash on which no income has been paid.
2. **Tax Revenue:** Another benefit is that due to people disclosing their income by depositing money in their bank accounts government gets a good amount of tax revenue which can be used by the government towards the betterment of society by providing good infrastructure, hospitals, educational institutions, roads and many facilities for poor and needy sections of society.
3. **Cashless Economy:** Larger size of digital transaction in developed economies leads less corruption as compared to developing countries. Therefore, in order to escape from adversaries of corruption and black money and to have more transparent and cleaner economic growth with social Justice, less use of cash is one of the suggested measures.
4. **Terrorist Funding:** Black money was used for terrorist funding, money laundering, gambling etc, also inflating the price of major assets like real estate and due to demonetization all such activities will be reduced for some time and it will take years to generate that amount of black money again.
5. **Tax payers:** Another benefit is that due to people disclosing their income by depositing money in their bank accounts government gets a good amount of tax revenue which can be used by the government towards the betterment of society by providing good infrastructure, hospitals, educational institutions, roads and many facilities for poor and needy sections of society.
6. **Benami Properties Identified:** After demonetization 300 benami properties were claimed. These properties were identified during income tax clean money policy.
7. **Widening Impact of Tax Base:** The step of demonetization showed improvement in the level of voluntary compliance as a result of action taken by income tax department on the basis of cash deposits in the wake of demonetization the number of e-return of individual tax payers increased from 2.22% to 2.79% returns registering an increase of 57 lakhs returns or 25.3%.

Thus, from the above points we can conclude that the advantages of demonetization can be seen in the long run only.

9. DISADVANTAGES OF DEMONETIZATION

1. **Down shift in economic growth:** Economic growth will experience a period of pause due to business disruption, in short term.
2. **Unease and Anxiety to Public:** Sometimes, demonetization can be very inconvenient. Queuing up in banks to deposit money or exchange currency can be inconveniencing.
3. **Panic:** Not everyone understands the essence of demonetization and, therefore, such an exercise is likely to result in panic among a section of the population.
4. **Financial Crises to poor people:** A small change in the value of currency about whether a currency is valid or not can mean a lot of hardship. As such demonetization can increase inequalities within society for short period.
5. **Other Limitations:**
 - Inadequate supply of new notes.
 - Destruction of old currency
 - Additional printing and distribution cost of new currency.
 - Problem situation for small-scale business operations that deal in cash.

10. CONCLUSION

Demonetization is one of the main initiative step taken by Indian government to root out black money, money laundering, benami properties etc. Demonetization will also help banks to recover from high dormancy rates (idle bank accounts), which is currently around 43 per cent. But there are plenty of ways where black money can be turned into white but Indian government realized it too late. The unorganized sectors were badly affected. Indian government achieved limited objective aftermath, but in the long run, people may realize. However, before any demonetization program is carried out, it should be carefully examine and the impact on poor should be considered. Demonetization can be a fresh new start, or it can be something that causes unnecessary confusion and inconvenience for the country.

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