

Focus: Governance

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Organizational Justice

Non-mandatory and exemplary Corporate Governance practices

Role of B-Schools in Developing the Culture of Corporate Governance

Bargaining Power, Political Connection and Productivity in Government Services

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New Strategies to Manage Finished Products Inventory

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Organizational Justice as Predictor of Activity of the Position, Achieving Result and Developing Further Potential

GEETA RANA AND S. K. SRIVASTAVA

The management discourse has increasingly focused on the performance of the organizations to meet the challenges of global competition. The relationship between organizational justice and managerial effectiveness in terms of activities of the position, achieving the results and developing further potential has received very little attention in the literature. This is a survey-based empirical study of 300 managers based in India. A step wise multiple regression analysis was conducted to find out the results. The results revealed that the distribution of rewards, organizational policies and procedures and interpersonal treatment determines the positive behavior patterns along with emotional and cognitive balances while perceiving the jobs calling and enjoying.

The growth of international business has drawn increasing interest in managerial effectiveness in the context of a revolutionary organizational change process. Over the last decades, managerial effectiveness is appearing as an important factor for the accomplishment of organizational goals and has been conceptualized in terms of competence, satisfaction, conflict resolution, need fulfillment, value realization and recognition (Srivastava and Sinha, 2007). Managerial effectiveness has been identified through three factors. First, it involves an individual's competencies, which includes a set of knowledge, skills and abilities (Shipper et al. 2003). Second, this encompasses motivation to do the job and third entails factor related to the work environment which facilitate in performing the job effectively (Sethi and Nicholson, 2001).

Gupta (1996) support the definition of managerial effectiveness as "the ability of a manager to carry out the activities required of his position while achieving the results both current and its terms of developing further potential". Earlier, factors such as organizational structure, reward system, occupational variables, safe working conditions, job satisfaction and commitment had a significant motivational factor which influenced managerial effectiveness. But in the present scenario these aspects have become mundane and can be highlighted that perception of justice as the demand of the present scenario to meet the competitive edges while considering managers as human beings and developing potential to exercise to attain effectiveness. The importance of perceived fairness and its effect on managerial effectiveness cannot be overlooked. Managerial effectiveness and organizational effectiveness both are interlinked because performing well is prerequisite for today global managers within an organizational dynamics. When managers perceive an organization to be fair, they may react positively to the

organization and would be more willing to work effectively which also improve both organization's effectiveness and performance. Greenberg (1993) has defined organizational justice that refers to the fairness of decisions made by authorities, in respect to the outcomes and implementation of the procedures. In a more comprehensive manner, we can say that perception of justice within organizations (Distributive justice, Procedural justice and Interactional Justice) leads to high levels of job satisfaction, commitment, reduced turnover intentions and attenuation of counterproductive behavioral and cognitive dissonance.

A substantial body of research has examined the impact of justice perceptions on outcomes such as job satisfaction, organizational commitment, organizational citizenship behaviour, productivity, and withdrawal behaviours that consistently illustrate the importance of justice in the workplace (Charash and Spector, 2001). The purpose of this investigation is to explore the relationship between perceptions of organizational justice and managerial effectiveness dimensions. If modern managers focus on justice issues, they will be healthier and more productive at workplace and will create long term performance cultures which lead to sustainability. Implications from this research can help organizations advance processes and prepare managers to facilitate organizational decision that impact policies and procedures to maximize their competencies.

Concept of Organizational Justice (OJ)

Cropanzano et al. (2001) defined organizational justice as the fairness perceptions of employees in organizational decision making. They linked the justice perceptions to commitment level of employees, job performance, withdrawal and organizational citizenship behavior. Fairly treated employees, compared to the ones who are unfairly treated, demonstrated organizational citizenship behavior, show higher job performance, are more committed and have fewer turnover intentions (Rupp and Cropanzano, 2002). Folger (1994) linked justice to moral and ethical standards and explained in his studies that individuals prefer to be part of organizations that behave morally and ethically than those that do not. Justice is considered to be socially constructed which means that an act is considered to be just if it is perceived so by the individuals on the basis of empirical research (Cropanzano and Greenberg, 1997). Organizational justice researchers have consistently identified three different types of fairness perceptions as: Distributive Justice, Procedural Justice, and Interactional Justice (McDowall & Fletcher, 2004;

Erdogan et al. 2006; Zhang et al. 2009; Klendauer and Deller, 2009). Brief introductions of the three dimensions of organizational justice have been discussed below

Distributive Justice

Distributive justice concern people's perceptions of the fairness of the distribution of resources between people (Greenberg and Baron 2003). Furthermore, Rahim et al. (2001) found that when perceptions of distributive justice were high, employees used more cooperative conflict management styles when interacting with their supervisor. Managers is concerned about the equity aspect of work loads, working hours, working condition, incentives, remuneration, promotions, career development. The manager's perception of whether the outcome is fair or unfair is the basis of the concept of distributive justice.

Procedural Justice

Procedural justice refers to the perceived fairness of the means used to determine the amount of benefits (Folger and Konovsky, 1989). These procedures should be consistent, bias free and take into account the concerns of all parties and be morally acceptable (Leventhal, 1980). Here the managers are concerned about whether the decision process is fair and the process used to determine the outcome is just. It is mainly concerned with the fairness of the means that an organizations uses to determine outcomes. Importantly, the view of managers about whether procedural justice should be reflected in a decision-making process plays a crucial role. We expect that procedural justice perceptions will enhance the level of managerial effectiveness. Procedural justice in the workplace helps to managers which they operate same set of rules, regulation and procedure to maintain equity and harmonious environment for achieving organization excellence.

Interactional Justice

Justice research began to focus on interactional justice that focus on the fairness of the interpersonal treatment the individual receives from the decision maker (Ambrose et al. 2007). The perception of the supervisor as supportive and respectful of subordinates' dignities in the interaction process will improve perceived interactional justice and positively influence subordinates' trust in supervisor (Wat and Shaffer, 2005). If managers perceive the interactional justice perception their morale, trust, respect among the coworkers lead to a greater satisfaction. Interactional

justice (interactional and informational justice) which help the managers to perceived equity, strengthen peer group cohesion and feel some recognition lead to the managerial effectiveness.

Concept of Managerial Effectiveness

For any successful business organization issue of managerial effectiveness is very important, although managerial effectiveness varies organization to organization and it is also vary to different job position and hence the topic of effectiveness needs to be studied carefully. Balarman (1998) defined managerial effectiveness in behavioral terms which evaluated managers on selected job oriented criteria such as communication, cost awareness, delegation of work, labour relation, planning and scheduling, securing interdepartmental cooperation, training subordinates and utilizations of capacity. Nair and Yuvaraj (2000) defined managerial effectiveness is to analyze organizational design, cultural imperatives, people problems and performance systems that produce results.

In the present scenario of mergers and acquisitions, downsizing, layoffs, restructurings, up-gradation of technology are examples of fundamental organizational change which need to focus and restore on the issue of managerial effectiveness. Rastogi and Dave (2004) defined managerial effectiveness is not only a personality characteristic but it is related to performance and output. Tyler and Lind (1992) proposed that managers care about justice within the organization criteria because depending on justice perception managers will arrive at different conclusions about their recognition, standing, and trust by management. A number of studies have focused on the characteristics and skills of the individual managers (Katz et al. 1978; Balaraman, 1989). Gupta (1996) suggested three important aspects of effectiveness: activities of the position (communication and task assignment, networking, colleagues management, informal communication, management of market environment, conflict resolution, integrity and communication, motivating, delegation, welfare management and consultative) achieving the results (such as discipline, client management and image building) and developing further potential (confidence in subordinates, and inspection and innovation).

With the above discussion a lacuna has been observed in the management discourse, where managerial effectiveness at workplace has always been an agenda. An urge has been expressed to provide work environment which leads to managerial effectiveness while delineating major behavioral pattern as organizational justice within

organizations while establishing managers to be marked as fully functioning and flourishing towards their roles. Thus, it can be hypothesized that perception of justice (distributive justice, procedural justice and interactional justice) leads to managerial effectiveness in terms of activities of the position, achieving the results and developing further potential.

Methodology

Sample

The present study was carried out on a randomly selected sample of 300 managers belonging to the government, public and private sectors. Majority were from the middle level of management. However, there was a general mix when it came to the functional areas, age groups, years of experience, educational background and income groups.

Measurement

Two questionnaires were used for the present study. These were:

- (1) "Managerial Effectiveness Questionnaire (ME)" developed by Seeta Gupta (1996). It consists of 45 items, which describes managerial behaviours, incorporating 16 factors with three dimensions of managerial effectiveness, mainly activity of the position, achieving result and developing further potential. This is a 5-point likert scale. The reliability of the scale is .73
- (2) "Organizational Justice Questionnaire (OJ)" by perception of justice within organizations was measured by using three scales, which purports to identify the three dimensions of organizational justice as distributive justice, procedural justice, and interactional justice. Distributive justice was measured with the 5-item scale Index, developed by Price and Muller (1986). The reliability of the scale is .90. Perception of procedural justice was measured by using 15-item scale developed by Niehoff and Moorman (1993). The scale has reported reliability for .90. Perception of interactional justice was measured by using a 9-item scale developed by Moorman (1991). This 9-item scale measures the interpersonal treatment that the employees receive during the enactment of organizational procedure. This is a 7-point scale and the scores on the scale ranges from 1=strongly Disagree to 7=Strongly Agree. With the reliability reported as .98.

Table 1: Mean, Standard Deviation, and Intercorrelation between Organizational Justice and Managerial Effectiveness Dimensions (N=300)

Variables	Mean	S.D	ACTP	ACHR	DFP	DJ	PJ	IJ
1. ACTP	54.78	19.21	1	.88**	.90**	.60**	.62**	.66**
2. ACHR	16.17	5.8	.88**	1	.86**	.57**	.60**	.63**
3. DFP	19.52	6.63	.90**	.86**	1	.58**	.61**	.64**
4. DJ	23.11	8.05	.60**	.57**	.58**	1	.82**	.86**
5. PJ	41.5	15.28	.62**	.60**	.61**	.82**	1	.88**
6. IJ	41.09	14.36	.66**	.63**	.64**	.86**	.88**	1

**Significant at .01 level (2-tailed)

ACTP -Activity of the position, ACHR-Achieving the results, DFP-Developing further potential, DJ-Distributive justice, PJ-Procedural justice, IJ-Interactional justice

Result

Table 1 presents the mean, standard deviation and intercorrelation for all the variables. It can be observed that our hypotheses is generally supported by the strong correlations between each of the independent variables and the dependent variables, the strength of this relationship varies widely between .57 (lowest) and .90

(highest). A significant relations has been found between organizational justice (OJT) and managerial effectiveness (on over all basis) with the calculated correlation value as $r = .67^{**}$ ($p < .01$ level). The relationship of organizational justice (on overall basis) has been displayed through graph (Figure 1).

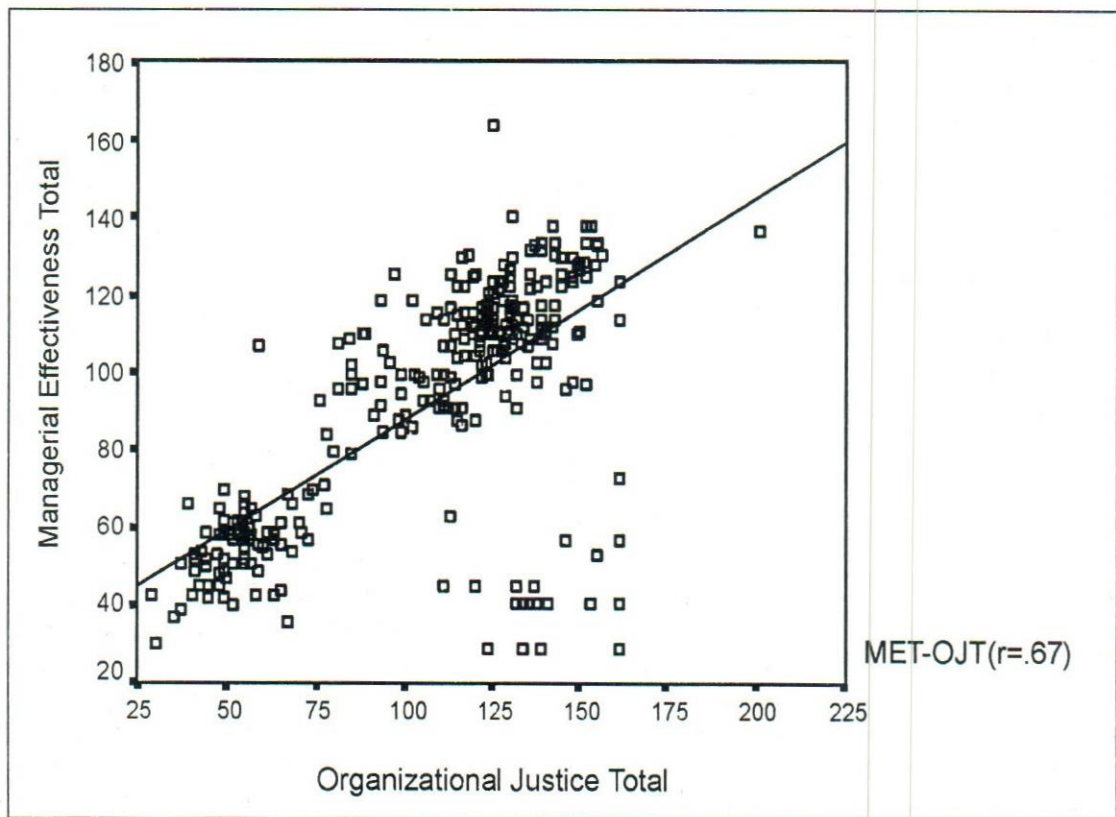


Figure 1. Graph Showing Relationship Between MET and OJT

To identify the genuine and most critical predictors of managerial effectiveness, therefore, it is necessary to go beyond the zero order correlations and undertake multivariate analysis. This was done with the help of stepwise multiple regression technique. The dimensions of organizational justice were entered for the stepwise multiple regression equation and it was found that all the dimensions of justice i.e., distributive justice, procedural justice and interactional justice were significant for the activity of his position, achieving the results and developing further potential.

On the basis of Table 2, the results of stepwise multiple regression reveal that among all the dimensions of organizational justice, distributive justice predicted activity of his position, with multiple R as .60 ($F=167.86^{**}$, $p<.01$, $\beta =.60$, $R^2=.36$); procedural justice with multiple R as .64 ($F=105.95^{**}$, $p<.01$, $\beta =.41$, $R^2=.41$); interactional justice multiple R as .67 ($F=80.34^{**}$, $p<.01$, $\beta =.44$, $R^2=.44$) and jointly explained 44 % variance in the prediction of activity of his position. And as a whole, distributive justice has been found as the strongest predictor of activity of his position with the calculated Beta value as .60.

Table 2: Stepwise Multiple Regression Analysis showing Managerial Effectiveness as Dependent variable with the Dimensions of Organization Justice as Predictor Variable (N=300)

Independent variable	R	R ²	SEm	F-value	D.F	² Value
1.D.V. ACTP						
DJ	0.6	0.36	15.39	167.86	1,298	0.6
DJ,PJ	0.64	0.41	14.72	105.95	1,297	.25,.41
DJ,PJ,IJ	0.67	0.44	14.33	80.34	1,296	.07,.17,.44
2.D.V:ACHR						
DJ	0.57	0.32	4.75	144.54	1,298	0.57
DJ,PJ	0.61	0.38	4.58	91.88	1,297	.23,.41
DJ,PJ,IJ	0.64	0.41	4.48	68.71	1,296	.06,.18,.41
3.D.V:DFP						
DJ	0.58	0.34	5.37	157.39	1,298	0.58
DJ,PJ	0.62	0.39	5.17	91.17	1,297	.26,.39
DJ,PJ,IJ	0.65	0.42	5.06	72.56	1,296	.09,.16,.41

*ACTP : Activity of the position, ACHR: Achieving the results, DFP: Developing further potential, DJ: Distributive justice, PJ: Procedural justice, IJ: Interactional justice

For achieving the results, distributive justice predicted achieving the results with multiple R as .57 ($F=144.54^{**}$, $p<.01$, $\beta =.57$, $R^2=.32$), procedural justice with the multiple R as .61 ($F=91.88^{**}$, $p<.01$, $\beta =.38$, $R^2=.38$); interactional justice with the multiple R as .64 ($F=68.71^{**}$, $p<.01$, $\beta =.41$, $R^2=.41$) and jointly explained 41 % variance in the prediction of achieving the results. And as a whole, distributive justice has been found as the strongest predictor of achieving results with the calculated Beta value as .57. On the basis of the table we can say that distributive justice is the strongest predictor of achieving the result.

Lastly, developing further potential has been predicted on the basis of dimensions of organizational justice and has been found that distributive justice

predicted developing further potential, with multiple R as .58 ($F=157.39^{**}$, $p<.01$, $\beta =.58$, $R^2=.34$); procedural justice with multiple R as .62 ($F=91.17^{**}$, $p<.01$, $\beta =.39$, $R^2=.39$); interactional justice with multiple R as .65 ($F=72.56^{**}$, $p<.01$, $\beta =.41$, $R^2=.42$) and jointly explained 42 % variance in the prediction of activity of his position. And as a whole, distributive justice has been found as the strongest predictor of developing further potential with the calculated Beta value as .58. Among all the dimensions of justice distributive justice has strongly support the managerial effectiveness dimensions followed by interactional justice and procedural justice. Hence, we can say that our hypothesis has been retained at .01 levels while predicting managerial effectiveness dimensions on the basis of justice dimensions.

Discussion

On the basis of the obtained results, it can be suggested that there is a significant relationship between perception of justice and managerial effectiveness. The findings have indicated that positive perception of justice (distributive justice, procedural justice and interactional justice) leads to managerial effectiveness. It can be stated that distributive, procedural and interactional justice related to the fulfillment of the cognitive needs (thinking, growth and decision making) and also affects task performance and contextual performance of managers (Harrison et al. 2006). It is also evident from the results that perception of justice at workplace plays a significant role in determining the activities of the position, achieving the results and developing further potential among managers, which in combination increases managerial effectiveness. It can be suggested that satisfaction of being treated fairly at workplace generates positive emotions as self-respect, pride, contentment and happiness (Burne, 2008) along with personalized relationship increase job satisfaction and effectiveness of managers which directly contribute to the success of an organization (Tripathi and Tripathi, 2001). When managers perceive their organization as fair they are more likely to improve their skills, gain expertise on competencies and proactive behaviors (Acquaah and Tukamushaba, 2009), and are more willing to perform effectively, which in turn increases managerial effectiveness (Rana et al. 2011). Thus, organizational justice is one of the most important factors for increasing competency and individual's performance (Fathy & Tony, 2010).

Table 2 reveals that activities of his position have been predicted by distributive justice with the joint effect of procedural justice and interactional justice. The findings suggest that if managers perceive fair treatment at workplace which provide material motivation (monetary incentives) (Jamaludin, 2009) and encourage managers to voice their concern in the decision making process while interactional justice facilitates managers' positive attitude toward information sharing and bring feeling of recognition within organization (Jerusalim and Hausdorf, 2007). This improves manager's activity towards professional front. Further, achieving results has been predicted by distributive justice with the joint effect of procedural justice and interactional justice. The results suggest that positive perception of organizational justice (distributive, procedural and interactional justice) at workplace provides feelings of deservedness which reduces turnover intentions (Lambert et al. 2010) and counterproductive work behavior among

managers. This makes managers disciplined and develop achievement orientation (Barrick et al. 2005), and push them for achieving the results. Lastly, developing further potential has been predicted by distributive justice with the joint effect of procedural and interactional justice. Perception of justice at workplace leads to positive outcomes, and these positive outcomes may either be tangible (e.g., money, services) or non-tangible in nature (social rewards, such as status and respect) (Cropanzano & Ambrose, 2001) which further fosters personal values and identity to managers. This creates meaning in manager's work life and establishes standards of excellence, and promotes high ideals.

Overall perception of distributive justice has a greater impact on work-related outcomes including pay satisfaction (Folger and Konovsky, 1989), job satisfaction (Dailey and Kirk, 1992), job security and supervision (Oldham et al. 1986), which make managers harmonious, synergistic and efficient towards work (Orlitzky et al. 2003) and fosters integrity and communication for reducing personal bias and conflict. It is suggested that procedural justice and interactional justice develop the feelings of respect and pride and fosters group cohesiveness (Janssens et al. 2003; Kickul and Troth, 2003) while reducing communication gap and managers displaying social sensitivity, respect, honesty, dignity, and politeness (Konovsky, 2000) with increased effectiveness.

Conclusion

The present study initiated a more in-depth analysis by highlighting the psychological framework of managers in terms of perception of justice at workplace, which is not only a cognitive construct but also an affective and highly personal for managers. It has become increasingly clear that fairness, integrity, and sensitivity at work place create organizational systems that are welcoming, inclusive, and congruent while increasing self-esteem (competence and worth) and feeling of achievement as a key criterion to judge one's total potentialities and capabilities (Joshi & Srivastava, 2009) among managers. The present findings indicate that perception of distributive justice, procedural justice and interactional justice generates a strong sense of affiliation with organization and acknowledge managers' personal responsibility for the outcomes such as clear communication for resolving problems, with increased managerial effectiveness in terms of activities of the position, achieving the results and developing further potential. It can be concluded from the present study that work is a pervasive aspect of one's life, where manager

expects more than materialistic gain and experience progress and momentum marked by a sense of learning (greater understanding and knowledge) in the stimulated market environment (Johnson et al. 1996) and help them to develop in a positive direction and finally spurt one's self development, emotional literacy and emotional alchemy and enable them to realize their full potential towards organizational goal (Adekola, 2006; Williams and Warrens, 2003; Ajaja, 2003). Thus, perception of justice enhances the managers, skills, commitment, effectiveness and productivity.

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Democracy, good governance and modernity cannot be imported or imposed from outside a country.

—Emile Lahud

Corporate Governance and Investor Protection: A Study of the Long-Run Performance of IPOs with Reference to Pre-issue and Post-issue Rating

ARWAH ARJUN MADAN

IPO grading is mandatory for raising capital in the Indian stock markets. While pre-issue rating of IPOs is much debated, there is no mechanism for reviewing the post-issue performance of the company. The companies are found issuing misleading prospectus, making false statements and fraudulently inducing investors to invest. There is the growing problem of vanishing companies. The article considers a sample of IPOs for the period 1992–95 for their long-run performance on the basis of the pre-issue rating and post-issue rating. The findings of the study indicate that the pre-issue rating can prove to be an effective indicator for assessing the post-issue performance of the companies. However, the post-issue categorization of shares poses difficulty to the investor in trading such securities at the exchange.

Business magazines, journals and newspapers often review IPOs/public issues. A complete review of the company's financial analysis and profile is present and an attempt is at times made to assign ratings to the IPOs/public issues. The question that often comes to one's mind is whether the IPOs/public issues should be rated. There has been a lot of debate on this issue in the recent times. Experts are of the opinion that rating of equity would make equity look much safer than it actually is. It is quite possible that such a rating could give investors a false sense of security and would not make them and keep them aware and cautious of equity investments. The market is expected to evolve its own rating mechanism using information of various kinds available at different points of time.

Another set of experts is of the opinion that rating of equity can help investors make informed investment decisions. Rating of equity when done in an objective and scientific manner can guide investors in choosing companies for the purpose of investment. Transparency and informational efficiency on the fundamentals of the issuer company can be targeted through the process of rating. It can be a basis for differentiating issues available for investment in the market.

Way back, in the early nineties, two business magazines—the Capital market and the Dalal Street—would bring out a rating for companies coming up with public issues on a regular basis. For reasons best known to them, the practice stopped in the year 1995. There has been a lot of debate on the rating of IPOs.

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In the year 2004, SEBI proposed to introduce mandatory rating of initial public offerings (IPO), a service not available on any bourse across the world. The rating would cover promoters, present management record and past performance yet will stay clear of making any comments on the pricing of issues. Companies were to be asked to disclose the ratings in the prospectus or the offer document. The regulator's move aimed to fill the lacunae in the current IPO process by assessing companies that are in the early stages of existence. By December 2005, SEBI agreed to introduce IPO grading on optional basis in Indian primary market, instead. However, IPO Grading is no longer optional and a company which has filed the draft offer document for its IPO with SEBI, on or after 1 May 2007, is required to obtain a grade for the IPO from at least one CRA. It was decided to make grading of all IPOs mandatory. The grading shall be done by credit rating agencies, registered with SEBI under the SEBI (Credit Rating Agencies) Regulations, 1999. It shall be mandatory to obtain grading from at least one credit rating agency. The issuer shall be required to disclose all the grades obtained by it for its IPO in the prospectus, abridged prospectus, issue advertisements and all other places where the issuer is advertising for the IPO.

IPO grading can be stated to be a service intended to facilitate the assessment of equity issues offered by unlisted companies to public. In fact, IPO grading is positioned as a service that provides 'an independent assessment of fundamentals' to assist comparative assessment that would prove useful as an information and investment tool for prospective investors (Saha, 2006). The methodology of such grading is to consider five-point scale with a higher score indicating stronger fundamentals, above average, average, below average and poor fundamentals.

There is much debate on the pre-issue rating of IPOs/public issues. However, there is no mechanism for monitoring or reviewing the performance of the company post-issue. The directors/promoters are found issuing misleading prospectus and making false statements and fraudulently inducing investors to invest their money. The projects for which the money was raised have not even commenced and there is the growing problem of vanishing companies. Debarring directors/promoters of vanished companies has been a step in the right direction. There has been continuous effort on part of SEBI in the tightening of disclosure practices and transparency of the offer document, efforts to ensure that the information published in the offer document is fair and true. The Government of India had initiated punitive action against directors and

promoters of over 200 companies that vanished after raising public funds in the years 1993–94 and 1994–95. The directors and promoters would be charged for issuing misleading prospectus, fraudulently inducing investors to raise money and making false statements. The projects for which the money was raised have not commenced and the companies have vanished. The Department of Company Affairs (DCA) has ordered prosecutions in about 60 cases under section 63, 68, and 638 of the Companies Act. One sees very little action on this front since then.

Review of Literature

A study (Uma, 1995) on Equity issues in the primary market was carried out to ascertain whether rating of equity issues on certain vital criteria gave investor a positive advantage on their investment in the primary market. The study revealed that the ratings were definitely a good indicator of future returns. It was also noted that an issue with higher ratings did yield higher returns. The following hypotheses were tested in the above study on equity issue in the capital market in India: (i) Rating is a good guide to potential returns. (ii) The broad trend in the stock market also plays an important role in determining the return on a new issue. (iii) The return on the issue also gets affected by the conditions prevailing in the industry to which the company belongs however, the impact was found to be negligible the reason being the industry indices used may be too segregated to capture the effect. The study suggested that a good system of rating can be used to invest money prudently and judgement of analysts may be considered crucial.

A recent study on Grading of IPOs (Poudyal, 2008) analyzes the efficacy of IPO grading. With the help of a regression analysis, a total of 63 IPOs that were graded reported that securities with higher IPO grades tend to exhibit underpricing to a lesser extent. It was also observed in case of higher IPO grades, the subscription rate of the IPOs improves across all class of investors, including retail investors. IPO grades are found to be inversely related to the short-term liquidity of the IPOs, i.e. at least in the short term, higher graded IPOs do not exhibit high turnover ratio. However, the study concludes that the IPO grades fails to explain with any significance the subsequent market performance of the issues in terms of capital gains.

Another study (Khurshed, Paleari, Pande and Vismara, 2008) analyzes the certification role of the newly introduced mechanism of Grading for book building IPOs in India. Besides the observation that Grading does not affect the underpricing of bookbuilt IPOs, it is also observed

that though grading is meant for the retail investors, it is being made use of by the informed institutional investors in India. The study concludes that the transparency of the bookbuilding process offers a much stronger signal to the retail investors as compared to that provided by Grading.

A study (Maskeri, 2012) of 56 public issues launched during the one year period from October 2009 to October 2010 states that 40 issues traded at a loss after one year of listing compared to their issue price. These issues were rated from Grade 1 to Grade 4; IPOs with Grade 4 had show a failure rate as high as 60%, IPOs with Grade 3 issues as well as IPOs with Grade 2 which are supposed to be 'Average Fundamentals', the failure rate is 75%. The study points out that any issue with grading from Grade 2 to Grade 4 have almost similar failure rates irrespective of the fundamentals of the company even when the market conditions are accounted for. At the same time, the IPOs with Grade 4 are found to be highly oversubscribed raising questions on the reliability and relevance of IPO Grading.

A paper (Joshy and Agarwalla, 2012) examines the market impact of a unique IPO certification on the IPO pricing efficiency by providing comprehensive issue-related information to the market, especially to the retail investors. The results indicate that grading has only a limited influence on the IPO demand of retail and institutional investors. It is observed that the low grade issues appear to have weaker demand from investors relative to the ungraded IPOs. The study suggests the failure of grading as a process of IPO certification.

Data and Methodology

The article discusses the issue of rating of equity with special reference to IPOs. It considers a sample of IPOs for the period 1992–95 for their long-run performance (5 years from the time of listing). This study has taken into consideration two factors to assess the performance of IPOs- pre-issue rating and post-issue rating. Section I deals with pre-issue rating and Section II deals with post-issue rating.

For the pre-issue rating (i) the rating as given by Capital Market & Dalal Street is taken into consideration; (ii) for the short-run performance, 100 observations have been reviewed; (iii) for the long-run performance, a total of 51 observations have been reviewed.

For the post-issue rating (i) the share categorization of shares by the Bombay Stock Exchange (BSE) in the year 2000; (ii) a sample of 717 IPOs for the period 1991–1995 to assess the long-run performance.

The Bombay Stock Exchange (BSE) introduced the grading of shares of companies listed at the exchange. Along with the earlier grading—'A', 'B1', 'B2' and 'B', a new category 'Z' was introduced for companies that were not complying with the listing agreement or had poor trading volumes. In 2002, certain amendments to guidelines for shifting/retaining companies' to/in 'Z' Group were made. As per the revised guidelines, BSE state that it would consider any three out of the following seven criteria of non-compliance for shifting a company to the 'Z' Group.

In December 2003, BSE introduced of a new group called 'T' group. The Exchange has in the past put scrips in the trade-to-trade segment as a surveillance measure. Such scrips have either been transferred to 'Z' group or have remained in their erstwhile group and are identified by the '\$' sign affixed to the scrip ID. There has been difficulty in identifying such scrips and distinguishing them from scrips being traded in the 'Z' group. Market representation and deliberations led to the introduction of a separate group 'T'. All scrips settled on 'Trade to Trade' basis on account of surveillance measures were to be shifted to 'T' group. Companies listed at BSE were first categorized in the year 1999 as A, B1, B2, B and Z, the first time the Z category was introduced. In March 2004, BSE refreshed its categorization for a total of 5536 companies listed at the exchange, out of which 2787 companies were categorized as 'Z' companies (Table 1).

Table 1: Classification of 'Z' Category shares

Reason	Category-Z	Nos. of Obs.
Non-compliance with clause of Listing Agreement	A	146
Non-compliance-SEBI directive signing with depositories	B	142
Weak Fundamentals	C	5
On revocation of suspension	D	0
Surveillance Action	E	0

Section I: Performance of IPOs and Pre-Issue Rating

Issue rating (Madan, 2002) considers as a factor influencing initial return on IPOs and their long-run performance. A positive relation is found to exist between return on listing and the issue rating for the said initial public offer made by the company. The relationship is found to be statistically significant. Further, the sample was divided into two categories: a high rating (above 50) and a low rating (below 50).

The return on listing for IPOs with an issue rating above 50 is found to be as high as 323% as against 119.8%

for IPOs with an issue rating below 50 (Table 2). The study concludes that the issue rating assigned to the IPO is found to significantly influence the initial return on the IPO.

Table 2: Performance of IPOs- Rating-wise

Rating	Below 50		Above 50	
	50		50	
Return	On Listing	Daily	On Listing	Daily
Average	1.19	0.0049	3.23	0.0085
Minimum	-0.6	-0.0038	-0.58	-0.0039
Maximum	7	0.0198	34	0.0264
Std. Dev.	1.38	0.0049	5.31	0.0065
Coefficient of Variation	1.15	0.98	1.64	0.77
Return ^a = f (Issue Rating)	4.4 x 10 ⁻³ + 1.19 x 10 ⁻³		-1.39 x 10 ⁻²	
(t)	0.109**		2.168*	

*Daily Return** significant at 10% level *significant at 5% level

Table 3: Z-Test-Long-run Performance & Issue Rating

Rating above 50 (22 observations)									
	Listing	3 mths	6 mths	9 mths	1 year	2 years	3 years	4 years	5 years
AVG	0.0094	0.0138	0.0066	0.0038	0.0029	0.0017	0.0007	6.08E-05	-0.0003
MIN	-0.004	-0.004	-0.0003	0	0	-0.0001	-0.0007	-0.0012	-0.0016
MAX	0.0264	0.0298	0.0156	0.0109	0.0069	0.0041	0.0026	0.0017	0.0011
STDEV	0.0081	0.0088	0.0043	0.0029	0.002	0.0011	0.0009	0.0008	0.0007
Coefficient of Variation	0.85	0.63	0.66	0.77	0.71	0.64	1.34	14.34	-2.35
Rating below 50 (29 observations)									
	Listing	3mths	6mths	9mths	1 year	2 years	3 years	4 years	5 years
AVG	0.0054	0.0087	0.0039	-0.0023	0.0015	0.0006	924E-05	-0.005	-0.0006
MIN	-0.004	-0.002	-0.001	-0.002	-0.0025	-0.0014	-0.0023	-0.002	-0.0025
MAX	0.0164	0.0244	0.0187	0.0125	0.0066	0.0031	0.0022	0.0013	0.0006
STD. DEV.	0.0047	0.008	0.0043	0.0031	0.0021	0.0011	0.0011	0.0009	0.0006
Coefficient of Variation	0.86	0.92	1.102	1.34	1.42	1.85	12.4	-1.67	-1.03
Z=	2.064	2.142	2.208	1.779	2.309	3.474	2.137	2.438	1.617
P value	0.0197	0.0161	0.0139	0.0384	0.0107	0.0003	0.0166	0.0075	0.0537
Alpha risk	0.05	0.05	0.05	---	0.05	0.01	0.05	0.01	---

(# Daily Return)

A high rating assigned to the initial public offer is found to significantly influence the return on listing.

A Z test was conducted to find out whether there is a difference between the performance of IPOs with a higher pre-issue rating as compared to a lower pre-issue rating over a period of five years after listing. The periods taken into consideration are on listing, 3 months, 6 months, 9 months up to one year and then annual returns for the second year, third year, fourth year and fifth year after listing. In the long run too, IPOs assigned with a high issue rating at the time of offer perform better in comparison to IPOs with a low issue rating. The results are found to be significant (.05 level) (Table 3).

The aforementioned studies show that rating of IPOs/ Public Issues can prove to be a good indicator for making investment decisions. A rating system need to be developed to rate IPOs/Public Issues after taking into consideration all aspects, factors and financial details of a company.

Section II: Post Issue Rating & Performance of IPOs

Further on, for making an assessment of the long-run performance of IPOs on being assigned a rating/grading, a sample of 717 IPOs is considered during the period 1991–1995. An assessment of the IPOs is carried out for a period of five years; the periods taken into consideration are on listing, 3 months, 6 months, 9 months up to one year and then annual returns for the second year, third year, fourth year and fifth year after listing.

From the sampled data, it is observed that (i) in the year 2000, 61% of the IPOs are categorized under the category 'B' and 22% of the shares are categorized under the category 'Z' and (ii) in the year 2004, out of the 439 companies of 'B' category reported in 2001, 44.64% show a shift upward to 'B2' in the year 2004, while 32.34% companies from the same category show a shift downwards to the 'Z' category in the year 2004 (Table 4).

Table 4: Categorization of Shares-Year 2000 to 2004

2000		2004 (Shift)						
Category	Nos. of Obs.	'A'	'B1'	'B2'	'B'	'Z'	'T'	NA
'A'	10	8	2	-	-	-	2	-
'B1'	62	3	39	12	-	2	-	6
'B2'	48	-	26	12	-	22	-	14
'B'	439	-	-	196	0	142	19	52
'Z'	158	-	-	-	-	127	-	31

Table 5: Performance of IPOs-Category of Shares-'A', 'B1', 'B2', 'B' & 'Z'

Shares	No	Listing	3 mths	6 mths	9 mths	1 year	2 years	3 years	4years	5 years
'A'	10	0.0075	0.0081	0.0049	0.004	0.0033	0.0007	0.0005	0.0005	0.0006
'B1'	62	0.0075	0.0065	0.0033	0.0021	0.0014	4.88E-05	-0.0001	-4.03E-05	0.0002
'B2'	48	0.00507	0.0059	0.003	0.0017	0.0012	-0.0002	-0.0006	-0.0007	-0.0006
'B'	439	0.0057	0.0049	0.0021	0.0009	0.0004	-0.0007	-0.0009	-0.0008	-0.0005
'Z'	158	0.0046	0.0051	0.0025	0.0015	0.0007	-0.0005	-0.0009	-0.001	-0.0008

The long-run performance of IPOs under the various categories of shares show the category 'A' does perform very well in comparison to all other categories. The results are found to be statistically significant (Table 5).

It is observed that the return on IPOs for category 'A' is found to be positive for the complete period of five years after listing, though it shows a decline over the five year period.

It is observed that the return of IPOs in category 'A' and 'B1' are found to perform well with initial return on listing registered to be very high in comparison to other categories.

In case of remaining categories 'B2', 'B' and 'Z', it is observed that the return remains positive for a period up to one year on listing, however, it is negative for the rest of the period i.e. the second year to the fifth year.

Since the above categorization/grading came into effect in the year 2001, the study considers the return on listing of IPOs in a retrospective effect. The above observations indicate that the categorization/grading as introduced by the Bombay Stock Exchange (BSE) can prove an effective tool for dissemination of information on the performance of companies in the capital market for the benefit of existing as well as potential shareholders as well as other stake holders. The study considers IPOs issued during the period 1991-1995 and covers a period of five year up to the year 2000. As per the categorization/grading, the performance of companies or the return on IPOs is very much indicative of the grading; the return on the category 'A' shows excellent return or outperforming the others while the return on the category 'B1' showing comparatively better returns over the remaining ones.

Observations

There are no other indicators as of today in the capital market in India wherein the post-issue performance of the companies can be assessed. The findings of the study indicate that the categorization/grading of shares of companies by the BSE can prove to be an effective indicator for assessing the post-issue performance of the companies and assist in making investment decisions for investors. There is a need for the scrutiny of companies on a regular basis. The categorization/grading began with parameters as stated under the Corporate Governance Code. The categorization/grading can prove to be a good post-issue rating for the investors.

However, there is a growing number of companies coming under the category 'Z' and that is where the attention and action is needed. As per the BSE categorization/grading in the initial period (2001), it is observed that there is an equal number of companies categorized as 'Z-A'- companies for non-compliance with the Listing Agreement and 'Z-B' non-compliance on SEBI directive on signing with depositories (Refer Table 1). A few cases of companies were reported as ones with weak fundamentals. No cases were reported on surveillance action initiated against companies or when revocation of suspension was ordered. Moreover, for this categorization/grading to be an effective post-issue rating, there is a need to categorize/grade more and more companies under the reason that the company has weak fundamentals. Further on, punitive action along with regular surveillance can ensure that these companies meet the requirements and adhere to the norms of corporate governance.

As L.C. Gupta points out in a study (Economic Times, March 17, 2004), it is observed that only about 1000 out of the 9644 (SEBI Annual Report 2001-02) companies listed at the stock exchanges in India have added value to shareholder investments. The percentage of companies with current share value below the par even at a boom time is found to be large in case of 'B2', 'T' and 'Z' category (Table 6); those that have added to the

Table 6: Companies adding Shareholder Value

Category	%
A	2.1
B1	25.3
B2	83.6
T	83.1
Z	81.8

shareholder value, companies from 'A' and 'B1' category is very small.

Conclusion

One has to raise a lot of questions about the issue of Corporate Governance in India. A majority of companies coming under the list of vanishing companies is said to be facing punitive action against directors and promoters initiated by the Government of India. However, one is not sure of the extent of the action taken against these vanishing companies and the progress thereafter. It is especially the small investors who are at a loss. No matter how much you transfer companies from one category to another, or some new category tomorrow, the investor just ends up holding useless scrips of paper. Such a categorization/grading cannot be just a mechanism used by the BSE as a measure of stock exchange regulation, but it has to be so designed and implemented that it can be effectively used by the investor to monitor companies and guide him to make the investment decisions. Very often, the investor is left helpless when the company is suddenly shifted to the category 'T' or category 'Z'. To conclude, the categorization/grading poses difficulty for the investor in trading such securities at the stock exchange.

The capital market is entirely driven by the information it receives from various sources. To begin with, there are the merchant bankers and there is a need to exercise due diligence; this can facilitate the entry of quality paper in capital market and shun fly-by-night operators from tapping the capital market. Second, one sees a strategic role for auditors calling for strong action. There is need for tough action against the malpractices carried out by companies disclosing false information to the public. The auditors have to stand firm and refuse lending their name to companies going public providing false information and fake figures. Further on, the stock exchanges have to work out a better and more efficient screening system to assess and review applications for listing. Some experts also recommended that SEBI should take up vetting of the offer document once again; this can help exercise greater vigilance in the scrutiny of the offer documents. The institutional investor in India can also play a more effective role; the interests of the people investing and resting their savings with them should be the prime concern. The Clause 49 of Listing Agreement states that the institutional directors on the boards of companies to be considered as independent directors whether the institution is an investing

institution or a lending institution even when the SEBI Committee on Corporate Governance (the Narayana Murthy Committee) had made a recommendation against such nominee directors.

In 1999, a RBI Working Group (Chairmanship of N. H. Siddiqui) stressed on the need to establish a credit information bureau in India. The two main reasons for the setting up of a credit information bureau are: (1) the continuous growth and expanding nature of the financial sector and (2) the need for an effective mechanism to mitigate the credit risk by enhancing the quality of credit decision. The Reserve Bank of India and the Government of India accepted the recommendation. As a step towards setting up a credit information bureau, Credit Information Bureau of India Ltd. (CIBIL) was established in the year 2000. CIBIL is said to cater to both, commercial and retail segment as a composite bureau. CIBIL has banks, financial institutions, credit card companies, housing finance companies and non-banking finance companies along with other credit guarantors as its members. It supplies and receives credit information on various borrowers – individuals as well as businesses. The core segment is maintaining the past payment history of the borrowers. CIBIL is said to be equipped with latest state-of-the-art technology from both, its technical and equity partners.

An attempt can also be made on providing information on the credit position or the finance position of a company. CIBIL or an agency set on the lines of CIBIL can be set up to provide information of the post-issue performance of the company- end-use of capital raised through public issue, performance of project undertaken or completion of projects initiated through the proceeds of the public issue. It has been observed that the companies have reported to be a sick or a loss-making unit after having made a public issue. One also sees the problem of 'vanishing' companies in the Indian capital market. Information can be made available on promoters / directors with latest updates and profiles. Wide publicity and dissemination of information on the current activities of such doubtful companies can help forewarn investors and influence their investment decisions.

Everywhere in the review of literature on the Grading of IPO in the pre-issue stage in India, it is stated that it is a globally unique concept. It is said that there is no grading of IPOs that takes place in any capital market across the world and one of its kind developed in the Indian capital market and implemented as a mandatory requirement since the year 2007. It is reported by many studies on IPO grade that it has helped to bring about more transparency and information symmetry to the market despite the fact worth noting that IPO grading is NOT a recommendation to buy, sell or hold the securities at the same time, it is also NOT a comment on the valuation or pricing of the IPO nor an indication of the likely listing price of the securities (Poudyal, 2008). Likewise, a categorization or grading to be designed for post-issue performance of companies that can prove a good guide or indicator for making investor decisions.

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Gender equality is more than a goal in itself. It is a precondition for meeting the challenge of reducing poverty, promoting sustainable development and building good governance.

—Kofi Annan

A Study of Non-mandatory and Exemplary Corporate Governance Practices of Selected Companies in India

RAMROOP K. SHARMA

This article studies the extant non-mandatory provisions of Corporate Governance (CG) and practices. It also looks at exemplary CG practices adhered to by selected companies. CG has gained momentum over the years. In India, codification of CG by Confederation of Indian Industries (CII) in 1998 was the first initiative. Since then, different committees on CG have been formed by the regulators and eventually CG became mandatory for selected companies since January 2006. Clause 49 of the Listing Agreement contains mandatory as well as non-mandatory provisions of CG. These provisions are applicable to selected listed companies. Compliance with CG provisions should promote protection of interests of stakeholders, particularly equity shareholders. While companies are required to adhere to mandatory provisions; compliance with non-mandatory provisions is voluntary. A review of literature on CG shows that there exists partial compliance with some non-mandatory provisions of CG. The number of studies ascertaining compliance with all non-mandatory provisions is negligible. Further, instances of studies on exemplary CG practices are rare and so this paper attempts to fill this research gap. The findings of the paper reveal that compliance with non-mandatory provisions of CG in general is weak. Similar are the results in case of exemplary CG practices. The findings have implications for companies, stakeholders and regulators.

The Cadbury Committee was set up in May, 1991 to establish standards of Corporate Governance (CG) and submitted its report in the year 1992. It stated thus: "Corporate governance is a system by which companies are directed and controlled" (Cadbury Committee, 1992, para. 2.5). A Manager (agent) may not always administer the company in the interest of the shareholder (principal). This conflict of interest between manager and owner engenders agency issues. The objective of Agency Theory is to establish the optimal contractual relationship between the principal and the agent. The theory focuses on protection of interests of equity shareholders as they have voting rights apart from financing companies. So suppliers of finance should get adequate return on their investments (Shleifer and Vishry 1997, p. 737). Among suppliers of finance, debt holders are paid interest or principal even in the event of companies incurring losses; equity shareholders being residual claimants carry risk with respect to their capital and returns. Hence the interests of equity shareholders should prevail over that of other stakeholders. The Securities and Exchange Board of India (SEBI) defines CG as "the way in which companies run themselves, in particular the way in which they are accountable to those who have a vested interest in their performance, especially their shareholders" (SEBI—Glossary). In consonance with the views of SEBI, the Birla Committee Report says that the fundamental objective of CG is the "enhancement of shareholder value, keeping in view the interests of other stakeholders" (Kumar Mangalam Birla Committee Report, 2002, para 4.2). Ideally, CG means protecting interests of equity shareholders but not at the cost of other stakeholders.

CG Developments—A Snapshot

Instances came to light of companies in the United States (US) making illegal political contributions and bribing the government; consequently, the Foreign and Corrupt Practices Act was enacted in the US in 1977 (Mehta,

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2003, pp. 677–678). The Act has provisions for the establishment, maintenance and review of internal control. Further, occurrence of corporate frauds worldwide intensified CG developments. Instances are the failure of Xerox and Enron in the US, Robert Maxwell and Barings Bank in United Kingdom (UK) and Nugan Hand Bank in Australia (Kar, 2009, p. 12.) In 1979, the Securities and Exchange Commission (SEC) mandated reporting on internal controls (Mehta, 2003, p. 678). The Cadbury Committee's recommendations for the Board and reporting on effectiveness of internal control have been noteworthy (Panchali, 1999, p. 65.) Further, reforms in CG continued,

pursuant to the recommendations of the King Committee in South Africa (1994), the Toronto Stock Exchange Report in Canada (1994), the Greenbury Committee in UK (1995), the Vienot Committee in France (1995), and the Hampel Committee in UK (1997) (Annual Report of Infosys, 2005–06, p. 114). In 1997, the New York Stock Exchange (NYSE) with the consent of the SEC directed all US companies to form Audit Committees with a majority of Independent Directors. The General Motors Board of Directors Guidelines in the US, and the Dey Report in Canada made noteworthy contributions. The Sarbanes-Oxley (SOX) Act passed by the US Congress (July 2002) introduced drastic changes in corporate financial reporting since 1930. In November 2003, the SEC approved these changes to the NYSE and the National Association of Security Dealers Automated Quotation System as listing requirements. The Higgs Report on Non-Executive Directors and the Smith Report on Audit Committees (January 2003) was part of CG momentum in UK as well as Europe. In April 2004, the government of 30 countries revised the Organisation for Economic Co-operation and Development's (OECD's) principles of CG. So the advancement of CG is linked with the failure of companies globally.

In India, the Companies Act, 1956 laid the foundation for corporate financial reporting and disclosure requirements (Chakrabarti, William and Yadav, 2008, p. 63.) Further the wave of liberalisation, privatisation and globalisation in 1990s necessitated government decontrol and competitive businesses. The developments of CG in the UK, particularly the recommendations of Cadbury Committee (1992), triggered CG reforms in India. Further, incidence of stock market scams such as the Harshad Mehta Scam, 1992, the Vanishing Companies Scam, 1994, M. S. Shoes Scam 1994 and others intensified the CG debate (Sharma, 2010, pp. 47-48). In the Indian context initiatives were taken by National Task Force of CII chaired by Rahul Bajaj which developed "A Code of Desirable Corporate Governance" in 1998 (CII). The SEBI appointed Kumarmangalam Birla Committee in 1998 and on its recommendations the Listing Agreement was enacted by SEBI in the year 2000 for selected companies. The Department of Company Affairs,

Government of India appointed the Naresh Chandra Committee to improve CG and the committee made recommendations in the Indian context on the lines of the Sarbanes-Oxley Act, 2002. Further, SEBI established the Narayan Murthy Committee in 2003 to refine CG provisions. The J.J. Irani Committee formed by the government suggested modifications in the Companies Act, 1956 with respect to CG provisions. Based on recommendations of the aforesaid committees, Clause 49 was revised a few times (SEBI Circulars at www.nseindia.com). Government of India, Ministry of Corporate Affairs (MCA) also established the National Foundation for Corporate Governance in 2004 as a catalyst to strengthen CG (NFCG, 2012). In 2007, the government issued Corporate Governance Guidelines for Public Sector Enterprises in addition to compliance requirements with Clause 49 of the Listing Agreement. Despite these developments, the sensational fraud at Satyam Computers in 2008-09 caused loss to stakeholders and raised many questions on the credibility of companies with respect to CG (*Business Standard*, November 2, 2010, p. 11). Consequently, the MCA thought of some initiatives, as for instance, developing Corporate Governance Voluntary Guidelines, 2009, Corporate Social Responsibility Voluntary Guidelines, 2009, Corporate Governance Recommendations for Voluntary Adoption by CII, 2009, National Voluntary Guidelines on Social, Environmental and Economic Responsibility of Business, 2011 (NFCG, 2012). The Institute of Company Secretaries of India too recommended strengthening the Corporate Governance Framework guidelines after the Satyam fiasco. Further, Companies Bill, 2012 incorporates many provisions of Clause 49 of the Listing Agreement such as requirement of a certain number of Board Meetings, Audit Committee and selection of Independent Directors apart from including new provisions, like Class Action Suits as per Section 245, and establishment of Special Fraud Investigation Office under Section 211 (Companies Bill 2012). Apparently, MCA is taking keen interest in CG regulations. The Government is also planning to finalise a National Policy on Corporate Governance for which suggestions have been sought from the Adi Godrej Panel on Corporate Governance (*Economic Times*, Sept. 27, 2012, p.7). Recently, SEBI vide circular dated August 13, 2012, has mandated inclusion of the Business Responsibility Report as a part of the Annual Report for the top 100 listed entities (Business Responsibility Report, FAQs, p. 1). This reporting requirement is in line with the National Voluntary Guidelines on Social, Environmental and Economic Responsibilities of Business. Despite increased awareness and improvements and developments in CG, the desired results are yet to be seen and one concern is with respect to its implementation in spirit.

Review of Literature

As per the approach of the Cadbury Committee, compliance with a voluntary code coupled with disclosure, will prove more effective than a statutory code, (Cadbury Committee, 1992, para. 1.10). In case of non-mandatory practices of CG, the results are quite disheartening (Sharma, Agarwal and Ketola, 2009, abstract). Further, a study reveals that in case of 44.44% of the sample companies, an Independent Director has been acting as chairman of the Remuneration Committee; with respect to Shareholders Rights, 14.36% of the companies have sent half yearly reports to the shareholders and only 7.22% of the companies have passed special resolutions through postal ballot (Sharma, 2010, p. 271). Overall, mean disclosure score of voluntary CG practices over a period of time is less than 50% (Sharma, 2010, p. 231). It remains to be seen whether some of the voluntary CG measures will become obligatory for companies through a comprehensive revision of the Companies Act, 1956 (Sharma, 2012, p. 15). The government has considered a few extant voluntary provisions of Clause 49 as a part of the Companies Bill, 2012, for instance, establishment of Nomination and Remuneration and Stakeholders Committee under Section 178 (Companies Bill, 2012). The adoption of non-mandatory provisions of CG does have an impact on firm performance and compliance with such provisions protects interests of shareholders (Madan, 2012, p. 275). From a review of literature it is evident that non-mandatory practices of CG are vital for companies though compliance with such non-mandatory provisions is optional.

Regulatory Framework of CG

Clause 49 of the Listing Agreement has become effective from January 1, 2006. Entities seeking listing for the first time, at the time of seeking in-principle approval for such listing and for existing listed entities having a paid-up share capital of Rs. 3 Crore and above or net worth of Rs. 25 Crore or more at any time in the history of the company, by April 1, 2005 are required to comply with mandatory provisions of CG. This Clause is also composed of non-mandatory provisions (Clause 49 of Listing Agreement, Annexure ID, Circular no. SEBI/CFD/DIL/CG/1/2004/12/10, dated 29 October, 2004.)

Non-Mandatory Provisions of CG

The non-mandatory provisions are described below.

The Board

A Non-Executive Chairman may be entitled to maintain a Chairman's office at the company's expense and is allowed reimbursement of expenses in the performance of his duties. Independent Directors may have a tenure

not exceeding, in the aggregate, a period of nine years on the Board of a company.

Remuneration Committee

(i) The Board may set up a Remuneration Committee to determine on their behalf and on behalf of the shareholders, the company's policy on specific remuneration packages for executive directors including pension rights and any compensation thereof. (ii) To avoid conflicts of interest, the Remuneration Committee, may comprise at least three

directors, all of whom should be Non-Executive Directors and the Chairman of the Committee being an Independent Director. (iii) All the members of the Remuneration Committee should be present at the meeting. (iv) The Chairman of the Remuneration Committee should be present at the Annual General Meeting to answer the shareholders' queries; however, it would be up to the Chairman to decide who should answer the queries.

Shareholder Rights

A half-yearly declaration of financial performance including summary of the significant events in the preceding six months may be sent to each shareholders.

Audit Qualifications

Company may move towards a regime of unqualified financial statements.

Training of Board Members

A company may train its Board members as per the business model of the company considering the risk profile of the business, their responsibilities as directors and the best ways to discharge them.

Mechanism for Evaluating Non-Executive Board Members

The performance evaluation of Non-Executive Directors could be done by a peer group comprising the entire Board of Directors, excluding the director being evaluated and such evaluation could be the mechanism to determine whether to extend the terms of appointment of Non-Executive Directors.

Whistle Blower Policy

The company may establish a mechanism for employees to report to the management, concerns about unethical behaviour, actual or suspected fraud or violation of the company's code of conduct or ethics policy. This mechanism could also provide for adequate safeguards against victimization of employees who avail of the mechanism and also provide for direct access to the Chairman of the Audit Committee in exceptional cases. Once established, the existence of the mechanism may

be appropriately communicated within the organization.

Research Design

Research design specifies the objectives, methodology, tools and limitations of the study.

Objective of the Study

To ascertain non-mandatory and exemplary CG practices by companies in general.

Research Methodology

Research Methodology consists of the below mentioned aspects.

Sampling Method

Purposive Sampling

Purposive sampling method is used for the sample which consists of 34 companies which featured in the S&P CNX NIFTY Index in the years 2005–06, 2006–07 and 2007–08. The sample companies pertain to different sectors. Some companies in the Index were excluded as they were not members of the exchange in all the three years of the study which would not provide a comparative view; a few were excluded due to non availability of data.

Source of Data

Annual reports are considered important documents for assessing and analyzing the CG standards and compliance level of companies (Karim, 1996, pp. 89-124). Hence, secondary data were gleaned from CG reports which are part of annual reports. Printed copies of Annual Reports of some companies were received on request and some Annual Reports were retrieved from their websites.

Definition of Terms

Non-Mandatory CG Practices refers to compliance with non-mandatory provisions of Clause 49 of the Listing Agreement.

Exemplary CG Practices refer to CG practices beyond mandatory and non-mandatory provisions of Clause 49 of the Listing Agreement.

Tools for Data Analysis

Data collected from the company's Annual Reports were analysed with the help of classification, tabulation and percentages to determine the extent of compliance. A test of proportion was also used for the study.

Limitations of the Study

Results of the study are subject to limitations of estimation of errors, sample size, sample period and sampling method.

Data Presentation and Analysis

Exhibit 1: Sample companies that featured in S&P CNX Nifty Index at 31st March 2006, 2007 and 2008

Sr. No.	Sample
1	ABB Limited, India
2	ACC Limited
3	Ambuja Cements Ltd.**
4	Bharti Airtel Limited*
5	Bharat Heavy Electricals Limited***
6	Bharat Petroleum Corporation Limited***
7	Cipla Limited
8	Dr. Reddy's Laboratories Limited
9	GAIL (India) Limited***
10	Grasim Industries Limited
11	HCL Technologies Limited
12	Housing Development Finance Corporation Limited
13	HDFC Bank Limited
14	Hero Honda Motors Limited
15	Hindalco Industries Limited
16	Hindustan Unilever Limited*
17	ICICI Bank Limited
18	Infosys Technologies Limited
19	ITC Limited
20	Larsen & Toubro Limited
21	Mahindra & Mahindra Limited
22	Maruti Suzuki India Limited**
23	Oil and Natural Gas Corporation Limited***
24	Ranbaxy Laboratories Limited
25	Reliance Infrastructure Limited**
26	Reliance Industries Limited
27	Steel Authority of India Limited***
28	Sun Pharmaceutical Industries Ltd.
29	Tata Motors Limited
30	The Tata Power Company Limited
31	Tata Steel Limited
32	Tata Consultancy Services Limited
33	Wipro Limited

* Indicates those companies that have changed their names in the year 2005-06, so a new name features in the sample.

** Indicates those companies that have changed their names in the year 2006-07, so a new name features in the sample.

*** Government companies.

Sources: (i) *The Economic Times*, Ahmedabad, 31st March 2006, 2007 and 1st April 2008.

(ii) www.nseindia.com

(iii) Annual Reports of sample companies.

Table 1: Data on compliance with Non-Mandatory Provisions of CG as per Clause 49

Provisions	Clause 49 of Listing Agreement	Number of Companies					
		2005-06		2006-07		2007-08	
		Full Compliance	Non-Compliance*	Full Compliance	Non-Compliance*	Full Compliance	Non-Compliance*
1. The Board	Annexure ID	2 -5.88%	32	1 -2.94%	33	1 -2.94%	33
2. Remuneration Committee	Annexure ID	21 (61.76%)	13	21 -61.76%	13	21 (61.76%)	13
3. Shareholder Rights	Annexure ID	9 -26.47%	25	8 -23.53%	26	9 (26.47%)	25
4. Audit Qualifications	Annexure ID	14 -41.18%	20	15 -44.12%	19	16 -47.06%	18
5. Training of Board Members	Annexure ID	7 -20.59%	27	6 -17.65%	28	6 -17.65%	28
6. Evaluation of Non-Executive Directors	Annexure ID	8 -23.53%	26	8 -23.53%	26	7 -20.59%	27
7. Whistle-Blower Policy	Annexure ID	23 (67.65%)	11	24 (70.59%)	10	23 (67.65%)	11

*Non-Compliance includes less than full compliance.
Source: Gleaned from Annual Reports.

Trends in Compliance with Non-Mandatory Provisions of CG

Compliance with Non-Mandatory Provisions of CG can prove beneficial for the smooth functioning of companies.

For instance, whistle-blowing on unethical practices may deter fraud within the company.

An inconsistent pattern can be noticed with regard to non-mandatory practices of CG as presented in Figure 1.

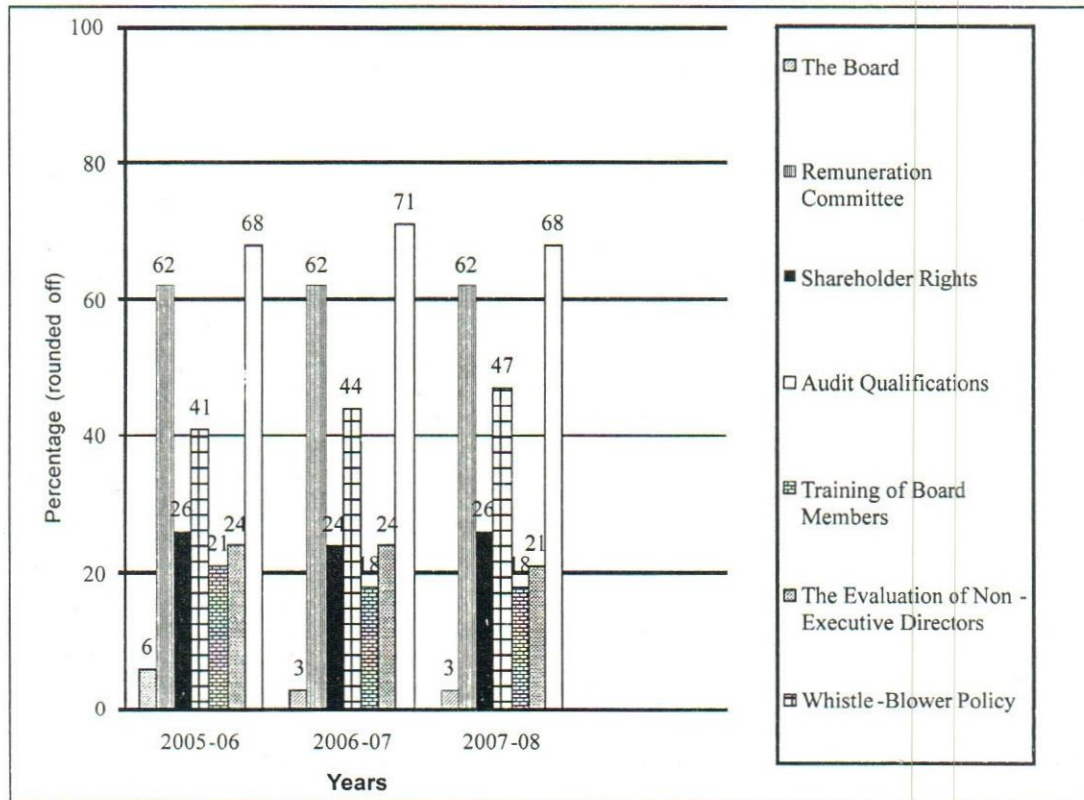


Figure 1: Trends in Compliance with Non-Mandatory Provisions of CG

Table 2: Data on Exemplary CG Practices

No.	Exemplary Practices	Number of Companies					
		2005-06		2006-07		2007-08	
		Compliance	Non-Compliance	Compliance	Non-Compliance	Compliance	Non-Compliance
1	CG Ratings	3	31	3	31	4	30
2	Shareholders Satisfaction Survey	1	33	2	32	2	32
3	Compliance Committee	0	34	0	34	2	32
4	Ethics and Compliance Committee	4	30	4	30	4	30
5	Nomination Committee	6	28	10	24	9	25
6	Value Added Statement/Market Value Added	4	30	2	32	3	31
7	Health, Safety and Environment	7	27	7	27	8	26
8	Secretarial Standards on CG by Institute of Company Secretaries of India	1	33	1	33	3	31
9	Fraud Monitoring Committee	2	32	2	32	2	32
10	Compliance with Recommendations of CG by Committee(s)(e.g. Kumar Mangalam Birla, Naresh Chandra and Narayan Murthy Committee)	2	32	2	32	2	32
11	United Nations Global Compact Programme	2	32	2	32	3	31
12	Value Reporting	1	33	1	33	1	33
13	Economic Value Added Analysis	5	29	4	30	4	30
14	Euro Shareholders CG Guidelines, 2000	1	33	1	33	1	33
15	30 Organisation for Economic Cooperation and Development's Principles of CG	1	33	1	33	1	33
16	Findings and Recommendations of The Conference Board Commission on Public Trust and Private Enterprises in the United States, 2002 and 2003	1	33	1	33	1	33
17	Early Compliance of International Financial Reporting System	1	33	1	33	1	33
18	Sustainability/Environment and Sustainability Reporting	5	29	6	28	7	27
19	Risk Monitoring Committee	1	33	1	33	1	33
20	Environment Report/Policy/Environment Management	5	29	5	29	5	29
21	Frequently Asked Questions in Annual Report	2	32	2	32	2	32
22	Secretarial Compliance Certificate by Company Secretary	5	29	5	29	5	29
23	CG Guidelines for Public Sector Enterprises, 2007	0	34	0	34	1	33
24	CG Monitoring and Review Process/Compliance	0	34	2	32	1	33
	Mean of Number of Companies complying and corresponding percentage	2.5 (7.35%), i.e., 3	2.71 (7.97%), i.e., 3	3.04 (8.94%), i.e., 3

Source: Gleaned from Annual Reports.

Instances of the oddity are apparent across the three years with respect to the evaluation of Non-Executive Directors and the whistle-blower policy.

Status of Compliance with Non-Mandatory Provisions of CG

Though, compliance with non-mandatory provisions of CG is voluntary, it is deemed desirable in the larger public interest and such compliance is good for companies as revealed from the review of literature.

Statistical Tests

Seeing the nature of the data, it was decided to adopt Single-Sample Tests involving proportions. For suitability of statistical tests and applications, data were classified into two categories, the first set included those companies which demonstrated full compliance while the other comprised companies whose compliance was either partial or nil.

As a part of computation of the Test Statistic, Z scores were computed using the following formula (Blalock, pp. 198-199).

$$Z = \frac{P_s - P_u}{\sqrt{P_u q_u / N}}$$

Where p_s = Percentage of actual number of companies demonstrating full compliance

p_u = Percentage of standard / null hypotheses, i.e., a majority as meaning greater than 50 per cent, hence 0.501 was considered.

q_u = $1 - p_u$

N = Sample size

Significance Level and Critical Region: The significance level of 0.2 and a one-tailed test are selected.

Hypotheses Testing and Discussion

The following null hypotheses were considered for testing in pursuance of the objectives of the study for all the three consecutive years as mentioned above.

H_1 : A majority of companies adheres to non-mandatory provisions of CG with respect to the Board.

Computation of Test Statistic of H_1 for 2005-2006:

$$Z = \frac{0.0588 - 0.501}{\sqrt{[(0.501)(0.499)]/34}} = -0.4422 + 0.0857 = -5.16$$

The Z scores for the subsequent two years were computed in the same way.

Table 3: Z Scores for H_1

Provision	Years		
	2005-06	2006-07	2007-08
Non-mandatory provisions of CG with respect to the Board	-5.16	-5.5	-5.5

For the year 2005-06, 2006-07 and 2007-08 a normal distribution table will show that the probabilities of Z scores of -5.16 and -5.50 are almost nil if the assumptions were true and as it is less than the significance level of 2 per cent, the null hypothesis is rejected. On the basis of the evidence it can be established that there are instances of non-compliance with respect to the Board in a majority of companies.

H_2 : A majority of companies adheres to non-mandatory provisions of CG with respect to Remuneration Committee.

Table 4: Z Scores for H_2

Provision	Years		
	2005-06	2006-07	2007-08
Remuneration Committee	1.36	1.36	1.36

For the year 2005-06, 2006-07 and 2007-08 a normal distribution table will show that a Z score of 1.36 would occur approximately 8.69 percentage of the time by chance if the assumptions were true and since it is more than the significance level of 2 per cent, we fail to reject the null hypothesis.

H_3 : A majority of companies adheres to non-mandatory provisions of CG with respect to shareholders rights.

Table 5: Z Scores for H_3

Provision	Years		
	2005-06	2006-07	2007-08
Shareholders rights	-2.76	-3.1	-2.76

For the year 2005-06, 2006-07 and 2007-08 a normal distribution table will show that Z scores of -2.76 and -3.10 would occur approximately 0.29 and 0.09 percentages of the time respectively by chance if the assumptions were true and as they are less than the significance level of 2 per cent considered, the null hypothesis is rejected.

H_4 : A majority of companies adheres to non-mandatory provisions of CG with respect to Audit qualifications.

Table 6: Z Scores for H₄

Provision	Years		
	2005-06	2006-07	2007-08
Audit qualifications	-1.04	-0.70	-0.35

For the year 2005-06, 2006-07 and 2007-08 a normal distribution table will show that Z scores of -1.04, -0.70 and -0.35 would occur approximately 14.92, 24.02 and 36.32 percentages of the time respectively by chance if the assumptions were true and as they are more than the significance level of 2 per cent, we fail to reject the null hypothesis.

H₅: A majority of companies adheres to non-mandatory provisions of CG with respect to training of Board Members.

Table 7: Z Scores for H₅

Provision	Years		
	2005-06	2006-07	2007-08
Training of Board Members	-3.44	-3.79	-3.79

For the year 2005-06, 2006-07 and 2007-08 a normal distribution table will show that probabilities of Z scores of -3.44 and -3.79 are almost nil if the assumptions were true and as they are less than the significance level of 2 per cent, the null hypothesis is rejected.

H₆: A majority of companies adheres to the non-mandatory provision of CG with respect to the evaluation of Non-Executive Directors.

Table 8: Z Scores for H₆

Provision	Years		
	2005-06	2006-07	2007-08
Evaluation of Non-Executive Directors	-3.10	-3.10	-3.44

For the year 2005-06, 2006-07 and 2007-08 a normal distribution table will show that probabilities of Z scores of -3.10 and -3.44 are 0.10 and nil percentages if the assumptions were true and since they are less than the significance level of 2 per cent, the null hypothesis is rejected.

H₇: A majority of companies adheres to non-mandatory provisions of CG with respect to the whistle-blower policy.

Table 9: Z Scores for H₇

Provision	Years		
	2005-06	2006-07	2007-08
Whistle-blower policy	2.05	2.39	2.05

For the year 2005-06 and 2007-08 a normal distribution table will show that a Z score of 2.05 would occur approximately 2.02 percentage of the time by chance if the assumptions were true and as it is more than the significance level of 2 per cent, we fail to reject the null hypothesis.

However, for the year 2006-07 a normal distribution table will show that a Z score of 2.39 would occur approximately 0.84 percentage of the time by chance if the assumptions were true and since it is less than the significance level of 2 per cent, the null hypothesis is rejected.

In the years 2005-06 and 2007-08, the failure to reject the null hypothesis implies that evidence is not strong enough to reject unlike the year 2006-07. It may be on account of inconsistency in reporting with respect to the whistle-blower policy.

Status of Exemplary CG Practices

Some companies have introduced exemplary CG practices. These practices go beyond compliance with mandatory and non-mandatory CG norms. Such practices can further promote value creation and improved transparency.

H₈: A majority of companies follows exemplary CG practices.

Table 10: Z Scores for H₈

Feature	Years		
	2005-06	2006-07	2007-08
Exemplary CG practices	-4.99	-4.92	-4.80

For the year 2005-06, 2006-07 and 2007-08 a normal distribution table will show that probabilities of Z scores of -4.99, -4.92 and -4.80 are almost nil if the assumptions were true and as it is less than the significance level of 2 per cent, the null hypothesis is rejected. On the basis of the evidence it can be established that a majority of companies does not follow exemplary CG practices.

Conclusion

There exist instances of non-compliance with non-mandatory provisions of CG and exemplary CG practices in a majority of the companies. The level of compliance is low, far below a majority.

Policy Implications and Recommendations

Increased transparency and disclosures are impaired as a majority of companies are not adhering to the non-mandatory provisions of CG. Unless incentives are

extended for compliance with the non-mandatory provisions, companies may not adhere to the same. Further, non-compliance with the non-mandatory provisions of CG can work as barriers to CG reforms and thereby jeopardize the interests of stakeholders, in particular, equity shareholders. For instance, compliance with training of Board Members is a crucial aspect of CG. Hence, non-mandatory provisions should be encouraged immediately by the regulators. With respect to exemplary CG practices, a few companies have attempted to go beyond mandatory and non-mandatory CG practices, viz; Infosys Technologies Limited and it is exemplary.

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If management is about running the business, governance is about seeing that it is run properly.

—R Tricker

Role of B-Schools in Developing the Culture of Corporate Governance in the Organization: A Study of Indian B-Schools

NANDITA SETHI

Business education is truly at a crossroads especially after scandals like Enron, which have put corporate reputation at great stake. The main question being asked is: Are Business Schools failing in training the future managers in their legal and ethical responsibilities to society? It is well known that the strategies employed in an organization are the personification and characterization of its higher management. Culture of the organization represents the values, beliefs and ethics, and comes from the shared vision of its management. Business schools as supplier of business managers can produce the well-trained and ethically responsible managers, who ensure the best practices of corporate governance in their organizations. This demands the attentions of b-schools to play their role more actively by nurturing the codes of good governance in the minds of business managers. This study aims to investigate current situation of India's business graduates in terms of their perception towards corporate governance and explores the scope of corporate governance issues in the courses of business schools. The study undertakes qualitative and quantitative surveys of the business schools of India on various aspects that show the existing situation and tries to reach some broad conclusions.

The emerging global business environment has undergone unprecedented changes and the existing business models and frameworks cannot easily explain these changes. From the globalization of capital markets to the emergence of powerful information technologies there has been a phenomenal change in the very nature of the modern firm. While globalization has been a boon in many business related aspects, it has also made the corporations vulnerable to greater risk, abuse and fraud, sometimes on a global scale, and raises serious issues related to inadequacies of governance, demand for new reforms and models of operation and re-evaluation of systems. Scandals in Enron, WorldCom, Tyco and Adelphia Communications are adequate evidence of this and have become sources for the evolution of many new concepts like, corporate governance, corporate responsibility, corporate citizenship and social responsibility.

Corporate governance can be defined as the formal system of accountability and control for the legal, ethical and socially responsible organizational decisions and use of resources. It is based on certain institutions like; laws, contracts, norms and regulations that create self-governing system in the organization. This compliance-oriented program has become the central element of competitive market economy of today. In good corporate governance system, managers make decisions by making the process very transparent, digestible and conducive to direct the resources in which they ensure the accountability, accuracy, timeliness, and use of powers effectively. Corporate governance comprehends the structure of relationship and the corresponding responsibilities among the core groups, consisting of shareholders, board members, and managers, etc, designed to best foster the competitive performance and required to achieve the corporation's primary objectives.

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Corporate governance, therefore, involves ethical, social, legal, environmental and managerial operation related issues. According to business ethicist, a corporation has various stakeholders, internal and external, groups whose support is essential for the survival and growth of any corporation (Freeman, 1984; Lozano, 2000; Mitroff, 1983). Commonly acknowledged stakeholders that a corporation interacts with include employees, customers, shareholders, suppliers, government agencies, managers, creditors and community groups. One group that should be considered as a stakeholder consists of business students, who collectively constitute the future leadership of corporations and will eventually become members of virtually all stakeholder groups (R.A. Peterson and G. Albaum, 2005). Therefore this concept has direct implications for businesses and business education. Theory of corporate governance triggered out the minds of business schools' deans to get the academia involved in the practices of this recommended model. "After a year of high-profile corporate scandals and bankruptcies, including big names, Professors at business schools have reinvigorated their ethics instruction by turning headlines into lecture fodder and paper topics" (J.K. Wall, 2002).

In order to exercise good corporate governance in the corporations, business managers have to be trained. Therefore consideration needs to be given to teach business education within a moral context. This demands the attentions of business institutions to play their role more actively by nurturing the codes of good governance in the minds of business managers. The learning of ethics and morals in business education will serve as an effective change agent and result in the business graduates turning from pre-conventional and conventional phases in their moral development to a post-conventional stage and enable them to respect the rights of others in society (Kohlberg, 1976). Colleges are one of the best places to encourage this type of value development culture (White, 1980). Business students should be trained to understand the responsibility of business to its larger extent for the social system in which it operates. Only then, they can "become better managers and lead a corporation towards responsible behavior firm, which is highly needed in this troubled world" (Hathaway, 1990). In business school's ethics courses, students should learn to understand the conflicts created by ethical dilemmas and make decisions, particularly when there is no clarity of right and wrong. Ethics courses should help the student develop the ability to make strategic decisions consistent with organizational and personal goals and values. (Stephen J Kimm. 2003).

The study aims to investigate current situation of India's business graduates in terms of their perception towards issues of corporate governance. The study assumes that ethically and socially responsible management can practice and implement good governance in the organization. Business schools as supplier of business managers can produce the well-trained and ethically responsible managers, who ensure the best practices of corporate governance in their organizations. The study proceeds in the following sections. Section 2 undertakes a brief literature review. Section 3 analyses the issues related to corporate governance in India. Section 4 takes up the research issues and methodology being followed. Section 5 does an analysis using some statistical tools and interpreting the results. Section 6 develops conclusions and suggests implications for business schools and also for future research. Some tables constructed from the statistical results are appended in the Annexures.

Literature Review

The issues of corporate governance and role of ethics in the development of corporate governance is widely discussed in the literature. Junichi Mizuo, 1998, conducted an empirical research on Business ethics and corporate governance in Japanese corporations; he called for a fresh look at corporate values and an attitude of conformance to business ethics on the parts of both organizations and individuals. Nakano, 1997, found in the study of business ethics perceived by managers, that company policy on business ethics is the most important factor influencing managers to make ethical decision. Walton, 1990, reported a survey conducted in USA from over 1000 senior executives, deans of business schools and members of Congress in 1988 which revealed that 99 percent of deans, 95 percent of corporate leaders, and 77 percent of Congress members felt deeply troubled over the unethical behavior of major figures in U.S. financial and manufacturing organizations. Vogel, 1992, raised the issue of variance in the norms of ethical business behaviors across the different industrialized nations and urged for the need for standardizing and globalizing the business ethics. The change in corporate world is widely affecting the culture of business schools. Business schools have now started putting much emphasis on ethical and social issues. Jennifer Merritt, 2002, mentioned that incoming MBA class at the University of Michigan Business School had an assignment even before students arrived in Ann Arbor. They are asked to write a case study on the most challenging ethical dilemma each person had ever faced. It is a new lesson plan for business schools across the country, where

corporate scandals and a waning MBA job market have touched off a wave of self-reflection and reform. Kumar, Kamalesh, 1995, in his survey of business graduates, "who are the future executives", found that future executives showed relatively strong orientation towards social values and the concept of social responsibility and good corporate citizenship has become an integral part of their value system. Kumar urged future business leaders to be careful that their efforts to be competitive and profitable do not cause them to embrace values that tarnish their ethics. Cuilla, Joanne B, 1985, discovered the failure of business schools to discuss business ethics with their students, but most students and faculty agree that ethics are important, and business schools need to integrate ethics into their curricula. Sims and Sims, 1991, recommended three outcomes out of applied business ethics course: (1) increased ability to recognize ethical issues in the work place; (2) enhanced skills in moral reasoning; and (3) clarification of moral aspirations. R Warren, G Tweedale, 2002, blamed the business schools for their negligence in historical and ethical dimensions as: corporate ethics, social responsibility of companies, disclosure, the actions of multinational companies overseas, the dilemmas of whistle-blowing, the impact of lobby groups and health and safety issues. Marietta Del Favero 2003, spoke about the social nature of governance, and said that understanding governance by cognitive approaches is more valuable. Rozensher, et al, 1994, provided his statistics that 90% of faculty responded that they spend at least some time covering ethical issues. Most spend between one and two class hours covering ethical issues; however, about 1/4 of all respondents said they spend more than 4 hours during the course of the semester on ethical issues. Pfeffer and Fong, 2002, found that business education in teaching the business ethics is not very effective; having no correlation with career success or has little influence on management practices. Donaldson, 2002 reported, contradictions in management theories and management education. Susan, Yusuf J Urgan, 1998 indicated that female students expressed stronger ethical attitudes than males. The same is also true for older versus younger students.

Corporate Governance and India

Corporate governance had not been a well-understood concept in India right up to the early 1990s. In the pre-liberalization period, it was believed that maximizing loans to the industrial sector would lead to industrial development and employment creation. Monitoring of the loans was

not considered a major priority. The financial institutions, which were mostly government owned and controlled, never came in the way of any management and virtually never divested their ownership stake in any firm. Instead it was found that many times they were pouring more money after a bad loan, in the hope that the distressed firm would find its way out of trouble rather than attempting to shut down such firms. Regulations had eliminated the possibility of competition among financial intermediaries, most of whom were again government-owned and not monitored themselves. The bottom line was that once a firm was granted a license under the pre-1991 'license raj' it was more or less guaranteed a financial support from state-run financial institutions. There were also constraints on monitoring by external capital markets. The Companies Act placed restrictions on the acquisition and transfer of shares, and so prevented the development of a market for corporate control. Takeovers were practically difficult to implement with half to two-thirds of the equity in any firm being in the hands of the entrepreneurs and the financial institutions, who never sold their shares.

With the 1991 balance-of-payments crisis, and the liberalization of the economy, several positive developments occurred on the corporate governance front. First, The Securities and Exchange Board of India (SEBI) Act of 1992 created a regulatory body with the explicit mandate to improve the functioning of Indian financial markets. Second, the state-run financial institutions were given incentives for better performance and a freer hand to monitor their loans. As they were slowly being snatched off their historically privileged access to funds, the need to access public capital markets made them more conscious of the bad loans on their balance sheets. Competition among the financial institutions increased with the deregulation of interest rates and the gradual elimination of consortium requirements. Private sector mutual funds were allowed to compete with the state monopoly. Third, a takeover code was introduced in late 1994, after a public outcry over legally sanctioned price rigging.¹ Fourth, restrictions on the entry of foreign investors were eliminated and regulations on their investments were substantially clarified. All these developments threw the domestic corporates open to external competition in all the markets: product, factor and capital. The pressure to compete globally in turn put pressure to follow internationally accepted norms of corporate governance.

Implementation of corporate governance in India has depended upon laying down explicit codes, which

¹In 1993-1994, many firms issued preferential equity allotments to the controlling shareholders at steeply discounted prices

enterprises and the organizations are supposed to observe. We have the Kumaramangalam Birla code as a result of the committee headed by him at the behest of the SEBI. Earlier we had the CII coming up with the code for corporate governance recommended by the committee headed by Shri Rahul Bajaj. These codes however, can, at best, only be guidelines and how effective corporate governance can be, will depend upon the management's belief in corporate governance and the commitment of the people in the organization, to it. The Indian corporate governance scenario is still found to be deficient for various reasons, some of which are: (i) SEBI does not have all-pervading powers to police all violations of regulations. It continues to adapt and modify regulations as it learns more about how to regulate financial markets. (ii) Takeovers continued to be difficult given the paucity of timely information and high transactions costs in both the primary and secondary equity markets.² (iii) Competition among financial intermediaries is limited. Many of the state-run intermediaries are still saddled with bad loans, which affected their ability to act as monitors. (iv) Disclosure problems continued to remain as requirements under the Companies Act are not very stringent.

Some data from Credit Lyonnais Securities Analysis (CLSA)³ supports this assessment of the current state of Indian corporate governance. The data are from a set of questions regarding corporate governance administered to 482 companies in 24 emerging markets in 2001. The companies are generally the ones of greater interest to foreign investors, typically characterized by some subset of the following characteristics – large size, greater equity float, and foreign listings. When the countries were ranked by the mean corporate governance score constructed by CLSA, it was found that India ranked in about the middle. Since most countries in these data have poor average corporate governance (with some exceptions like Hong Kong and Singapore), and since the selected companies are generally the better governed ones, it goes to show the level of implementation of corporate governance in India.

The need for corporate governance has been highlighted in India because of the scams we have been having almost as an annual feature ever since we had liberalization from 1991. We had the Harshad Mehta Scam, Ketan Parikh Scam, UTI Scam, Vanishing Company Scam, Bhansali Scam and so on. According to N. Vittal, Central Vigilance Commissioner, "I find that the legal and

administrative environment in India provides excellent scope for corrupt practices in business."⁴ Therefore unless a management is committed to be honest and observe the codes of corporate governance, the atmosphere is too tempting to do otherwise. Of course there are companies in India, like Infosys and Wipro, to name a few, which are following ethical practices. Corporate governance ratings of the software firms are higher than those of other Indian firms as they are more exposed to global competition than others. Overall, it is felt that creating proper public governance and making changes in the various regulations impinging on the working of an enterprise or a body like the capital market, is the need of the hour if we wish to establish better corporate governance in the country.

The Study

Issues

Corporate governance aims to minimize the chances of corruption, malpractices, financial frauds and misconduct of management. Corporate governance provides various codes and regulations to establish good governance system and monitor the performance of corporations in the context of transparency, advocacy, accountability and social contribution to the society. Business schools have an important role to play in the development of corporate governance and lead changes in the ongoing systems and procedures of the corporations. Business schools can support the culture of good governance by supplying the well-trained and ethical responsible managers, which ensure the best practices of corporate governance in their organizations. Training the graduates and teaching corporate governance in their courses can help to develop the corporate governance culture in the organizations. The study collects the perceptions of business graduate or future executives about the different issues related to corporate governance. The issues taken into study include: management issues, shareholder issues, customer issues, social issues, direct corporate governance and personal preparation. The study investigates the level of understanding and learning experiences related to corporate governance issues in business education. The study highlights the role of business schools in promoting the culture of corporate governance while training the future executives to apply good governance. The study addresses the following questions:

1. What is the understanding level of business graduates about corporate governance?

²A detailed account can be found in SEBI (1994).

³Tarun Khanna & Krishna Palepu, "Product and labor market globalization & convergence of corporate governance: Evidence from Infosys and the Indian software industry, Working Paper No. 02-040 Sep 2001, Strategy Unit Harvard University

⁴N. Vittal, "Issues in Corporate Governance in India", 5th JRD Tata Memorial Lecture Series

2. What are the sources of learning corporate governance for business graduates?
3. What are the overall perceptions of business graduates about corporate governances?
4. Do business schools play any role to promote corporate culture?
5. Are business graduates ethically competent to apply corporate governance in real business world?

Sample Design and Data Collection

This study selected nine business schools for data collection purpose. Of these, three B-Schools come directly under the university system. The Universities selected were - two from the public sector and one from the private sector. The remaining six are private B-Schools, which are either affiliated to the universities/ recognized by the AICTE or Industry recognized (For actual list of institutions see Annexure) The respondents randomly selected were business graduates in the two-year business management course and were studying in one of the four semesters of the course.

Methodology

The sample size of the study is 508 respondents whose response was taken for analysis through a specifically designed questionnaire, which contained the issues related to corporate governance. The issues were basically classified into six dimensions, taken from the literature about corporate governance: management issues, shareholder issues, customer issues, social issues, corporate governance issues and personal issues. The questionnaire covered thirty-two attributes/aspects to determine the students' perceptions and learning

experience towards corporate governance in the light of the education from their respective institutions (for study scale see Annexure). The factors were adapted from the relevant literature on corporate governance, interviews with various educationists and corporate management consultants of India. Lastly, five-point Likert type questionnaire was designed scaling factors ranging 1, which stands for "not important at all" to 5 for "very important". The data was processed and analyzed using SPSS software package. Statistical tools like reliability coefficient, Kolmogorov-Smirnov test, Chi-square test and mean scores were used for analysis.

Results and Analysis

From the 36 questions asked in the questionnaires a study scale was formed. In order to study the internal consistency and reliability of study scale, Alpha-coefficient was computed (Appendix Table 1). The scale with 32

Table 1: Reliability Coefficients

No. of Cases	508
No. of Items	32
Alpha Scores	0.83

attributes got 0.83 alpha scores. In behavioral studies, this alpha score indicates a reasonably high level of scale reliability. To study the ability of research scale in generalization of results or representation of population, Kolmogorov-Smirnov test is applied using the normal distribution. Z scores of Smirnov test (Table 2) are quite satisfactory and proved significant ($P < .05$) in most cases. The scores help the author to interpret the results over the population. Sample of study comprises of 33% female, 67% males Respondents of private business schools are 55% and of public institute are 45%. Data was also

B-Schools Surveyed

S.No	Name of the B-School / Institute/ University	Type
1	School of Business, Hyderabad Central University	Public
2	Department of Management, Osmania University (OU)	Public
3	ICFAI Business School, ICFAI University	Private
4	Institute of Public Enterprise	Semi-Public (AICTE Recognized)
5	Xavier's Vignan Jyothi Institute of Management	Private (AICTE Recognized)
6	St Niveditha College of Professional Studies	Private (AICTE Recognized)
7	Swamy Vivekananda Institute of Management	Private (OU affiliated)
8	Institute of Computers and Business Management	Private/ Industry recognized
9	National Institute of Construction Management and Research	Private/Industry recognized

Study Scale

S.No	Q.No	
Management issues		
1	Q7	Business education discourages me to participate in the micro politics of firm's higher management.
2	Q12	I am being taught that I must ensure the justice/equality and non discriminatory treatment among the employees of my firm
3	Q13	I am being trained to develop the compliance oriented culture of accountability for all level of employees in the firm
4	Q14	Business education teaches me to ensure the independency of internal and external auditors to strengthen the check and balance in the firm
5	Q15	My learning in business school helps me to adopt participative and democratic management style in business and other areas of life
6	Q16	Business education teaches me to support the power and reward sharing culture in the Organization
Share holders issues		
7	Q8	Business education forbids me to help the owner in his unethical/unlawful business transactions
8	Q17	Business education has taught me to prioritize the shareholders /owners interest in making the business decision
9	Q18	Business education encourages me to ensure the open system and maximum access to the information for shareholders
10	Q19	I have learnt that, I must ensure the resources allocation in the interest of shareholders/owners
11	Q20	Business education forbids me to manipulate or play with the figures to cheat the shareholders/owners
12	Q28	I am being taught in my courses that I must maintain the balance between the interest of shareholders/owners and rights of employees of the company
Customer's issues		
13	Q1	I am being taught in MBA program, that achieving the target is not each and every thing in business success.
14	Q2	Business education encourages me to work for value maximization instead of profit maximization.
15	Q3	Business education discourages me to increase the sale volume through unfair promotional means.
16	Q4	Business education teaches me to treat the customer with actual and real product features.
17	Q6	Business education strictly disallows me to cheat the customer with impossible promises or unrealistic expectations.
18	Q11	In order to win competition we have to apply certain hidden costs.
Social issues		
19	Q23	Learning in business school strongly recommends me to care for the local values and culture while making businesses decision
20	Q24	I am being taught that I should not support the business policies, which can damage the local traditions and customs for commercial purpose
21	Q25	Business education encourage me to fight for the environmental issues while making the business decision in the firm
22	Q26	I learnt in the business education to abide by the local laws and regulations in business transaction
23	Q27	Business education strongly prohibits to encourage the culture of kickback and corruption among the local authorities of the state
Personal issues		
24	Q9	I learnt in business education that we should not overrule the firm's policies to gain personal benefit/self interest
25	Q10	I learnt in business education to ensure the 100% transparency and fairness in my business transactions
26	Q21	Business education disallows me to develop unrealistic forecasting to secure my job
27	Q31	Education of business school helps me to maintain the high level of moral, justice, and honesty in business and other affairs of life
28	Q32	Education of business school really helps me to become a socially and ethically responsible citizen
Corporate Governance		
29	Q33	Business education discourages me to become a part of malpractice/unprofessional conduct to gain short term benefits
30	Q34	Education of business school teaches me how to develop a good corporate governance system in the organization
31	Q35	Education of business school trains me, how to maintain the good corporate governance system in the organization
32	Q36	Education of business school teaches me, how to change the traditional business culture into good corporate governance culture

Table 2: One-Sample Kolmogorov-Smirnov Test

	N	Normal Parameters (a,b)		Most Extreme Differences			Kolmogorov-Smirnov Z	Asymp. Sig. (2-tailed)
		Mean	Std. Deviation	Absolute	Positive	Negative		
Q1	413	3.545	1.315	0.238	0.134	-0.238	4.843	0
Q2	413	3.862	1.103	0.218	0.151	-0.218	4.432	0
Q3	413	3.274	1.421	0.187	0.122	-0.187	3.798	0
Q4	413	4.039	1.021	0.235	0.173	-0.235	4.785	0
Q5	413	2.923	1.383	0.186	0.150	-0.186	3.789	0
Q6	413	3.450	1.416	0.210	0.140	-0.210	4.275	0
Q7	413	3.029	1.119	0.187	0.181	-0.187	3.800	0
Q8	413	3.203	1.382	0.178	0.125	-0.178	3.615	0
Q9	413	4.053	1.167	0.259	0.206	-0.259	5.259	0
Q10	413	3.850	1.150	0.227	0.159	-0.227	4.623	0
Q11	413	2.935	1.282	0.189	0.133	-0.189	3.846	0
Q12	413	4.169	1.031	0.288	0.210	-0.288	5.863	0
Q13	413	3.944	0.965	0.228	0.148	-0.228	4.626	0
Q14	413	3.896	1.043	0.206	0.146	-0.206	4.189	0
Q15	413	4.426	3.009	0.417	0.417	-0.267	4.477	0
Q16	413	4.085	1.002	0.246	0.181	-0.246	4.999	0
Q17	413	3.855	1.081	0.229	0.145	-0.229	4.654	0
Q18	413	3.959	1.052	0.224	0.161	-0.224	4.547	0
Q19	413	3.627	1.089	0.232	0.136	-0.232	4.716	0
Q20	413	3.322	1.490	0.211	0.139	-0.211	4.280	0
Q21	413	3.441	1.279	0.190	0.114	-0.190	3.854	0
Q22	413	2.893	2.483	0.223	0.207	-0.223	4.528	0
Q23	413	3.998	1.011	0.229	0.161	-0.229	4.657	0
Q24	413	3.615	1.190	0.198	0.126	-0.198	4.029	0
Q25	413	3.811	1.049	0.213	0.139	-0.213	4.331	0
Q26	413	3.942	1.001	0.240	0.145	-0.240	4.875	0
Q27	413	3.562	1.238	0.181	0.133	-0.181	3.672	0
Q28	413	4.126	0.942	0.249	0.177	-0.249	5.070	0
Q29	413	2.981	1.217	0.172	0.140	-0.172	3.500	0
Q30	413	3.237	1.237	0.206	0.122	-0.206	4.182	0
Q31	413	3.886	1.054	0.223	0.145	-0.223	4.540	0
Q32	413	3.985	1.024	0.229	0.161	-0.229	4.653	0
Q33	413	3.806	1.183	0.214	0.156	-0.214	4.349	0
Q34	413	3.952	1.042	0.218	0.157	-0.218	4.435	0
Q35	413	3.874	0.990	0.236	0.149	-0.236	4.793	0
Q36	413	3.845	1.052	0.222	0.136	-0.222	4.511	0

calculated about the study duration of business graduates as 16% respondents have completed their 25% of the program, 20% about 50%, 28% about 75% and 36% has completed the study period more than 75%. Time hierarchy of respondents indicate the validity of results as nearly 35% respondents are well experienced in business education and at the last stage of study and almost about 35% are below the mid of program duration. (Table 3).

Table 3: Demographics of Respondents

Gender	Frequency	Percent
Female	167	33
Male	341	67
Institute		
Public	229	45
Pvt	279	55
Program Duration		
25%	81	16
50%	102	20
75%	142	28
More than 75%	183	36

Table 4 shows that about 82% of the respondents have heard about the corporate governance, which means that nearly one fifth of the business graduates, are still

Table 4: Heard About Corporate Governance N=508

	Frequency	Percent
Yes	415	82
No	93	18
Total	508	100
Source of Information		
	Frequency	Percent
Faculty	178	43
Friend	62	15
Presenter	42	10
Electronic Media	133	32
Total	415	100

not aware of the corporate governance issues. Most of them have heard about it from their faculty (43%) and electronic media (32%). When it comes to reading, nearly 59% seem to have read about it and their source has mainly been newspaper (27%) and magazines (26%) while textbooks (14%) and teacher notes (9%) account for a smaller proportion (Table 5). Figures show that business graduates are less habituated to reading and whatever

Table 5: Read About Corporate Governance N=508

	Frequency	Percent
Yes	300	59.3
No	208	40.7
Total	508	100
Source of Information		
Textbook	41	14
Teacher	27	9
NewsPaper	80	27
Magazine	77	26
Others	26	9
No Response	49	16
Total	300	100

information they have read about corporate governance mainly comes from out of course sources. These statistics about reading and hearing of corporate governance demand the attentions of business schools management to, first, make corporate governance an important part of their course curriculum and course material and second, to encourage the business graduates to learn from the environment and also out of the recommended material. On the positive side, as awareness about corporate governance is mainly coming from the faculty through their interaction with students (table 4), this is indicative of the efforts of b-schools in creating this awareness. Business schools now need to expand their contribution in developing the culture of corporate governance to a larger extent. Table 6 shows that the graduates who are aware of corporate governance and have good understanding of it commonly agree (35-40%) that corporate governance can bring positive change in the business culture, encourages

Table 6: Perception of Business Graduates towards Corporate Governance, N=508

Factors	Frequency	Percent
Applicable in India	180	35
Need of hour	121	24
Helpful in development of Indian Economy	197	39
Helpful In development of Business Sector	203	40
Making Change in Business Culture	199	39
Ending Corruption in Business Sector	132	26
Transparent system in the Firms	200	39
Competitive edge in International Markets	149	29

Table 7: Mean Score

Management Issue

	Mean	Std. Deviation
Q15	4.4	2.8
Q12	4.2	1.0
Q16	4.0	1.1
Q13	4.0	1.0
Q14	3.9	1.0
Q7	3.0	1.1
Total	23.5	

Shareholder Issue

	Mean	Std. Deviation
Q28	4.1	0.9
Q18	4.0	1.0
Q17	3.8	1.1
Q19	3.6	1.1
Q20	3.3	1.5
Q8	3.2	1.4
Total	22.0	

Customer Issue

	Mean	Std. Deviation
Q4	4.0	1.0
Q2	3.9	1.1
Q1	3.5	1.3
Q6	3.5	1.4
Q3	3.3	1.4
Q11	2.9	1.3
Total	21.1	

Personal Issue

	Mean	Std. Deviation
Q9	4.1	1.2
Q32	4.0	1.1
Q31	3.9	1.0
Q10	3.8	1.1
Q21	3.5	1.3
Total	19.3	

Social Issue

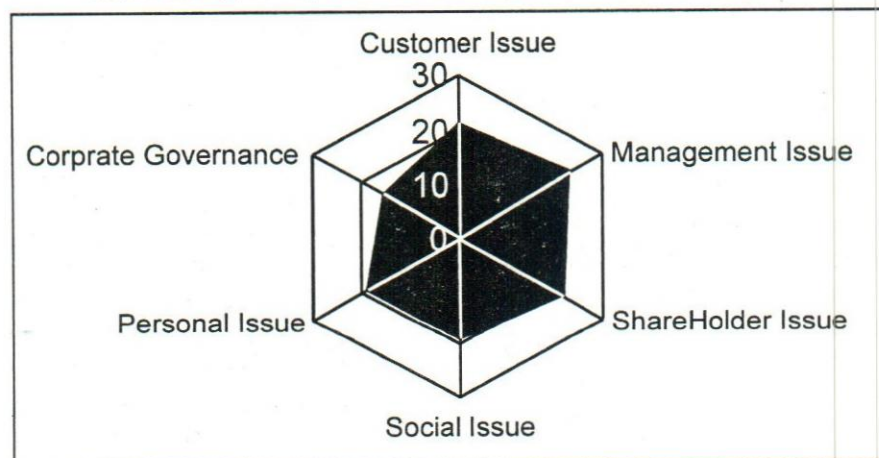
	Mean	Std. Deviation
Q23	4.1	1.0
Q26	4.0	1.0
Q25	3.8	1.1
Q24	3.6	1.2
Q27	3.6	1.2
Total	18.9	

Personal Issue

	Mean	Std. Deviation
Q34	4.0	1.0
Q35	3.9	1.0
Q36	3.9	1.0
Q33	3.7	1.2
Total	15.5	

Importance given by Business Schools to different areas of C.G

Importance given by Business Schools to different areas of C.G.



transparency in business operations, is applicable in India and is helpful in developing the business sector and the overall Indian economy. A lesser percentage (29%) agrees that following corporate governance provides a competitive edge to the organization, and still fewer (23-25%) feel that it helps in ending corruption or is the need of the hour.

Table 7 is computed to analyze the business graduates perception about their learning of corporate governance in business education. The study scale is divided over six issues, i.e, management, shareholder, customer, social, corporate governance and personal issues. Mean scores of respondents are taken as criteria for analysis and developed in descending manner. Mean scores in descending hierarchy shows the variable/issues given high score are being more focused by the business schools in business education. (see perception map below table 7)

In the case of management issues in corporate governance as: Adopting participative and democratic management styles and ensuring the equality and nondiscriminatory treatment among employees get the highest score (4.2); supporting the reward and power sharing culture; developing accountability culture and ensuring independency of the auditors gets mid level importance (4.0) and discouragement for participation in the micro politics of higher management gets the least importance (3.0).

Issues related to shareholders like: Balancing between the interests of shareholders and employee; ensuring open information sharing system get the highest score in B-Schools (4.1, 4.0); prioritizing shareholder's interest and ensuring appropriate resource allocation for shareholders get mid level importance (3.8, 3.6) and; discouraging to manipulate figures and cheat shareholders and forbidding to help owners in unethical transactions got the least scores (3.3, and 3.2).

In terms of customers issues related to corporate governance: Treating the customer with real product features and working for value maximization rather than profit maximization seem to get highest priority (4.0, 3.9); achieving target is not everything in business; not cheating with impossible promises is next in hierarchy (3.5,) and; not using unfair promotional means and applying hidden costs to win competition gets lowest priority (3.3, 2.9).

In the case of personal competency in developing the good corporate governance in the organization: Discouraging to overrule the firm's policies for personal benefit and becoming a socially and ethically responsible

citizen got most priority (4.1, 4.0); maintaining high level of moral, justice & honesty in business and; ensuring 100% transparency & fairness in business transaction got mid level priority (3.8, 3.9), while discouraging unrealistic forecasting to secure one's job got least importance (3.5)

In the case of social issues which come under corporate governance: caring for local values and culture and abiding by the local laws gets the highest ranking (4.1, 4.0); fighting for environmental issues is next important (3.8) and; not supporting policies which damage local traditions and customs and; discouraging the culture of kickbacks got the least importance (3.6).

In issues related to the direct teaching of corporate governance, B-School education teaches to develop corporate governance got a mean score of 4, while, it teaches to maintain good corporate governance, and helps in changing the traditional business culture into good corporate governance came next with 3.9 and that it discourages to become a part of malpractices/unprofessional conduct for short term benefits got the lowest score of 3.7.

Scores of each six heads are summed up and presented in table 7, which outlines the importance given to each issue of corporate governance by the b-schools in their provided business education. According to the perception and learning of business graduates in business education, business schools are putting most emphasis on management related issues (23.5) that come under corporate governance head. This is because management is one of the crucial subjects in business education. Second, business schools are also giving great relevance to teaching the issues related to shareholders (22.0). Each program of business education consists of 2 to 4 subjects related to shareholder's issues; therefore business graduates hold common understanding about shareholder rights and obligations. Customer issues (21.1) come close to shareholder issues and are almost as important. B-Schools have maximum courses directly or indirectly related to customer issues. Personal issues related to developing competencies for good corporate governance culture came next in importance (19.3) closely followed by social issues (18.9), which together get mid level importance in business educations. Teaching directly about corporate governance got least scores (15.5). Separate courses or part of courses do not include the titles of corporate governance. B-schools at the most have one course or so in ethics/corporate governance. Therefore, directly related issues of corporate governance seem to be less prioritized by business schools and do not form an important part of their course curriculum.

Table 8: Discrimination Analysis and Mean Scores

	Institute		Mean Scores		Program Duration				Mean Scores				Gender		Mean Scores	
	Chi-Sq.	Asy. Sig.	Pub	Pvt	Chi-Sq	Asy. Sig.	25%	50%	75%	>75%	Chi-Sq	Asy. Sig.	F	M		
Q1	15.94	0.00	219.2	268.6	13.09	0.00	254.7	258.0	207.5	218.1	0.56	0.45	252.8	242.8		
Q2	4.27	0.04	233.1	258.5	8.12	0.04	246.1	255.3	216.6	271.8	0.59	0.44	256.4	246.3		
Q3	2.81	0.09	235.0	256.0	4.76	0.19	233.0	258.4	234.4	220.3	8.35	0.00	276.2	237.1		
Q4	10.80	0.00	226.0	265.7	12.79	0.01	250.1	261.4	209.4	235.4	12.03	0.00	279.3	234.2		
Q5	4.65	0.03	253.6	226.6	13.50	0.00	198.3	254.6	245.6	275.0	1.65	0.20	235.8	253.0		
Q6	1.91	0.17	235.6	252.8	3.90	0.27	247.3	253.9	226.2	226.0	3.37	0.07	265.2	240.6		
Q7	0.40	0.53	246.3	238.5	3.30	0.35	224.7	243.3	255.6	261.0	0.17	0.68	252.2	246.8		
Q8	0.03	0.87	240.1	242.2	3.29	0.35	223.6	250.6	234.9	256.3	0.52	0.47	253.1	243.4		
Q9	6.18	0.01	230.8	260.6	18.54	0.00	269.1	257.2	218.8	178.2	14.54	0.00	282.7	233.4		
Q10	7.40	0.01	229.2	262.7	14.14	0.00	266.9	255.8	220.9	186.4	12.76	0.00	281.1	233.9		
Q11	7.57	0.01	257.8	223.4	7.83	0.05	220.9	237.8	268.6	265.9	0.84	0.36	240.1	252.4		
Q12	13.64	0.00	225.6	269.7	36.72	0.00	273.0	268.1	199.2	173.1	7.90	0.00	274.6	238.5		
Q13	2.15	0.14	233.8	251.6	2.97	0.40	251.0	248.6	229.9	219.3	0.42	0.52	241.2	249.7		
Q14	6.05	0.01	228.6	258.7	9.83	0.02	263.1	250.1	225.8	190.6	10.88	0.00	276.6	233.2		
Q15	7.12	0.01	230.9	262.7	12.49	0.01	280.9	246.8	226.4	205.5	10.41	0.00	278.2	236.8		
Q16	6.37	0.01	231.8	262.5	17.82	0.00	276.1	256.6	216.7	190.9	9.08	0.00	277.3	238.0		
Q17	0.13	0.72	241.6	246.0	18.34	0.00	234.2	269.7	218.0	193.4	0.46	0.50	255.1	246.1		
Q18	3.31	0.07	234.9	257.2	15.49	0.00	225.8	266.6	237.9	182.9	2.07	0.15	262.9	244.0		
Q19	4.15	0.04	228.1	253.1	10.65	0.01	224.9	260.3	224.8	203.5	0.43	0.51	238.6	247.3		
Q20	6.29	0.01	223.9	254.9	2.54	0.47	239.1	244.0	224.2	260.5	2.28	0.13	256.6	236.6		
Q21	13.73	0.00	217.4	263.1	2.73	0.43	245.5	246.5	223.5	226.8	8.66	0.00	269.5	230.5		
Q22	4.94	0.03	249.0	221.5	4.35	0.23	220.9	237.4	246.5	274.6	0.22	0.64	246.7	240.5		
Q23	12.88	0.00	219.2	262.4	19.84	0.00	241.5	261.6	213.4	172.8	15.79	0.00	278.2	226.9		
Q24	1.60	0.21	229.2	244.7	4.77	0.19	230.5	250.6	225.0	211.5	4.19	0.04	259.7	232.8		
Q25	4.15	0.04	225.7	250.4	7.26	0.06	225.3	255.4	222.7	217.3	2.46	0.12	255.8	235.4		
Q26	4.37	0.04	225.1	250.1	14.17	0.00	232.2	254.0	227.3	165.7	8.80	0.00	266.8	228.7		
Q27	1.03	0.31	231.1	243.5	3.49	0.32	229.5	246.1	240.1	203.4	1.56	0.21	253.1	236.7		
Q28	7.69	0.01	223.6	256.6	31.79	0.00	230.9	269.4	209.9	159.0	11.37	0.00	272.6	229.6		
Q29	0.45	0.50	240.6	232.3	3.21	0.36	221.4	246.0	232.9	259.1	3.01	0.08	226.9	249.9		
Q30	0.19	0.66	235.2	240.5	4.14	0.25	220.0	249.1	230.9	255.7	1.73	0.19	254.8	237.4		
Q31	15.54	0.00	217.2	265.0	14.30	0.00	259.9	253.3	207.1	202.7	10.95	0.00	272.6	229.6		
Q32	13.23	0.00	218.0	261.8	17.02	0.00	246.3	258.5	207.6	188.5	6.82	0.01	265.4	231.6		
Q33	3.57	0.06	225.1	247.9	6.53	0.09	260.3	240.5	217.4	215.2	1.94	0.16	252.8	234.7		
Q34	20.15	0.00	212.1	266.0	17.23	0.00	286.7	230.5	221.6	206.7	5.94	0.01	262.5	231.0		
Q35	17.86	0.00	213.9	264.7	9.67	0.02	274.2	234.2	222.2	219.2	1.77	0.18	253.2	236.0		
Q36	10.17	0.00	219.2	257.8	6.04	0.11	260.8	240.9	221.3	211.7	6.16	0.01	263.5	231.2		

a. Kruskal Wallis Test ; Highlighted figures signify 10% (<0.1) and 5% (<0.05) significance levels
 b. Grouping Variable: institute Grouping Variable: program duration Grouping Variable: Gender

In Table 8- Discrimination Analysis- variance in perception of business graduates is outlined. Differences of opinion are conducted between (i) private and public business schools, (ii) female and male and; (iii) study period of program. Results from the table show that there is significant variance between public and private B-schools in most variables some of which are like: Ensuring open sharing system, maintaining the high level of moral, justice & honesty, maintaining good corporate governance, discouraging to manipulate with figures, balancing between interest of employee and shareholders, not using unfair promotional means, not cheating with impossible promises, discouraging to overrule the firm's policies and changing traditional to good corporate governance (where $P < .10$). The mean scores of the public and private B-schools outline the better performance of private B-schools in teaching the issues of corporate governance. In terms of study period also there is significant variance in attributes like achieving goal is not everything; working for value maximization rather than profit maximization; ensuring 100% transparency; adopting participative styles; prioritizing shareholder's interest; abiding by local laws; maintaining high level of moral, justice and honesty, etc ($P < 0.1$). The mean scores show that business schools gradually improve the learning of students in the variables like working for value maximization; discouraging to participate in micro politics; forbidding to help the owners in unethical practices; discouraging manipulating figures or window dressing; following local laws and following ethics in business. The male and female perceptions also show significant variance in issues like; B-schools education discourages to increase sales through unfair promotional means; treating customers with real product features; making impossible promises, overruling firms policies, adopting participative management styles, manipulating figures, becoming socially and ethically responsible; changing the culture into good corporate governance, etc, ($P < 0.1$). The mean scores show that females are more positive and concerned about corporate governance than their male counterparts.

Conclusion and Suggestions

All over the world we find certain trends emerging, which have enhanced the importance of corporate governance in business operations. We find governments have been exiting markets, leaving business to private parties; countries have more market oriented reforms leading to liberalization and globalization of economies; there is better awareness about environment; and the information technology boom has vastly improved productivity and

innovation. The emerging scenario of economies has led businesses to capture the world market and expand their operations all over the world. This trend facilitates the entry of big giants into capital markets and brings the economy at greater risk, abuse and fraud, sometimes on a global scale, and ultimately leads to greater awareness of inadequacies of governance, and the demand for new reforms. It involves ethical, social, legal, environmental and managerial operation related issues. The study aims to investigate current situation of India's business graduates in terms of their perception towards corporate governance. Ethics and morals are rooted in the behavior of management, and teaching corporate governance to business graduates in their courses can help to develop the corporate governance culture in the organization. The study tries to address some issues like: the understanding level of business graduates about corporate governance; their main sources of learning corporate governance; their overall perception about corporate governance and the role played by business schools in promoting good corporate culture.

The study makes fruitful addition to the existing knowledge of corporate governance and demonstrates the role of business schools in developing corporate governance in the organization. The primary study of B-School graduates from nine leading universities/B-schools, collected through a specifically constructed research instrument and analyzed under the issues related to corporate governance gives the following broad conclusions.

1. While the awareness about corporate governance is on the rise amongst business graduates and the B-school faculties have been instrumental in increasing this awareness, yet their main source of written information is from outside sources like newspaper and magazines and not from course material or teaching notes. This statistics need attention of business school managements to add more courses in corporate governance and upgrade their prescribed courses and teaching material to include more issues related to corporate governance. As far as perceptions of business graduates go, they strongly agree that having awareness of corporate governance can bring positive change in the business culture, encourage transparency, is applicable and helpful in developing the business sector and the overall Indian economy. However there do not feel very strongly that corporate governance gives organizations a competitive edge, helps in ending corruption or is the need of the hour.

Education in b-schools will have to impart this awareness that in the long run, organizations with poor corporate governance practices will find it difficult to compete and survive in a global economy where corporate governance policies are almost converging and is therefore the need of the hour.

Amongst the six issues analyzed, the management related issues and shareholder issues are given the highest importance in b-school education. The customer and personal issues get mid-level importance while social issues and direct issues of corporate governance get lowest priority in b-school education. B-schools will have to focus more on social, environmental and direct corporate governance training issues.

2. In management issues, aspects like adopting participative management styles and ensuring equal treatment of employees are well stressed while power sharing culture, developing accountability and independency of auditors comes next and least importance is given to non-involvement in micro politics of organizations. In shareholder issues, balancing between the interests of shareholders and employee, and ensuring open information sharing system get the highest weightage; prioritizing shareholder's interest and ensuring appropriate resource allocation for shareholders get mid level importance and manipulating figures and forbidding to help owners in unethical transactions got the least priority. In customer issues: treating the customer with real product features and working for value maximization rather than profit maximization seems to be highly stressed while importance of achieving targets and not cheating with impossible promises is next in hierarchy; while not using unfair promotional means and applying hidden costs to win competition gets lowest priority. In personal competency in developing the good corporate governance in the organization, most importance is given to discouraging overruling firm's policies for personal benefit and encouraging to become a socially and ethically responsible citizen, while maintaining 100% transparency & fairness in business transaction got mid level priority and discouraging unrealistic forecasting got least importance. In the case of social issues b-school education gives the highest emphasis on, caring for local values and culture and abiding by the local laws, while fighting for environmental issues is next important and not supporting policies which damage local traditions and customs, and

discouraging the culture of kickbacks got the least importance. In issues related to the direct teaching of corporate governance, while b-school graduates strongly feel that their education theoretically teaches to develop and maintain corporate governance, they do not feel as strongly and competent about whether it helps in changing the traditional business culture into good corporate governance and discourages to become a part of unprofessional conduct for short term benefits.

3. It is also observed that there is significant variance in perception between public and private B-schools in most variables like: ensuring open sharing system, maintaining the high level of moral, justice & honesty, maintaining good corporate governance, balancing between interest of employee and share holders, etc. The results show that private b-schools are performing better in the teaching of corporate governance on various aspects. This has implications for public B-schools to improve their training of corporate governance. The time analysis shows that different study periods significantly affect the graduate's perception towards corporate governance. As students proceed in their course their learning and understanding on many issues of corporate governance gradually increases. Finally, the gender analyses shows that females are more aware, positive and concerned about issues of corporate governance than their male counterparts.

The results indicate that business schools are not directly offering adequate courses on corporate governance and corporate governance is not included in the course content of many courses of business education. Therefore graduates comparatively do not feel themselves competent enough to develop the good corporate governance culture in the organization or make change in the traditional style of management to accommodate with requirements of good corporate governance. B-schools need to work on this and not only add on new courses on corporate governance, but also make corporate governance an integral part of the existing courses.

Managerial Implication and Future Research

The study shows that business graduates are aware of general issues of corporate governance that come under different heads like management principles and share holders' issues. They are mostly not directly being educated about corporate governance issues under the head of corporate governance. The management of

business schools should incorporate corporate governance in their course outlines or offer separate course on this crucial subject of business management. The business school's dean should focus on training the graduates to become competent enough to develop good governance and change the traditional style into modern corporate governance system. Managers of business schools should incorporate the problems of local industry and their appropriate solution to change the local industrial environment into good corporate governance culture.

Future research needs to be conducted on the possibility of separate courses or specializations on corporate governance. The future research can also collect the perception of faculty members, deans and managements about the role of business schools in developing the corporate governance culture in the organization. Involving corporates and their top-level management in future surveys would be very beneficial. A comparison between industry requirements of corporate governance and business school's training in it can also provide useful insights about the gaps in the development and requirement of corporate governance in India.

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If a country does not have a reputation for strong corporate governance practices, capital will flow elsewhere. If investors are not confident with the level of disclosure, capital will flow elsewhere. If a country opts for lax accounting and reporting standards, capital will flow elsewhere

—Arthur Levitt

Public Service Unions:

A Study on Bargaining Power, Political Connection and Productivity in Government Services in Kerala

SABU THOMAS

The influence of trade union movement is well reflected in social and political changes of the world. In the Indian context, the union activity of government employees has often created partisan attitude which critically affected the administrative, developmental and welfare functions of the government. The unions are politically motivated, whereas effective governance presupposes neutrality and non-involvement in politics. The common goal of unions is revision of salary and enhancement of service benefits at regular intervals and improvement of promotion avenues. They frequently use their collective strength to sway policies, particularly matters such as pay revision etc., in their favour through political manipulations. But no publication or commentary is available on the efficiency/productivity and bargaining power of government employees in Kerala. It was established in the primary data collected from the employees that one of the main factors which is responsible for deteriorating efficiency/productivity is the influence of political parties. But the study could not arrive at definite conclusion on the percentage increase in the matter as there was significant difference in this regard between respondents from the same union. In spite of the union influence on pay and employment benefits, the study shows that most of the NGOs in Kerala opined that the bargaining power of the public employees unions is substantially influenced by their political connection, but no response from the NGOs in the matter of improving productivity has received.

Trade union movement is considered as a means of collective action undertaken by working people to protect their interests. The movement provides a forum for interest articulation leading to a perceptible improvement on work and wages. The influence of union movement is well reflected in social and political changes of the world. Union activity amongst the government employees also is of great significance in the contemporary period. In the Indian context, the union activity of government employees has often created partisan attitude which critically affected the administrative, developmental and welfare functions of the government. The unions are politically motivated, whereas effective governance presupposes neutrality and non-involvement in politics. The common goal of unions is revision of salary and enhancement of service benefits at regular intervals and improvement of promotion avenues. They frequently use their collective strength to sway policies, particularly matters such as pay revision etc., in their favour through political manipulations. Because of the difference in the style of functioning, it is essential to explore in detail the various dimensions of union movement amongst government employees and the role played by each of them in the determination of pay.

Significance and Method of the Study

The studies are conceived within the broad framework of the experiences of public service unionism in developed countries of the world. Public service unionisation in India is not much different from that of other parts of the world. The concept of public service itself needs some elaboration before understanding public service unionism. The State in today's world is engaged in diverse activities besides

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governance. The service performed by the State is generally monopolistic in character and relatively precise legal provisions govern the conduct of public service. Therefore, it is difficult for government administrators to expand or to curtail activities or to change procedures without public attention and ratification. Another distinctive feature of the states' activities, whether in developed or in developing nations carried on by its administrative agencies is that it is not affected by market trends and therefore normal market fluctuations do not affect these services.

The nature of public service has also contributed in shaping the characteristics of the public service unionism. It is generally seen that the conditions of service rarely vary from department to department. The pay structure, working hours, leave facilities are often uniformly regulated as per the position, job, class, grade or status. The conditions of employment are laid down by statutes, order of government, departmental rules, treasury regulations etc., and so designed as to create an orderly service with similar benefits and opportunities at each level. The union movement is also typical and has a different nature as required to meet the service conditions. The membership in public service union is encouraged on the ground that representations through associations not only promote good employee relations but are essential for effective negotiations on pay, transfer, promotion, recruitment and other employment benefits also. All these features are prevailing in the government sector of Kerala too.

The government employees in general, can be classified into three broad categories:

1. Non-Gazatted Officers
2. Gazatted Officers and;
3. Civil Service Officers

This classification is derived from the British Civil Service system. The gazetted officers are those employees, who are in receipt of a prescribed minimum pay and is subject to an announcement in the official gazette, while the non-gazatted officers are not subjected to any such announcement. The gazetted officers can be compared to the Public Managers in Western countries. The NGOs are the lowest levels of government employees. They do the clerical, secretarial maintenance, janitorial and other routine and support jobs. The Gazatted Officers form the lower and middle levels of management in the government and is possibly the most critical level.

They do most of the executive work like supervision,

inspection and assessments and provide the basis for higher level decision making. The recruitment of this category is either by promotion from NGO category or by direct selection. The Civil Service Officers are part of All India Service, which is written into the Constitution of India and the selection process is very rigorous and elaborate. The civil servants occupy the higher levels of bureaucracy and have a lot of power vested in them. Civil Service Officers help in planning, implementing, directing, assessing and reviewing government policies. The Service personnel of the State comprise officers of the former Travancore-Cochin State, those transferred from former Madras State on the date of re-organisation of the State and those appointed to the service of the new State on or after 1st November 1956. In Kerala the NGOs' strength is as high as 90 per cent of the total government employees. All the categories of government employees have their own unions or associations. The associations of NGOs are very powerful in the state and have strong political affiliations. There are certain procedures for recognition of these unions/associations by the government. However, the non-recognized associations are not treated as illegal combination by the government. The changes in pay structure and employment benefits are generally the results of the combined and concerted effort of all the service associations in the country. There is no scientific and rational method of pay determination in India and the existing system is the adaptation of the British system that prevailed before independence.

In Kerala, as in other parts of India, for the purpose of determination of pay, the Government notifies the formation of a commission comprising of one or more experts, to enquire into the pay and other employment benefits, both monetary and non monetary, over and above the basic pay. The commission studies the existing situation and submits its recommendations within the prescribed time limit. Based on the findings, the Government discusses the matter with the service associations and on reaching a consensus; is implemented through a Government Order. It may be noted that often the recommendations of the pay commissions are not directly related to productivity, output, nature of work, performance etc. as in the case of fixing pay structure in industries and other organised sectors.

The universe of the studies constitutes the NGOs spread in 14 administrative departments under the Government of Kerala, who are members of the associations of NGOs within the state. From the preliminary observations during the pilot study made by

Table 1.1: Departmental and Union-wise Classification of Respondents

Sl. No	Departments	NGO Union	NGO Association	Joint Council	Others	Total	%
1	Adv. General	4	2	2	4	12	2.1
2	Judiciary	24	20	4	32	80	13.9
3	Revenue	94	52	24	4	174	30.2
4	Registration	16	10	4		30	5.2
5	Taxes	14	8	2		24	4.2
6	Motor Vehicles	20	8	2		30	5.2
7	Treasury	22	18	2	2	44	7.6
8	Police	28	10		2	40	6.9
9	Jails	12	6	2		20	3.5
10	Printing	6	12		10	28	4.9
11	Stationery	6	6		2	14	2.4
12	Public Works	20	20		10	50	8.7
13	Insurance	8	6	2	2	18	3.1
14	Vigilance	6	6			12	2.1
Total		280	184	44	68	576	100

(Figures pare with numbers indicate the percentage share)

the searcher, it was understood that, there is no substantial qualitative difference in dispersion of population from region to region. Then the total population has been divided in to three geographical divisions, namely, Southern, Central and Northern regions. The sample was selected from Thiruvananthapuram, Thrissur and Kozhikode; representing the Southern, Central and Northern regions of Kerala. As the head quarters of all the government departments are situated in the Southern region (Thiruvananthapuram), the proportion of the samples taken from the three regions

was in the ratio of 2:1:1 from the southern, central and northern region respectively.

For the profile of the respondents selected for the purpose of this study, this scholar used all the NGOs (excluding teachers) from class IV employees to supervisory category (Junior Superintendent) were included. Almost 74 per cent of the respondents belong to clerical category and the lowest representation was from technical category (9 per cent). It may be noted that a major portion of government employees is in the clerical

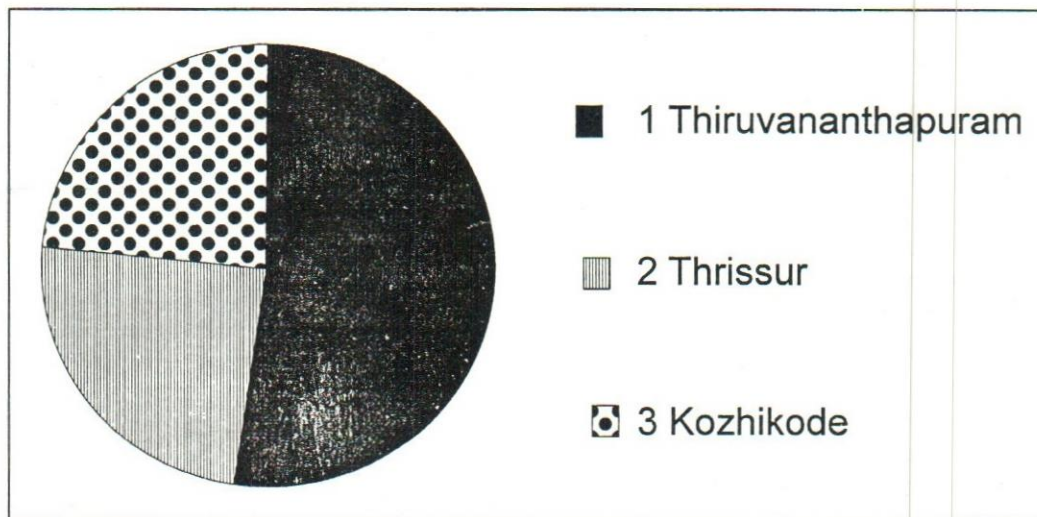


Figure 1.1 - Centre-wise classification of respondents

cadre. More than 50 per cent of the respondents were in the age group of 36-45 years. Only 3.1 per cent of the respondents were in the age group of 18-25 years. About 90 per cent of the union leaders who have responded in the survey were in the age group of 36-55 years.

(Note: The maximum age of entry in government service for general categories is 35 years and for reserved categories, is 40 years)

The data gathered from union members by this scholar were put to quantitative as well as qualitative analysis. The data were analysed by using simple percentage terms. The data collected from union leaders were also analysed in the same manner. Along with this, for measuring the preferences, the respondents were asked to rank the various factors. This method was adopted as the respondents are in a better position to observe and report their feelings, opinion etc., than anyone else. The ranking has been derived in such a way that, the frequency of each variable is multiplied by its rank in the reverse order and the value so arrived at divided by total valid frequency multiplied by the highest rank. And again this value was multiplied by 100 in order to get the rank score out of hundred. The factors with the highest score were reckoned as first rank and so on. The rank score has been calculated using following formula.

$$S = \frac{(f_1 \times P) + (f_2 \times P-1) + (f_3 \times P-2) \dots + (f_n \times P-n)}{N \times P} \times 100$$

- S = Rank Score
- P = Number of factors in the reverse order
- f₁, f_n = Frequencies of particular preference
- N = Total number of respondents

Three major unions namely, Kerala NGO Union, Kerala NGO Association and Joint Council of State Services Organisations represent more than 80 per cent of the NGOs in the state. The main analysis has been done by taking the views of the members of these three unions independently and the remaining four unions and other category/departmental associations as one group under the head 'Others'

Constant errors such as 'halao effect' and 'generosity error' in the ratings have been reduced by using relatively neutral descriptive terms for the scale positions and by having various ratings of a respondent made independently.

The study is directed to broaden the understanding of the manner in which service associations are functioning, particularly the unions of non-gazetted employees in Kerala. To enable this, the evolution, structure, growth,

political affiliation, bargaining power, striking activities, leadership style etc. of all major unions in the state have been taken into account for the study. Apart from this, aspects like relationship between State's income and pay and allowances of government employees, unions' influence on pay of government employees and criteria for determination of pay of government employees are also examined during the study.

The name of a particular organisation is decided with reference to the major category of employees, which it represents. For example Non-Gazetted Officers' Association, Gazetted Officers' Association, Teachers' Association etc. The major categories of employees in the Kerala State Service are Non -Gazetted Officers and Teachers. The Non -Gazetted category of employees includes all employees from class 1V to Junior Superintendent level, i.e. just below the gazetted category. There are also associations, in which NGOs are members; like the State Secretariat Employees Association, Public Service Employees Association, Local Fund Audit Employees Association etc. But these associations represent both gazetted and non-gazetted category and therefore are excluded from the scope of the present study. According to the salary structure, the majority of the teachers in the state services are in the non-gazetted rank, but teachers are represented by their own categorical organisation and therefore, teacher's organisations are also excluded from the purview of this study.

The Joint Council of state services organisation is a federation of state employees associations. It has been formed with the active support of about 47 category/technical associations of government employees in Kerala. This historical background of the Joint Council has attracted the category associations formed subsequently in the state. The Joint Council gives direct membership to both gazetted and non-gazetted employees. Majority of the present members of Joint Council belongs to non-gazetted category. Therefore, this organisation has been included in the study.

Origin of Public Service Unions

The public service unions came into existence in circumstances analogous to those in which industrial trade unions appeared. The public unionism slowly gained importance, as government agencies became larger and more impersonal, with the vanishing of older forms of intimacy and with the decreasing of personal touch and patronage of political bosses. As these conditions became

more and more wide spread, with evolution of elected councils, mayors, governors and legislature the category of government employees seemingly became powerless. It became necessary to organise for collective action especially regarding the employment benefits and service conditions. Public union is the successor in many ways to the old political and administrative system.

Trade Unions of Government Employees in India

The government has become one of the largest employers of the country and majority of the white-collar employees in India is in the Central and State Government establishments. The process of the trade union movement of the government employees has marked differences with that of the industrial workers. The industrial workers established their trade unions through ceaseless struggles against inhuman capitalist exploitation. But the growth of trade union movement of the government employees was from the very beginning faced with strangling impediments created by the colonial government. In a colonial administration, the entire community of government employees is made to function as arms and limbs not of an institution serving the people but of a machinery brutally exploiting, oppressing and acting against the people.

Evolution and Growth of Government Employees' Associations and Unions in India

Government employees' associations originated only in the first decade of the twentieth century. The Indian Telegraph Association (ITA) formed in 1906 may be said to be the first association of this category. The association was able to secure a pay hike for employees from Rs.40/- to Rs. 50/- per month (1). The success of the ITA in securing monetary gains for its members induced the postal employees to form the Bombay Postal Union in 1907.

These preliminary efforts for forming unions paved the way among the other government employees. This also gave really effective inspiration for them to get organised into unions, in the period following the World War 1. The post-war economic crisis and the October Socialist Revolution impelled and inspired the government employees to come together for collective action with a view to resisting the deteriorating economic conditions. Being terribly hard-hit by the after effects of the war, the government employees began to realise the folly of standing aloof and soon there grew up a number of unions and associations. Between the years 1918-1920,

employees in the Currency Office, the Accountant General's Office, Income Tax' Office etc. have formed their department-wise or office-wise unions(2). In 1925 the All India Railwaymen's Federation was born. Bank employees also significantly contributed to the process of early unionism in the public service. Now the employees under the government India are well organised at the departmental levels. The unions have also equal representation at the Joint Consultative Machinery (JCM) in which matters related to employment are discussed and recommended to government.

Origin of Conduct Rules for Government Employees

As soon as the rule of East India Company was established in India, various decrees were proclaimed to regulate the conduct of the employees of the company. The East India Company Acts of 1770, 1793, and 1797, the Sale of Office Act 1809, The Government of India Act 1833, The Supreme Court Officers Act 1859, The Indian Penal Code 1860, The Police Act 1861, The Administrator General's Act 1874 and similar Acts that had been passed during those days added up to form the basis of the official orders for regulating the employees' conduct⁽³⁾. With the founding of Indian National Congress in 1885, the colonial government became, however, quite alert about the political activities of the government employees and it was for the first time in 1890 that orders of the Governor-General in Council were issued in this regard. The circular⁽⁴⁾ containing the orders stated that, "A Government servant may not take part in any political agitation or meeting, or attend any political meeting, his presence at which is likely to be misconstrued or to impair his public usefulness. When there is room for doubt whether any action, which a government proposes to take, will contravene the provisions of this rule, he should refer the matter for orders to the Local Government, or his immediate superior official". In 1904 the Government of India framed a compact set of rules known as The Government Servants' Conduct Rules 1904⁽⁵⁾. The rules were made applicable both in respect of the Central and Provincial Government employees. The rules were modified giving it a reactionary character-prohibiting meeting in public place, procession and strike by the government employees. Even after the end of the colonial rule in 1947 many of these anti-democratic rules were not repealed. On the contrary these have been made more stringent by effecting in them a number of retrograde amendments thereby reducing the government employees to the status of second class citizens divested of political and trade union rights.

The question of granting official recognition to the government employees' associations and unions in India came up for consideration of the British Government in the background of the principle laid down for recognition of the government employees' associations in Great Britain. The principles of granting official recognition to the government employees' associations and unions were first enunciated on 13 October 1921⁽⁶⁾. Accordingly, the Government of India after incorporating the principles already noted, framed a complete set of rules for recognition of the government employees' associations in India and authorised the provincial governments to make such subsidiary rules as may be required⁽⁷⁾. The question of official recognition to the government employee's association in India first came up for consideration of the Government after the formation of the Indian Telegraph Association in 1906. But the matter didn't progress until the year 1919. Among the government employees' associations of India, Foreman's Association of India, an organization of the Foremen in the Ordnance factories of India, was the first to get official recognition in the year 1919. The head office of that association was situated in Calcutta⁽⁸⁾. In the matter of recognition of service associations of government employees the executive instructions, which were issued in 1937, continue to regulate the practice concerning such recognition⁽⁹⁾. The Central Civil Service (Recognition of Service Associations) Rules 1959, have now replaced those executive instructions with the following conditions:

- (a) that no person who is not a government servant is connected with the affairs of the associations;
- (b) that the executive of the association is appointed from amongst the members only;
- (c) that the association shall not espouse or support the cause of individual government servant; and
- (d) that it shall not maintain any political funds or lend itself to propagation of views of any political party or politician.

Although the conditions for official recognition of the unions of government employees are stipulated in the Conduct Rules, many State Governments have not extended the right for negotiation.

The Government Employees Rights of Negotiation

In Britain, there are two methods of joint consultation and negotiation in the non- industrial Civil Service: the Whitely Council method and the method outside Whitely Councils,

of direct relations between staff associations and Government departments. Curiously, though this machinery for negotiation was introduced in Great Britain as early as in 1919, the British Government during the long course of its colonial rule did not even think of introducing any such system with regard to the Civil Service in India. The Government instead resorted to a policy of suppression or at least crippling the unionism of the government employees. In independent India too, it was only after a period of long 19 years and after various agitations including a countrywide strike of the employees in 1960, that a machinery for negotiation known as the Joint Consultative Machinery (JCM) was introduced in October 1966. This machinery for the Central Government employees was on the pattern of Whitely Machinery in Britain. This was not applicable to the State Government employees. Only recently a few State Governments have introduced similar machinery and that too in a purely perfunctory manner without much mentionable benefits.

Civil Service (Conduct) Rules, 1955

The mounting pressure of threat of strike by civil servants led to the appointment of the First and Second Pay Commissions, Commissions on Dearness Allowance, Bonus etc.⁽¹⁰⁾. It was in 1955 that President issued Central Civil Service (Conduct) Rules, affecting those employed in the government service *inter alia* being as follows: Section 4(a): No government servant shall be a member of or be otherwise associated with any political party or any organisation which takes part in politics, nor shall he take part in or subscribe to or assist in any other manner any political movement or activity.

Rule 4 - A says: No government servant shall participate in any demonstration or strike in connection with any matter pertaining to the conditions of service. Rule 4 - B says: No government servant shall join or continue to be a member of any Service Association of Government Servants, (a) which has not within a period of six months from its formation, obtained the recognition of the Government under the rules prescribed in that behalf, (b) recognition in respect of which has been refused or withdrawn by the Government under the said rule.

Rules Relating to Service Associations in Kerala

The matters relating to formation, recognition and political activities of the associations of government servants in Kerala are regulated by the Government Servants (Conduct) Rules 1960. As per this rule, "Service

Association" means a voluntary combination of government employees formed into a lawful organised body, with the object of: -

- (i) securing and promoting conditions of service, common interest and legitimate demands of its members;
- (ii) inculcating in the members the sense of co-operation, friendliness and fraternity, and
- (iii) carrying on general welfare activities for the well being of its members, it includes a union, association, federation, confederation or co-ordination.

On the basis of this regulation, many service associations/unions were formed and have been operating in the state. Most of these unions have support of the political parties and kinds of mutual benefit relationship exist between them. The unions also, to a certain extent, influence the decisions of the Government in the matter of pay determination. But before studying and analysing the influence of service associations in the determination of pay of government employees, it is imperative to understand the demands of the union's political activities, bargaining power and the opinion of the employees about the efficiency/ productivity in the government service in the state.

Demands of the Unions

There is no common forum such as Joint Consultative machinery, as in Central Government and many other States, in Kerala for bringing the service associations and Government for a joint discussion to reach harmonious settlement of disputes. Here in Kerala, normally the service associations submit memorandum containing their demands to the Government as well as the Pay Commission (if there is a commission in force). The committee holds discussion with the service associations and it may or may not consider the demands of the service associations. The Pay commission/committee submits the report to government containing their recommendations on completion of their term. The government usually holds further discussion with service associations. At this stage of discussion, there may be political lobbying for settling the demands. Most of the demands of different unions are identical. As for example general demands of three major unions, viz. NGO union, NGO Association and Joint Council submitted to the Pay Revision Committee (PRC) in 1997. The demands of each of the three unions were the following.

I. Kerala NGO Union

1. Lowest pay shall be fixed at Rs 3000/- based on the wages prevailing in the central public sector and recommendations of the Fifth Central Pay Commission (FCPC).
2. Increment rate shall be 3 per cent of the pay subject to minimum increment of Rs 90/- and maximum of Rs 450/-.
3. Total number of pay scales shall be reduced to 21 and the ratio of lowest and highest pay (Disparity Ratio) should not be changed from the present.
4. House Rent Allowances (HRA) shall be paid at the rate of 7 per cent of Basic pay in Panchayat area, 10 per cent in Taluk/ Municipal Area and 15 per cent in the Corporation Area.
5. Fixation of the pay shall be made by adding present Basic Pay, Dearness Allowance, Interim relief plus 20 per cent of the total amount (Basic Pay + DA + Interim Relief) worked out.
6. The ratio of promotion between LD Clerk, UD clerk and Head Clerk shall be changed as 1:2:1
7. Grade promotion shall be given in every five years of service.

II. Kerala NGO Association

1. Central pay structure and other allowances as recommended by FCPC shall be implemented in the State w.e.f. 1.1.96.
2. Lowest pay shall be fixed as Rs 2610/-
3. Grade promotion shall be given in 4,9 and 13th year of service and every five-years thereafter.
4. Pension age shall be raised to 58 years.
5. The special benefit enjoyed by the State government employees shall be retained while implementing the central pay structure.
6. Lowest pay scale of the gazetted officers shall be given to all the Non - Gazetted Officers who have completed 18 years of service.

III. Joint Council of State Services Organisation.

1. Central pay structure and allowances shall be implemented in the State w.e.f. 1.1.96.
2. Lowest pay shall be fixed as Rs 2610/-.
3. Grade promotion shall be given in the 4th, 9th and 13th year of service and every five years thereafter.

4. Joint Consultative Machinery (JCM) shall be constituted for improving efficiency and mutual trust among employer and employees.
5. Fixation benefit at the rate of 40 per cent shall be given to all the employees.

It may be noted from the analysis of these demands that, most of the demands of Joint Council are identical with the demands of NGO Association, though these two unions are associated with different political fronts. The demands of the NGO union are very different from that of other unions. Regarding the implementation of central pay structure, the views of NGO union is different. But some demands like grade promotion in every five years is common to that of other two unions. The demands of NGO union give the impression that there should be separate pay structure for the State government employees.

The charter of demands of all unions is formulated in the State executive council meetings. Ordinary member may not be fully aware of the demands put up by their leaders. It is not necessary that all the demands of service associations are reasonable. Also the views of individual members may be different in respect to a particular demand.

In this study it is noted that only 35.9 per cent of the respondents from NGO Association have stated that all demands of their union are reasonable. However, the proportion of respondents who, expressed the same opinion is comparatively higher from among the members of Joint Council. The respective per centages are Joint Council (63.6), NGO Union (45.7) and Other Unions (58.8) as shown in (Table No. 1.2).

Table 1.2: Opinion about the Reasonability of Demands

Sl. No.	Name of the Union	All Demands are reasonable	Most of the Demands are reasonable	Some of the Demands are reasonable	Few demands are reasonable	No Demands are reasonable	No Responses	Total
1	NGO Union	128(45.7%)	98(35%)	24(8.6%)	2(0.7%)	2(0.7%)	26(9.3%)	280(100)
2	NGO Association	66(35.9%)	86(46.7%)	18(9.8%)	4(2.2%)		10(5.4%)	184(100)
3	Joint Council	28(63.6%)	12(27.3%)	4(9.1%)				44(100)
4	Others	40(58.8%)	12(17.6%)	8(11.8%)			8(11.8%)	68(100)
Total	262	208	54	6	2	44	576	

Source: Survey Data

Professionalisation and Computerisation of Government Departments

It has been reported that the government of Kerala has initiated several measures to professionalise the functioning of the government. But the strong resistance from the service associations compelled the government to withdraw from such moves. For instance, the State government has been considering the formation of a State civil service for several years. The idea was to set up an elitist group on the basis of merit, which could serve as a feeder category for the Indian administrative Service. While a fixed per centage would be recruited from the open market, the rest would be promoted from the existing cadres on merit. The proposal, however, was not acceptable to the Service Associations. It was therefore amended and the revised proposal stated that the selection would be from among the employees in service on the basis of a competitive test not taking in to consideration the original idea of recruitment from the open market. Even this revised proposal, was not acceptable to the service associations. They were against any proposal that involved selection⁽¹¹⁾

Under the leadership of NGO Union, a committee was constituted in 1986, to oppose the move of the government to computerise the departments. The then president of the union was the chairman of the committee (12). The committee organised propaganda against computerisation. But the union seems to have abandoned the movement and many government offices have now been computerised, even under the LDF regime.

Efficiency / Productivity in Government Service

The size of the bureaucracy and the cost incurred on maintaining them will not pose any problem for government, if the bureaucracy ensures commendable productivity and efficiency. While an employer has the obligation to periodically revise the salary structure so as to ensure that the employees get a fair deal, the employees should have an equally strong obligation to ensure that there is improvement in efficiency and productivity. Unfortunately it is not an easy task to find productivity norms for work in government. Most of the work done by

government departments especially at middle and higher levels does not lend them easy for quantification.

During the field survey the leaders of NGO Association, Joint Council, NGO Sangh and NGO Centre have also stated that efficiency and productivity in government service is deteriorating over the period. On the contrary, the leaders of NGO union, NGO Front and Kerala Government Employees Union did not concur to this Statement (revealed during the interview).

The study has also made an effort to understand the factors responsible for deteriorating efficiency and productivity in government service. From the listed factors (Table No 1.3), majority of the respondents opined that,

Table 1.3: Factors Responsible for Deteriorating Efficiency/ Productivity in Govt. Services

Sl. No.	Factors	Rank Score out of 100	Rank
1	Politicians	83.1	1
2	Bureaucrats	63.1	2
3	Service Associations	61.9	3
4	Union-Activities of Civil servants	50.5	4
5	Other Factors	5.3	5

Source: Survey Data

Note: the interference of service associations while improving efficiency and the loss productivity due engaging employees in union

politicians in the State are one of the important factors directly responsible for the deterioration in efficiency and productivity of government servants. They have also stated that the activities of service association as well as the present bureaucratic set up are also the contributing factors to this phenomenon.

Leaders of NGO Association, NGO Sangh, NGO Centre and Joint Council agreed with this opinion of the union members. While the leaders of NGO Union, NGO Front and Kerala Government Employees Union were hesitant to make any opinion in the matter (disclosed during the interview).

Political Connection of Union's of NGOs.

There is a general view that the trade union movement is divided and fragmented partly on account of a similar phenomenon in the political parties. Similar pattern of incidences happened in the history of union movement of government employees in Kerala. The main reason for the multiplicity of government employees unions in the State is due to the fragmentation of political parties. This might

have affected the bargaining power of these unions to a certain extent.

Political Activities of Government Employees.

Taking part in political activities by the government employees is regulated by revised Kerala Civil Service (conduct) Rule 1973, A government employee shall not be a member of any political party or any organisation which takes part in politics, nor shall he take part in the management or affairs of any political party or in any political campaign or assist in any other manner directly or indirectly, any political movement or activity. Though there is a restriction, it has been noticed that, many of the service associations in Kerala have a strong support from the political parties. Even small parties are interested in constituting service associations.

It is noted that from the very early days, service associations in Kerala were affiliated with political parties. The involvement of service association in politics is indirect and unofficial. But it is an established fact that, all the service associations other than departmental associations in Kerala are connected to one or other political party. To put it in another way, all political parties in Kerala have their own service associations.

The strong influence of political parties in the activities of service associations is evident from the reports of press in Kerala. It has been reported that State committee of the Congress party has established a sub-committee to settle the internal dispute in NGO Association (The Hindu, dtd 25/4/1998). Besides it has been noted that the party leaders are sharing stages in the annual conference of almost all service associations.

Exploring the trends of leaders entering politics after retirement can also identify the political link of leaders of service associations. The information given by present leaders of various unions shows that, majority of leaders of NGO union, NGO Association and NGO Front are planning to enter politics after their retirement. About 26 - 50 per cent of retired leaders of Joint Council, NGO centre, and 1-5 per cent of Kerala Government Employees Union are entering politics (information gathered during the interview).

Political Activities and Conduct Rules.

The associations /unions of NGOs in Kerala are recognised based on the conditions stipulated under Kerala Government Servants Conduct Rule 1960. Under Section 77(a)(3) of the rules the service associations shall not in

any way be connected with any political party or organisation(s). Regarding the involvement of leaders of political parties in the activities of service association, the rule puts certain restrictions. As per section 77 (a) (15), the service association shall not invite non-officials to speak at meetings of associations without obtaining prior sanction of the government.

In spite of the restrictions under the Conduct Rules, *the political connection of the unions is carried on without interruption from government or top bureaucrats or even from judiciary.* The government at several times reminds the civil servants about the need for keeping political neutrality and impartiality in their activities. The content of one of such circular⁽¹³⁾ is quoted below.

It has come to the notice of the government that some times certain sections of the society feel aggrieved that they are not getting full justice from the government departments because of the political affiliation of the officers of government or because of the improper interference of the politicians in the decision making process. This is most unfortunate, and this kind of apprehension on the part of the ordinary citizen should be removed at all costs”.

The union leaders and members have opined regarding the political connection of unions of NGOs and politicisation of civil service associations. Most of the leaders except the leaders of NGO Association and NGO Centre denied that their union has political connection.

Table 1.4: Opinion of Members Regarding Political Affiliation of the Unions

Sl. No.	Name of the Union	Affiliated to Political Party	Not Affiliated to Political Party	No Responses	Total
1	NGO Union	206(73.6%)	66(23.6%)	8(2.8%)	280(100)
2	NGO Association	158(85.9%)	18(9.8%)	8(4.3%)	184(100)
3	Joint Council	34(77.3%)	8(18.2%)	2(4.5%)	44(100)
4	Others	16(23.6%)	50(73.5%)	2(2.9%)	68(100)
	Total	414(72%)	142(25%)	20(3%)	576(100)

Source: Survey Data

Note: Among the other unions NGO Sangh, NGO Front, NGO Centre and Kerala Government Employees union has political connection. The departmental unions generally do not have any political bias.

However the responses from the members were contrary and they confirmed that there exists a connection with the political parties.

Table No.1.4 clearly shows that majority of the respondents from NGO Union, NGO Association and Joint Council affirmed that their unions are affiliated to Communist Party of India (Marxist), Congress Party and Communist Party of India (CPI) respectively. In the case of other unions only * 23.6 per cent of the respondents

has claimed that their union is affiliated to a political party.

Although majority of the respondents confirmed the political connection of the unions of NGOs, at least some of them have a different opinion about the politicisation of civil service association in general. This has been verified in the study. The results provided in the Table No. 1.5 very interestingly shows that more than 50 per cent of the respondents belonging to different unions have expressed

Table 1.5: Members' Opinion on Politicisation of Civil Service Associations

Sl. No.	Name of the Union	Favour	Not Favour	No Responses	Total
1	NGO Union	102(36.4%)	174(62.1%)	4(1.5%)	280(100)
2	NGO Association	48(26.1%)	132(71.7%)	4(2.2%)	184(100)
3	Joint Council	20(45.5%)	22(50%)	2(4.5%)	44(100)
4	Others	4(5.9%)	62(91.2%)	2(2.9%)	68(100)
	Total	174(30.2%)	390(67.7%)	12(2.1%)	576(100)

Source: Survey Data

their displeasure to politicisation of civil service associations in Kerala.

Bargaining Power

The best known approach to the subject of bargaining power is that of Chamberlain⁽¹⁴⁾, who defined such power in terms of the costs to each party of agreement relative to the cost to the employer of disagreeing (sustaining strike) as opposed to the cost of agreeing (granting the union demand), the greater the bargaining power of the union. This approach has been firmly grounded on private sector industrial relations, where the relevant costs were economic ones (essentially wage and profit loss) and affected only the two negotiating parties. The imposition of costs on third parties, which in turn would cause them to seek to influence the outcomes of the negotiating process, was almost totally ignored. It is the importance of this third party influence, as we shall argue, that crucially differentiates public and private sector negotiations.

The Economist⁽¹⁵⁾ has long back argued that many public sector unions, especially in the nationalised industries have substantial bargaining power. There exist numerous references to the 'privileged' wage position of public employee's⁽¹⁶⁾. Collective bargaining agreements in the public service have the appearance of a conspiracy between giants to solve their mutual problems at public expenses; the parties have found their narrow organisational reasonableness, but not always in terms that are just to the public⁽¹⁷⁾. Collective bargaining is not very common today in the government services. In India the practice of collective bargaining does not exist in civil

service. In the central government as well as in several State governments, a forum called Joint Consultative Machinery (JCM) has been constituted. The aim of JCM is to promote negotiation and settlement of issues relating to pay and other service conditions of the government employees. JCM is not a mandatory body, but it can recommend its decisions to government for perusal. The *concerned government takes the final decision.*

In Kerala, there is no forum like JCM, though the public employees are highly unionised in the State. The discussions on demands are usually conducted between the government and leaders of service associations directly. As the service associations have strong political support, the decisions are more politically significant unlike the agreements reached at the bargaining table. The views of the respondents regarding bargaining power of the unions of NGOs are given in figures below.

The information given in Figure 2.2 depicts that, more than half of the respondents argued that the bargaining power of the service association in Kerala has increased over the period. If there is an increase in the bargaining power, definitely there will be a strong reason for such change. In order to unearth the underlying factors for increase in bargaining power, the respondents were asked to rank the various factors enlisted. The five important factors, which may contribute to this phenomenon, have been put forwarded. These are strength of the unions, political affiliation of the unions, commitment of the leaders, support of the government and support of the general public. Of this, strength of the union have been ranked as first by the respondents (see Table No.1.6).

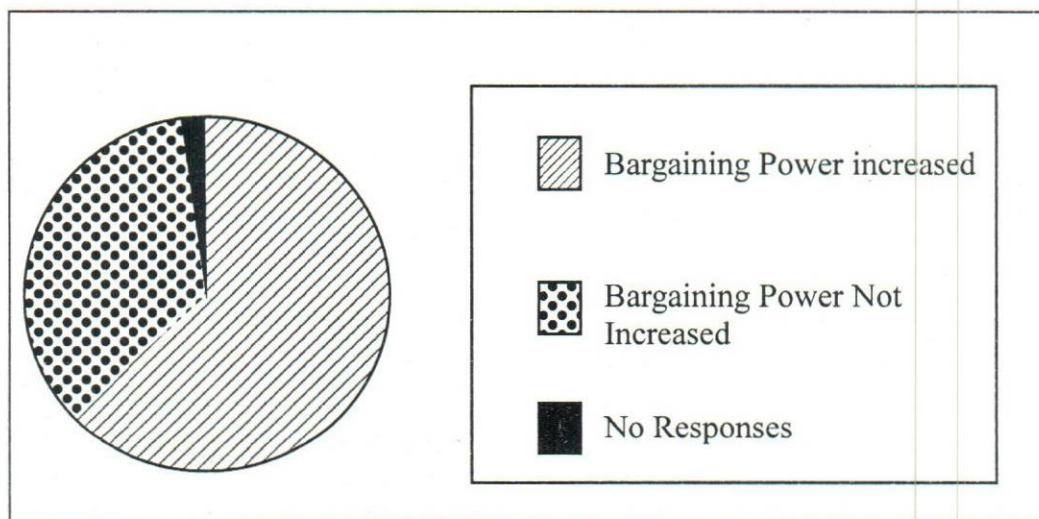


Figure 2.2- Respondent's Opinion About the Bargaining Power of Service Associations in Kerala

Table 1.6: Factors Contributing for Increase of Bargaining Power of Unions

Sl. No.	Factors	Rank Score out of 100	Rank
1	Union's strength	83.2	1
2	Political affiliation	71.2	2
3	Commitment of Leaders	62.0	3
4	Support of the Govt.	51.1	4
5	Support from the General Public	42.5	5
6	No Responses	2.4	6

Source: Survey Data

The opinions of the leaders were quite different from the views expressed by union members. The State leaders of Kerala NGO Union Stated that, the bargaining power of unions of NGOs has increased on account of strength of the union and support from other general trade unions. This Statement may be true in the case of Kerala NGO Union, as this union alone represents about half of the NGOs in the State. On the other hand, the leaders of two other major unions, viz. - a - viz., Kerala NGO Association and Joint Council are different. They have disclosed that the bargaining power of service associations in Kerala had actually decreased over the period. This happened due to

the multiplicity of service associations, and consequent inter -union and intra - union rivalries as also political interferences. The leaders of other four unions, viz. -a-viz., NGO Sangh, NGO Front, NGO Centre and Kerala Government Employees Union also feel that the bargaining power has increased, but they did not point out any definite reason for the same (opinion gathered during the interview).

Political Connection and Bargaining Power.

Public labour relations are fundamentally determined and carried out under the law of politics and that consequent settlement is political acts⁽¹⁹⁾. The bargaining power of the unions of public employees is substantively influenced by their political connection. A mutual benefit relationship has evolved between ministers or public political officials and service associations in Kerala. This relationship is part of their political connection. This may be reflected in the settlement of disputes or conceding demands or even in the transfer and postings of public employees. We have noticed many reports of transfer of employees belonging to a particular union, when the opposite party came to power. For example, there were reports of transfer of members of NGO Association (pro - Congress employees organisation) to remote and rural places, when the

Table 1.7: Opinion of the Respondents about the Help of Political Affiliation in Conceding Demands

Sl. No.	Union	Poli. Affiliation helped	Poli. Affiliation not helped	No Response	Total
1	NGO Union	164(58.6%)	78(27.9%)	38(13.6%)	280(100)
2	NGO Association	140(76.1%)	42(22.8%)	2(1.1%)	184(100)
3	Joint Association	32(76.7%)	8(18.2%)	4(9.1%)	44(100)
4	Others	22(32.35%)	22(32.35%)	24(35.3%)	68(100)
	Total	358(62%)	150(26%)	68(12%)	576(100)

Source: Survey Data

Communist Marxist party led Left Democratic Front got power in 1996(Reported by various News Papers).

During the field survey, it has been asked to the respondents that, whether the political affiliations of the union really help in conceding their demands. The analysis of the results show that, most of the respondents maintained that political affiliation of their union helped to meet the demands of the unions. (Table No.1.7). The respondents were not unanimous about the relentlessness of the political parties in conceding the demands of their affiliated unions, while in power.

The analysis of the data in Table No. 1.8 shows that 22 per cent of the respondents pointed out that the influence of political parties in yielding to the demands is not often. At the same time, 19.1 per cent of the respondents stated that political affiliation of the unions of NGOs has always helped to secure their demands accepted.

Concerning the link between bargaining power and political connection, the leaders of the unions have different views. Out of the 30 leaders, 16 leaders have agreed that, there is a close link between the two, while 6 leaders did not agree to this and 8 of them offered no response (disclosed by the leaders during the interview).

Table 1.8: Frequency of Political Influence in Conceding the Demands

Sl. No.	Opinion	Unions NGO Union	NGO Association	Joint Council	Others	Total
1	Always	60(21.5%)	34(18.5%)	14(31.8%)	2(2.9%)	110(19.1%)
2	Often	44(15.7%)	44(23.9%)	6(13.6%)	10(14.7%)	104(18%)
3	Sometimes	48(17.1%)	58(31.5%)	10(22.7%)	10(14.7%)	126(22%)
4	Rarely	10(3.6%)	4(2.2%)	2(4.5%)	2(2.9%)	18(3.1%)
5	Never	2(0.7%)	4(2.2%)	0	0	6(1%)
6	No Responses	116(41.4%)	40(21.8%)	12(27.3%)	44(64.8)	212(36.8%)
	Total	280(100)	184(100)	44(100)	68(100)	576(100)

Source: Survey Data

Conclusion

It was established by earlier studies that, public service unions have some influence on the fringe benefits and wages of public employees. However, practically, no study in Kerala has been conducted on bargaining power, efficiency/productivity and the impact of union movement on pay and other employment benefits of Government employees. In the present study, consistent with prior research in western countries, it was revealed that there is some but not substantial influence of service associations on the determination of pay and other benefits to Government employees in Kerala. But no publication or commentary is available on the efficiency/productivity and bargaining power of government employees in Kerala. It was established in the primary data collected from the employees that one of the main factors which is responsible for deteriorating efficiency/productivity is the influence of political parties. But the study could not arrive at definite conclusion on the percentage increase in the matter as there was significant difference in this regard between respondents from the same union. In spite of the union influence on pay and employment benefits, the study shows that most of the NGOs in Kerala opined that the bargaining power of the public employees unions is substantially influenced by their political connection.

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Organizations need to practice qualitative corporate governance rather than quantitative governance thereby ensuring it is properly run.

—Mervyn King

Community Vs. Individual Targeting in CSR Projects: A Case Study in West Bengal

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PARTHA TALUKDER AND MOUMITA PODDAR

In this article we have critically addressed the issue of proper targeting as well as demand driven selection of CSR schemes in a semi-urbanised area of Rural West Bengal. The corporate entity is a large PSU in the primary sector. The selection of schemes has been done on the basis of para/hamlet level multidimensional well-being measure, using the inclusion–exclusion principle. Prioritisation of projects is done by looking at the demand intensity estimated from household survey. Our findings support generic choice of community based projects for CSR by the PSU.

It is often observed in government aid schemes, which typically targets individuals or households, that targeting is poor and delivery percentage is low (typical estimates are around 16%). Usual candidate schemes criticised are the PDS, Antoday etc. Another common criticism is that often such schemes reduces labour supply and thus are counterproductive. See Mukherjee and Sinha (2013) for a simple model and empirics on the issue of MGNREGA. On the other hand, programmes that are targeted to create (local) public goods are often more productive (eg. construction of public toilets, JNURM, NHRM etc.) and suffer less from targeting maladies. The non-excludability of these schemes tends to lead to Pareto improvement and creates positive externality in the community.

A secondary important source of aid schemes are the Corporate social responsibility (CSR) schemes which are mandated by the government and often properly designed by the corporate entities. Mukherjee and Mallik (2009) provides a recent survey of Corporate social responsibility (CG) related issues in India. See also Wanknis (2007) where innovative projects under such schemes are documented. Successful CSR experiences often involve long term engagements with the local community. Thus in case of CSR engagements also, it is seen that community based projects are more popular.

Smith (2003) referred to CSR as the obligations of the firm to society or, more specifically, the firm's stakeholders—those affected by corporate policies and practices. This paper examined the pressures for increased corporate attention to CSR and whether this attention is warranted and likely to be sustained. The paper differentiated between the business case for CSR and the normative case and concludes that often there may

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be a compelling business case for making a substantial commitment to CSR, but an individual firm must assess the extent to which the general business case for CSR applies to its specific circumstances.

Gond and Moon (2011) referred to CSR as (a) the expectation that business is responsible to society—in the sense of accountability and for society—in the sense of compensating for negative externalities and contributing to social welfare (b) the expectation that business conducts itself a responsible fashion and more specifically (c) the management by business of the corporation-society interface through the enhancement of stakeholder relationships. Baron (2005) presented a theory of corporate social responsibility (CSR) where a social entrepreneur forms a CSR firm at a financial loss because either doing so expands the opportunity sets of citizens in consumption-social giving space or there is an entrepreneurial social glow from forming the firm.

With this background, in this paper, we aim to analyse the demand situation for CSR projects in the neighboring area of a large public sector unit in the primary sector. The area of operation being a semi-urbanized zone in West Bengal. The results discussed here are the outcome of a research project on Corporate Social Responsibility (CSR) to recommend suitable projects to be undertaken for implementation. Multiple surveys in 28 villages were conducted with alternative respondents to collect the relevant household data and to understand the ground reality.

In the next section the survey area, sampling and data collection methodology are described. Subsections present the preliminary findings. Section 3 takes up issues related to awareness, perceived usefulness and management of the CSR schemes to set the background to our selection process for both target village as well as prioritization schemes. The targeting of households is attempted in section 4 using the inclusion–exclusion principle. Prioritisation of schemes is presented in section 5. Finally section 6 summarises our findings and raises future issues.

Survey Area and Methodology

As part of the research project on Corporate Social Responsibility (CSR) to recommend suitable schemes to be undertaken for implementation, multiple surveys in 28 villages were conducted to collect relevant household data and to understand the ground reality. Important indicators of level of living of people were created from this database.

Selected households have been surveyed for detailed household information and to understand the nature of demand of the villagers. Information from NGOs and CSR office has helped to understand ground reality. It is observed that the villages under study being in close vicinity of the city have developed urban area characteristics, particularly in some hamlets.

The baseline study was aimed at collecting information of the selected villages and the CSR schemes existing in the villages. Oral accounts of some villagers were also collected to develop domain knowledge of the area. There were meetings with the NGOs working in the area to understand their view and share their experiences. Secondary data were collected from the CSR office to ascertain the list of projects implemented in the villages in last ten years.

Four rounds of survey were conducted to collect information about the villages. The first round aimed at household listing involving total enumeration. A short questionnaire was canvassed for the purpose to know about the demographic profile, educational characteristics, occupational structure and benefits received. The data gave fair idea about the level of living of the people. This was used as frame for sample selection in the next round. In the first round of study all the households in 28 villages covered under CSR were surveyed. Total number of household reported has been 8222 covering a population of 41891.

The second round of survey attempted to capture the response of the villagers regarding the CSR schemes operating in the village. 10% of households were randomly selected from every village for interview. Subsequent round of study was aimed at collecting information from the NGOs concerned regarding on the schemes operating in the villages. The NGOs consulted experienced persons in the villages, clubs and local functionaries to collect the data. The last round of sample survey involved another round of detailed study of the households for every hamlet (para) using a structured questionnaire. In all 899 households was selected using Probability Proportional to Size (PPS) sampling with household size as size measure. The PPS sampling scheme used for this survey was Midzuno's sampling scheme.

Preliminary Findings of the Household survey:

- 41% households are SC and ST
- About 11.4% households are landless

- Wage labour is the principal occupation of 48% households
- About 24% of head of households are illiterate
- 28% households have kachha house
- About 13% households do not own any house
- About 39% do not have any separate toilet facility
- 49% households have monthly per capita income less than Rs 1000
- 25% households cannot afford two square meals daily round the year
- 3.49% households do not possess any asset
- About 3.5% children do not go to school
- 21% households in the area have PSU links

Households feel that more community based schemes would be more useful.

6. About 79% households expressed their willingness to contribute money or labour for the schemes befitting their respective villages (especially for improving infrastructure).
7. The following schemes have gained high demand: Mobile medical facilities, pre-school education, vocational training (including skill development), multipurpose community halls, drinking water facility, sanitation and drainage.

Macro issues regarding CSR schemes

Local linkage and awareness

To understand the possible linkage between working relationship and awareness about the CSR schemes, we first look at the percentage of households (estimated) who are linked to the PSU in a work relationship. It is seen that on an average the link is about 21%.

To check whether a job link with the PSU reduces the lack of awareness regarding the CSR schemes available locally, we create a awareness gap variable for each of the broad scheme category by:

$$\text{Awareness gap} = \text{CSR report on existence of scheme} - \text{household awareness about it}$$

We expect the correlation of these variables with the link percentage across villages. But surprisingly the only significant correlation is between "link" and awareness gap for scheme category I5, which is positive. Hence, link with the PSU does not seem to help in creating awareness regarding the local CSR schemes.

Report on CSR schemes in the past

1. 88% schemes are operational. The schemes which are non operational are mainly so because of problems of up-keeping and maintenance (eg tubewells)
2. Nearly 89% schemes are reported to be useful.
3. Villagers report that 84% of the schemes are available to the every individual in the village.
4. For 97% of the schemes, household report that they don't have to pay anything to enjoy the benefits of the scheme.
5. 94% households demand more schemes.

Table 1: Percentage of households where some member work for the PSU (estimated, in percentage)

village	A1	A2	B3	B4	B5	B6	B7	B8	D9	D10
Link	12.39	43.92	9.81	0	37.06	42.19	13.96	22.66	15.59	4.52
village	D11	H12	J13	K14	K15	K16	K17	K18	M19	N20
Link	12.4	35	38.28	3.2	10.06	8.27	26.24	37.39	0	7.87
village	N21	N22	R23	S24	S25	S26	S27	T28	Wtd avg.	
Link	25.04	4.55	24.47	27.67	20.9	2.7	0	3.53	20.9	

Correlation with works for PSU	E1	E2	H1	H2	H3	H5	I1	I2	I3	I5
	.259	-.072	-.119	.233	-.162	-.044	-.246	.125	-.031	0.463*

*. Correlation is significant at the 0.05 level (2-tailed).

Table 2: Households ready to contribute money or labour for additional Schemes in their village (in percentage)

Village	A1	A2	B3	B4	B5	B6	B7	B8	D9	D10
Ready to contribute	79.41	63.83	88.89	75	15.38	100	85.71	90.35	75.4	90.91
Village	D11	H12	J13	K14	K15	K16	K17	K18	M19	N20
Ready to contribute	92	80	87.5	93.85	90.91	95.83	90.91	78.95	100	81.82
Village	N21	N22	R23	S24	S25	S26	S27	T28	Avg	
Ready to contribute	82.82	100	0	60.51	54.55	90.24	68.42	72	79.39	

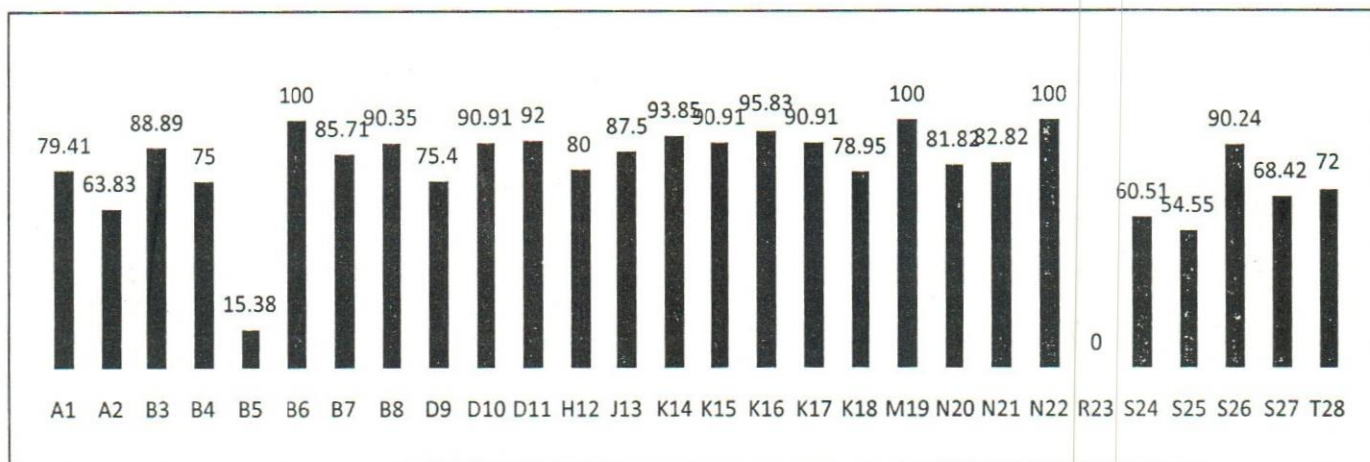


Fig . 1. Contribution of Labour or Money for Additional Schemes

Perceived usefulness

It is seen that the average percentage of households ready to contribute is quite high (~ 80%) and 26 out of 28 villages are more than 50%. So it is encouraging to conclude that the villages actually find the CSR schemes useful.

Project management

It is observed that the PSU is managing most of the CSR projects themselves. As the staff strength of the PSU

Table 3: Agency controlling the facility (percentage)

Panchayat Member	Community Leader	Political Worker	Others	PSU	Total
0.00	2.18	4.88	30.74	62.20	100

is limited, it is wiser to engage NGOs to undertake CSR activities in every village. Appropriate mechanism should be devised for accountability of the NGOs and restructuring the deliverables. Grievance redressal mechanism should be formalised as soon as possible. Details of the schemes sanctioned should be released in the public domain for the knowledge of local people.

Identification of Poor and Non Poor household:

One of the challenges here is to identify the poor hamlets in the CSR villages. The CSR schemes being community based, it is difficult to identify the exact number of beneficiaries. To avoid difficulty arising out of targeting, universalisation of the schemes may be the only feasible strategy.

It was rather difficult to define a Poor household based on the standard measures of poverty. The villages being urbanised, measures of rural poverty are not tenable. The methodology of Planning commission using Tendulkar's method of estimating poverty (Rupees One thousand per capita per month) gives us about 60% percent of poor in the CSR villages. We have used other indicators mentioned by Planning Commission to arrive at an overall poverty level and poverty level of respective hamlets (paras). This is done in the following manner:

The description of the variables that were initially considered to be Indicators of Wellbeing/III-being:

- 1) **Collection of fuel** : Only those households using cow dung and wood as fuel were considered

- 2) **No toilet** : Only those households who did not have any toilet were considered
- 3) **Females in the household having no additional dress for going outside**: Only those households were considered where female members doesn't have more than one dress for going outside the village
- 4) **Non-pucca** : Only those households with kuchcha and semi-pucca houses considered
- 5) **Two square meals per day** : Only those households who can not afford two square meals daily for the entire year were considered
- 6) **Child not going school** : Only those households with 5-12 year old child not going to school were considered
- 7) **Asset**: Out of 16 types of listed asset, for every household, ownership of respective category is counted.eg. If a household has asset category two (say), it is counted as one and zero if otherwise,

in this way, the sum total for all asset is arrived at. It can yield 16 as the max score. Possession of asset is considered as measure of well being

- 8) **BPL**: Only those households with BPL card are considered.
- 9) **Unemployed more than 3 months** : Only those households were considered where the principal earner remains unemployed for more than 3 months
- 10) **Homestead land** : Area of land adjacent to the house is considered
- 11) **Agricultural land**: Area of land under cultivation is considered
- 12) **Fallow land** : Area of land that have remained unused is considered

The above 12 variables actually contain 128 observations, each corresponding to particular para. Each observation or cell consists of the proportion of households those satisfy the property of the Poverty Indicator variable

Table 4: The correlation matrix among 12 variables which are considered as the indicators of well being/ill being:

	Collected fuel	No toilet	No addl dress for Female going outside	Non-pucca	two square meals not available daily	Child not going school	Asset	BPL	Unemployed more than 3 mts	Homestead Land	Agricultural Land	Fallow Land
Collected fuel	1	-.389**	-.040	.006	-.307**	-.083*	-.201**	-.193**	-.030	-.029	-.147**	-.007
No toilet	-.389**	1	-.042	.285**	.273**	.122**	-.170**	.235**	.215**	-.180**	.383**	.064
No addl dress for Female going outside	-.040	-.042	1	.086**	.257**	-.016	-.101**	-.029	.049	-.051	-.042	-.026
Non-pucca	.006	.285**	.086**	1	.289**	.079*	-.311**	.090**	.431**	-.092**	-.083*	.003
two square meals not available daily	-.307**	.273**	.257**	.289**	1	-.048	-.254**	.066*	.197**	.033	-.064	-.062
Child not going school	-.083*	.122**	-.016	.079*	-.048	1	-.087**	-.025	-.065	-.055	.026	-.022
Asset	-.201**	-.170**	-.101**	-.311**	-.254**	-.087**	1	-.018	-.239**	.074*	.211**	.211**
BPL	-.193**	.235**	-.029	.090**	.066*	-.025	-.018	1	.101**	-.084*	-.027	-.016
Unemployed more than 3 mts	-.030	.215**	.049	.431**	.197**	-.065	-.239**	.101**	1	-.038	.092**	-.036
Homestead Land	-.029	-.180**	-.051	-.092**	.033	-.055	.074*	-.084*	-.038	1	.028	.027
Agricultural Land	-.147**	.383**	-.042	-.083*	-.064	.026	.211**	-.027	.092**	.028	1	.210**
Fallow Land	-.007	.064	-.026	.003	-.062	-.022	.211**	-.016	-.036	.027	.210**	1

among the total number of households in that para. For Asset, the average of proportion of every household in a particular para was taken as a representative proportion for that para. And for the other 3 land related variables, we had used the total land holding for every para.

For computing the correlation matrix we have used the para size, i.e., number of households in a para as weights. For example, a para has 5 households (say) and suppose let there be 4 non-pucca households so the proportion of households in the particular para corresponding to Non-pucca Variable would be $4/5=0.8$. Suppose we consider another para having 50 households

with 30 of them satisfy the non-pucca criterion so the proportion for that particular para will be 0.6 which is less than that of the previous para but the number of poor households in the second para was more. To counter this problem we used the para size as weights.

Out of the above 12 variables we have finally considered only five with strong consistent association among themselves. Those are Non-pucca house, Non Availability of 2 square meals per day, Asset, BPL (from baseline) and Unemployment of principal earner for more than 3 months.

Table 5: Correlation Matrix of 5 selected Indicator of well being/fill being:

	Non-pucca	Non availability of 2 square meals per day	Asset	BPL	Unemployed more than 3 months
Non-pucca	1	.289**	-.311**	.090**	.431*
Non availability of 2 square meals per day	.289**	1	-.254**	.066*	.197**
Asset	-.311**	-.254**	1	-.018	-.239**
BPL	.090**	.066*	-.018	1	.101**
Unemployed for more than 3 months	.431**	.197**	-.239**	.101**	1

*. Correlation is significant at the 0.05 level (2-tailed).

** Correlation is significant at the 0.01 level (2-tailed).

Reason for choosing 5 indicators out of a total of 12 variables considered:

BPL is actually the response of the villagers of their holding of the BPL card. So it is a suitable indicator of poverty. It is positively correlated (significantly) with the other 3 Poor Indicator variables except **Asset** (which shows no significant correlation). It is also positively correlated with other depreciation variable like **Absence of toilet** in the house.

The variable **non-pucca** household has significantly high positive correlation with the other 3 Indicators of Poverty variables and significantly negatively correlated with **Asset** and also with the **Homestead** and **Agricultural Land**. So **Non-pucca** has been considered as a poor indicator variable.

We see that **Non availability of two Square meals per day** is significantly positively correlated with the other 3 Poor Indicators and significantly negatively correlated with **Asset**. It is also significantly positively correlated with other depreciation variables like **absence of toilet** and **absence of additional dress for Female**

for going outside. Therefore, it was also included as an indicator of poverty.

While considering **Unemployment for more than 3 months**, significantly high positive correlation with the other 3 Indicators of poverty is found and significantly negatively correlation with **Asset** is observed. It has also significantly positive correlation with absence of toilet. **Unemployment for more than 3 months** has been considered as a Poverty indicator variable.

Though **Asset** is actually not a depreciation variable, but it can be used as one if the corresponding proportions are subtracted to get the residual. It is significantly negatively correlated with 3 Poor Indicator variables except **BPL** (shows no significant correlation). It is also significantly negatively correlated with other depreciation variables like **Collected fuel**, **No outside cloth for female**, **No toilet**.

Reason for not considering the other variables as Poverty Indicators:

It is observed that **fuel Collection** is significantly negatively correlated with depreciation variables like **No toilet**, **Non**

availability of 2 square meals per day, BPL and Child not going to school. We suspect some problem while data collection and decide to drop this as an indicator of Poverty.

The variable **Absence of toilet** was rejected as it was observed that Government/PSU has built toilets for the poor in many areas.

Ownership of Land is not considered as an indicator as 28 villages covered under the survey were more or less urban and households owned less land.

Child not going to school was also not considered as an Indicator as the eligible population (with children in the age group 5 to 12 years and not going to school) were very less in number.

Female having no additional cloth for going outside was not accepted as indicator as appropriate information was not available from the data as respondents often consider this as private information. There was ample scope for under reporting. There was also a confusion about the definition. Households confused between cloth for going outside the house and outside the village. So the variable has not been considered as an indicator of poverty.

Identification of poor para/hamlet:

We have calculated proportion of households in each para of every village where the specific property of the indicator variable is present (e.g., we have calculated the proportion of households in each para that are non-pucca). In this way, we have got a proportion for each para for every poverty indicator variable. Then we select a cut off 60% (looking at various poverty figures in India). Now corresponding to each indicator variable we create a binary variable and assign 1 to the para for which the proportion is greater than equal to 0.6 and 0 to the para less than 0.6. Then corresponding to each para we calculate total of 0's and 1's which could be up to a maximum of 5 and store them in a column named as 'Sum'. Subsequently, we create columns to capture at least K (for all K=1(1)5). Consider the 'At least 1' column which contains elements 0's and 1's. We assign **zero** to those para where the 'Sum' column corresponding to the para is zero and **one** where corresponding value in the 'Sum' is one. Similarly, we create the At least 2, At least 3 columns and so on. This is the **Inclusion Exclusion Principle** by which we tag a para as poor satisfying certain criterions. Poor Paras in each of the 28 villages are thus identified.

Table 6: Poor and non-poor para/hamlet in each village: inclusion-exclusion with: (a) cut-off = 60% and K=3 (i.e., at least three out of five) and (b) cut-off = 70% and K=1 (i.e., at least one out of five)

village	Total number of Para	Number of Poor Para (a)	Number of Poor Para (b)
A1	1	0	0
A2	9	0	1
B3	4	1	3
B4	1	1	1
B5	1	0	0
B6	3	2	3
B7	1	1	1
B8	6	0	3
D9	10	1	6
D10	7	5	4
D11	6	1	2
H12	17	2	3
J13	1	0	0
K14	4	2	2
K15	2	1	2
K16	1	0	0
K17	1	1	1
K18	5	1	3
M19	1	0	0
N20	1	0	0
N21	16	0	6
N22	3	0	1
R23	1	0	1
S24	11	0	0
S25	2	0	0
S26	7	1	3
S27	2	1	1
T28	4	0	3
Total	128	21	50

Note: Red indicates villages satisfying 60% cut-off criterion and K=3 and Yellow indicates villages satisfying 70% cut-off criterion and K=1.

Prioritisation of CSR Schemes

After careful enumeration of the existing CSR schemes, three broad category of benefits were identified related to: Education, Health and Sanitation, Infrastructure

Broad Categories of Schemes:

- **Education:**

E1: School building and classroom construction. Donation of furniture, Tiffin and educational kits to a school. Toilet at school, Child Education.

E2: Adult Education Center, Vocational/Technical Training Center, Sports Coaching.

- **Health and Sanitation:**

H1: Medical Camp, Mobile Medical Van, Free treatment at Hospital & Ambulance service.

H2: Drain Repairing, construction etc. Toilet Repairing, construction etc.

H3: Tap connection, Tube well, Well, Pump Reservoir, Soak pit for tube well, Drinking Water facility

H4: Garbage disposal, Dustbin.

H5: Pond Digging, excavation, ghat.

- **Infrastructure:**

I1: Street Light Connection, Construction, Repairing (Including Solar Light).

I2: Resurfacing, Covering & construction of roads and metal roads.

I3: Community Hall, Community Center & Multipurpose Hall, Library, Club, Cultural Activity Shed, Burning ghat shed.

I4: Children Park, Sports Ground, Playground.

I5: Electricity Connection & Extension, Electric Poles setup.

- **Individual Benefits:**

House construction for poor etc.

Other Schemes which could not be classified under above categories has been marked in the corresponding files.

Based on household response on demand and supply of CSR projects (See appendix tables 7 & 8), the following table showing weighted average value (across villages) of demand and supply intensity is created. This table

Table 7: Weighted average of household response (demand and supply)

Scheme	E1	E2	H1	H2	H3	H4	H5	I1	I2	I3	I4	I5
Demand	0.1133	0.0224	0.0945	0.2609	0.5431	0.1147	0.0696	0.2184	0.2254	0.0849	0.0555	0.0224
Supply	0.4771	0.0177	0.3146	0.0538	0.2385	0.0	0.0779	0.0	0.2206	0.4196	0.0	0.0

highlights that demand and supply (awareness) is not very highly related (correlation = 0.11), which is expected. Notably, the highest demands are in H3, H2, I2 and I1 categories (in that order) which are all construction based projects. On the OTHER hand, supply awareness is highest in E1, I3, H3, I2 categories (in that order). So there is some overlap between the demand and the experience but clearly there are gaps in the process and a possible relocation of funds are called for.

Concluding remarks

To summarise, we have addressed the issue of targeting for CSR schemes in this paper. A large number of household level well-being /ill-being indicators were selected to begin with and then the number of indicators was drawn down to five, based on careful consistency analysis. The poor paras were finally selected based on two alternative inclusion – exclusion principle cut-offs with these five indicators.

Secondly we have also outlined an objective methodology for prioritisation of CSR schemes using the revealed demand information from the household level respondents. We also looked at the supply reports from the PSU to judge consistency / adequacy of past selections.

On a separate vein, we have also analysed respondents' awareness about existing CSR projects and whether it relates to link with the PSU. Comments were also made on perceived importance / usefulness of the projects and management of the same.

Future Issues:

- There should be periodic review to decide the list of CSR villages. It has been observed that some villages (which are very close to the town) are on the verge of losing the village characteristics. Such urbanised villages might be dropped to include more underdeveloped villages.
- It is worth studying how dynamic incentives/ contracts changes priorities over time for various schemes in the villages. Further analysis is needed to understand if the targeting was proper. It is

expected that an impact assessment would be undertaken on regular basis to understand the effects of intervention. There is a need to update the data base and generate panel data subsequently.

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Governance and leadership are the yin and the yang of successful organisations. If you have leadership without governance you risk tyranny, fraud and personal fiefdoms. If you have governance without leadership you risk atrophy, bureaucracy and indifference

—Mark Goyder

Appendix: Detailed Tables

Table 8A: Demand for educational schemes

Serial no	Name of village	E1		E2	
		NGO report	hh response	NGO report	hh response
1	A1	0	0.118	0	0.235
2	A2	0	0	0	0
3	B3	0	0	1	0.444
4	B4	0	0	0	0
5	B5	0	0.059	0	0
6	B6	0	0	0	0
7	B7	1	0.429	0	0
8	B8	0	0.018	1	0
9	D9	0	0.317	1	0.048
10	D10	0	0.045	0	0
11	D11	0	0.12	0	0
12	H12	0	0.197	0	0
13	J13	0	0	0	0
14	K14	0	0	0	0
15	K15	1	0.455	0	0
16	K16	0	0	0	0.083
17	K17	0	0	0	0
18	K18	0	0.077	0	0
19	M19	0	0	0	0
20	N20	0	0.182	0	0
21	N21	0	0.074	0	0.006
22	N22	0	0.5	0	0
23	R23	0	0	0	0
24	S24	1	0	1	0
25	S25	0	0	0	0
26	S26	0	0.024	0	0.024
27	S27	0	0.8	1	0.05
28	T28	0	0.12	1	0
	Total		.1133		.0224

'1' represents yes and '0' represent no

Table 8B: Demand for Health & Sanitation benefits

Serial no	Name of village	H1		H2		H3		H4		H5	
		NGO report	hh response	NGO report	hh response	NGO report	hh response	NGO report	hh response	NGO report	hh response
1	A1	1	0	1	0.588	1	0.118	0	0.029	0	0
2	A2	1	0	1	0.277	1	0.596	1	0.298	0	0
3	B3	0	0	0	0	1	0.556	0	0	1	0.222
4	B4	0	0	1	0.875	0	1	0	0	1	0.25
5	B5	1	0	1	0.765	1	0.529	1	0	1	0.176
6	B6	0	0.625	1	0	0	0	0	0	1	0.625
7	B7	0	0.143	0	0	1	0.571	0	0.714	0	0
8	B8	1	0.053	1	0.123	1	0.789	1	0.053	1	0.105
9	D9	1	0.27	1	0.444	1	0.444	0	0.016	0	0
10	D10	0	0.159	1	0.068	0	0.182	0	0	0	0.182
11	D11	0	0.2	1	0.28	1	0	0	0	1	0.32
12	H12	1	0.053	1	0.421	1	0.447	1	0.224	0	0.013
13	J13	0	0	1	1	0	0	0	0	0	0
14	K14	0	0.219	1	0.125	1	0.281	0	0	0	0.063
15	K15	0	0.182	0	0	1	0.818	0	0	0	0
16	K16	0	0	0	0	1	0.833	0	0	0	0
17	K17	1	0	0	0.636	1	0.909	0	0	0	0
18	K18	1	0	1	0.385	1	0.308	0	0	1	0.154
19	M19	0	0	0	0	1	0	0	0	0	0
20	N20	1	0	1	0	1	0.273	0	0	0	0.091
21	N21	1	0.006	1	0.29	1	0.852	1	0.34	0	0
22	N22	1	0	1	0.5	1	0.786	0	0	1	0.143
23	R23	1	0	1	0.5	1	1	0	0	0	0
24	S24	1	0.262	1	0	1	0.446	0	0	1	0
25	S25	1	0	0	0.364	1	0.909	0	0.091	0	0
26	S26	0	0	1	0.073	0	0.732	0	0	1	0.268
27	S27	1	0.25	1	0.2	1	0.65	0	0	0	0
28	T28	1	0.04	1	0	1	0.28	0	0	1	0.04
	Total		0.0945		0.2609		0.5431		0.1147		0.0696

Table 8C: Demand for infrastructure

Serial no	Name of village	I1		I2		I3		I4		I5	
		NGO report	hh response	NGO report	hh response	NGO report	hh response	NGO report	hh response	NGO report	hh response
1	A1	1	0	0	0.029	1	0.441	0	0	0	0
2	A2	0	0.383	0	0.191	0	0.106	0	0.149	0	0.064
3	B3	0	0	1	0.111	0	0	0	0	0	0.111
4	B4	0	0.125	0	0	0	0	0	0	0	0
5	B5	0	0.647	0	0.294	0	0	0	0	0	0
6	B6	0	0.313	1	0.375	0	0	0	0	0	0
7	B7	0	0.429	0	0	0	0	0	0	0	0
8	B8	0	0.263	1	0.491	1	0.035	1	0	0	0.053
9	D9	0	0.143	0	0.524	1	0.095	0	0.19	0	0.048
10	D10	0	0.545	1	0.068	1	0	0	0	0	0
11	D11	0	0.04	0	0.04	0	0.04	0	0	0	0
12	H12	0	0.289	1	0.118	1	0.092	0	0.105	0	0.039
13	J13	0	0	0	0	0	0	0	0	0	0
14	K14	0	0.156	1	0.375	0	0	0	0	0	0.0625
15	K15	0	0.091	0	0	1	0.182	0	0	0	0
16	K16	0	0	0	0.083	0	0	0	0	0	0
17	K17	0	0	1	0.545	0	0.091	0	0	0	0
18	K18	0	0.154	1	0.462	0	0.385	0	0.154	1	0
19	M19	0	0	0	1	0	0	0	0	0	0
20	N20	1	0.182	0	0.182	0	0.091	0	0	0	0
21	N21	1	0.272	0	0.111	1	0.006	0	0.099	0	0.006
22	N22	1	0	0	0.214	1	0.071	0	0	0	0.071
23	R23	0	0.75	0	0.25	0	0.25	0	0	0	0
24	S24	0	0	0	0	1	0.169	1	0	0	0
25	S25	0	0.455	0	0	0	0.182	0	0	0	0
26	S26	0	0.317	1	0.659	0	0	0	0	0	0
27	S27	0	0	0	0.5	1	0.55	0	0.1	0	0.1
28	T28	1	0.04	1	0.2	1	0	1	0	0	0
	Total		.2184		.2254		.0849		.0555		.0224

Table 8D: Other categories of demand

Serial no	Name of village	NGO report	CSR response
1	A1	0	0
2	A2	0	0
3	B3	1	0.222
4	B4	0	0
5	B5	0	0
6	B6	0	0
7	B7	0	0
8	B8	0	0
9	D9	0	0.063
10	D10	1	0.114
11	D11	1	0.2
12	H12	0	0.066
13	J13	1	0
14	K14	0	0.031
15	K15	1	0.091
16	K16	0	0
17	K17	0	0.182
18	K18	0	0.077
19	M19	0	0
20	N20	0	0
21	N21	0	0.025
22	N22	1	0.071
23	R23	0	0
24	S24	0	0
25	S25	0	0
26	S26	0	0.415
27	S27	0	0.3
28	T28	0	0.28
	Total		.0721

Table 9A: Supply for educational benefits

Serial No.	Name of village	E1			E2		
		CSR Report	NGO report	households response	CSR Report	NGO report	households response
1	A1	0	0	0	0	0	0
2	A2	0	0	0	1	0	0
3	B3	0	*	0	0	*	0
4	B4	0	*	0	0	*	0
5	B5	1	0	0	1	0	0.118
6	B6	0	*	0	0	*	0
7	B7	0	**	0	0	**	0
8	B8	0	0	0	0	0	0
9	D9	1	0	1	0	0	0
10	D10	1	*	0.818	0	*	0
11	D11	1	*	1	0	*	0
12	H12	1	1	0.987	0	0	0
13	J13	0	*	0	0	*	0
14	K14	0	*	0	0	*	0
15	K15	0	***	0	0	***	0
16	K16	0	*	0	1	*	1
17	K17	0	0	0	0	0	0
18	K18	0	1	0	1	0	0
19	M19	0	*	0	0	*	0
20	N20	0	0	0	1	0	0
21	N21	1	0	0.389	1	1	0.006
22	N22	0	0	0	0	0	0
23	R23	1	*	0	0	*	0
24	S24	1	1	0.985	0	0	0
25	S25	1	**	0	0	**	0
26	S26	1	*	0.976	0	*	0
27	S27	0	0	0.65	0	0	0
28	T28	0	0	1	0	0	0
	Total			4771			.0177

*All existing CSR projects are wanted

**No existing scheme

***Schemes are in specific para

Table 9B: Supply for Health & Sanitation benefits

Serial No.	Name of village	H1			H2			H3			H4			H5		
		CSR Report	NGO Report	households response	CSR Report	NGO Report	households response	CSR Report	NGO Report	households response	CSR Report	NGO Report	households response	CSR Report	NGO Report	households response
1	A1	1	1	1	0	0	0	0	1	0	0	0	0	0	0	
2	A2	1	1	1	0	0	0	1	1	0	0	0	0	1	0	
3	B3	0	*	0	0	*	0	1	*	0	0	*	0	1	1	
4	B4	1	*	0	1	*	0.875	1	*	0	0	*	0	1	0	
5	B5	1	1	0.882	0	0	0	0	0	0	0	0	0	0	0	
6	B6	1	*	0	0	*	0	0	*	0	0	*	0	*	0	
7	B7	0	**	0	0	**	0	0	**	0	0	**	0	**	0	
8	B8	1	0	0	1	0	0	0	0	1	0	0	1	1	1	
9	D9	1	0	0	1	1	0	1	1	1	1	0	0	0	0	
10	D10	1	*	0	0	*	0.818	0	*	0	0	*	0	1	0	
11	D11	1	*	0	0	*	0	0	*	0	0	*	0	*	0	
12	H12	0	0	0	0	0	0	0	1	0	0	0	1	0	0	
13	J13	1	*	1	0	*	0	0	*	0	0	*	0	*	0	
14	K14	1	*	1	0	*	0	0	*	0	0	*	0	*	0	
15	K15	0	***	0	0	***	0	0	***	0	0	***	0	***	0	
16	K16	1	*	1	0	*	0	1	*	0	0	*	0	*	0	
17	K17	1	1	0	1	1	0	1	0	0	0	0	0	0	0	
18	K18	1	1	0.5	1	0	0.2	0	0	0	0	0	0	0	0	
19	M19	1	*	0	0	*	0	1	*	0	0	*	0	*	0	
20	N20	0	0	0	0	0	0	1	1	0	0	0	1	0	0	
21	N21	1	1	0.691	1	0	0	1	1	0	0	0	0	0	0	
22	N22	1	1	0	0	0	0	0	0	0	0	0	0	0	0	
23	R23	0	*	0	0	*	0	0	*	0	0	*	0	1	0	
24	S24	1	0	0	0	0	0	1	1	1	0	0	1	1	0	
25	S25	0	**	0	0	**	0	1	**	0	0	**	0	**	0	
26	S26	0	*	0	0	*	0	1	*	0	0	*	1	*	0	
27	S27	1	6	0	0	0	0	0	0	0.85	0	0	0	0	0	
28	T28	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	Total			.3146			.0538			.2385			.0000		.0779	

*All existing CSR projects are wanted **No existing scheme ***Schemes are in specific para N.B.: 1 implies the scheme is supplied; 0 means the scheme is not supplied

Table 9C: Supply for infrastructure

Serial No.	Name of village	I1			I2			I3			I4			I5		
		CSR Report	NGO Report	households response	CSR Report	NGO Report	households response	CSR Report	NGO Report	households response	CSR Report	NGO Report	households response	CSR Report	NGO Report	households response
1	A1	1	0	0	0	0	0	0	1	1	1	0	0	0	0	0
2	A2	0	1	0	0	0	0	1	1	1	0	0	0	1	0	0
3	B3	1	*	0	*	0	0	1	*	1	1	0	*	0	*	0
4	B4	1	*	0	1	1	1	1	*	0	0	0	0	0	*	0
5	B5	0	1	0	1	0	0.529	1	1	0.882	0	0	0	0	0	0
6	B6	1	*	0	1	*	1	1	*	0	0	0	0	*	0	0
7	B7	0	**	0	0	**	0	0	**	0	0	0	**	0	**	0
8	B8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9	D9	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0
10	D10	0	*	0	0	*	0	1	*	0	0	0	*	0	*	0
11	D11	0	*	0	1	*	0	0	*	0	0	0	0	0	*	0
12	H12	1	1	0	1	0	0	1	1	0.368	0	0	0	0	0	0
13	J13	0	*	0	0	*	0	0	*	1	1	0	*	0	*	0
14	K14	0	*	0	0	*	0	1	*	1	1	0	*	0	*	0
15	K15	0	***	0	0	***	0	0	***	0	0	0	***	0	***	0
16	K16	0	*	0	0	*	0	1	*	1	1	0	*	0	*	0
17	K17	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0
18	K18	0	1	0	0	1	0.6	1	1	0.5	0	0	0	1	0	0
19	M19	0	*	0	0	*	0	1	*	0	0	0	*	0	*	0
20	N20	1	0	0	1	0	0	1	0	1	0	0	0	0	0	0
21	N21	0	0	0	1	0	0.525	1	1	0.691	0	0	0	0	0	0
22	N22	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23	R23	0	*	0	0	*	0	0	*	0	0	0	*	0	*	0
24	S24	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0
25	S25	0	**	0	0	**	0	0	**	0	0	0	**	0	**	0
26	S26	1	*	0	1	*	1	1	*	1	1	0	*	0	*	0
27	S27	1	1	0	0	0	1	1	0	0	0	0	0	0	0	0
28	T28	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0
	Total			.0000			.2206			.4196						.0000

*All existing CSR projects are wanted, **No existing scheme ***Schemes are in specific para

New Strategies to Manage Finished Products Inventory

HEMANT R. THAKKAR

Finished products inventory is very critical issue for manufacturing organizations. Large finished product inventory leads to huge stagnation of inventory and standstill of liquidity ratio and less inventory is having risk of higher lead time (waiting time) for customers. The mathematical model of economic order quantity is very popular for the inventory management, but majority organizations do not follow it rigorously due to several reasons like they follow periodic requirement instead of EOQ, and they attract towards discount offered by suppliers. So inventory management is still challenging for manufacturing organizations. A vendor managed inventory concept of Supply Chain Management (SCM) is also discussed in order to manage finished goods inventory. This paper is intended to study new strategies adopted by modern organizations to control the finished products inventory.

Inventory is necessary to provide flexibility in the production and in marketing system. The inventory can be categorized into three groups, viz. raw material inventory, semi-finished components inventory and finished products inventory. This paper is intended towards study of new strategies used by the modern industries to tackle finished products inventory. Generally the finished products inventory is necessary to remove the dependency of marketing people on manufacturing industries. Since, products are readily available all the time and they can sell very easily without any waiting period. But, if the finished products inventory is very large, huge stagnation of inventory and standstill of liquidity ratio is difficult to manage. The finished products inventory is very critical as maximum cost of product involved (compared to raw material and semi-finished components inventory) and products are laid idle in the go-downs. This is increasing pressure of manufacturing organizers and reducing liquidity of the organization to a very large extent. The inventory management is always necessary and overall objective of any inventory management system is to smooth-out the irregularities in supply, minimize of production cost by reducing the carrying cost proportion and to avoid stagnant position in the business cycle.

Literature Survey

Morris (1995) stressed in his study that inventory management in its broadest perspective is to keep the most economical amount of one kind of asset in order to facilitate an increase in the total value of all assets of the organization—human and material resources. He has indirectly indicated the effective utilization of resources instead of huge inventories.

Gerardo Molinary Fernandez expressed in his study about the weakness of traditional mathematical model of

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inventory management. He mentioned that many times suppliers are giving extra discounts on purchase of products; hence to avail more discount purchasers ignore the EOQ model. There are many other models available but they include many mathematical formulations, so people do not use them.

Scott Grant Eckert (2007) has mentioned in his paper that Inventory management is very important since, many retailers are trying to implement a "perfect order" system and due to that suppliers are constantly under pressure to meet the demands of these retailers. Inventory management has large impact on customer satisfaction and which created lot of pressure on the minds of manufacturer. So, suitable product wise customized inventory model is very important for each manufacturing organization.

Camelia Burja and Vasile Burja (P43-50, 2010) have formulated a mathematical model that will give the EOQ based on current figures of turnover. Since the market is always in highly dynamic condition, the inventory decision should be taken on current status of the turnover. Material resources are immobilized or released by changing the inventory rotation speed. The relation that expresses the size of the released or immobilized inventory, needed to achieve daily sales in the current period. The expression actually signifies additional or less number of days for which the inventory size is changed depending on the average daily sales.

Kuo-En Fu, Wei-Zhen Chen et al. (2012) have recommended the use of an economic order quantity (EOQ) model for the important multiple products and reduce the risk of complicate raw material shortage problem in the inventory system. They have developed a fitness linear regression model of a raw material using Anova technique.

Grzegorz Michalski (2008) of Institute of Economic Forecasting has proposed the value based inventory model. EOQ and purchase order quantity are decided based on this new model.

S. L. Adeyemi and A. O. Salami (P135-142; 2010) have stated that the Coca Cola Company operates a policy of making orders on a quarterly basis within a period of one year. It has been observed that the company does not always adopt the EOQ model in placing orders for its raw materials and this account for the variations between the calculated EOQ and the expected order sizes of the company.

Shuo Huang, Bo Liao and David J. Robb (2011) have developed a tractable inventory model for bricks-and-clicks for traditional and on-line dual service retailers. He has analyzed that an inventory for a single product to serve both online and traditional customers is advantageous, if the lead time is short. Customers from both channels are attended on a First Come First Served (FCFS) basis as long as there is inventory on hand. If the inventory level has dropped to zero, demands from the traditional channel are lost, whereas online customers wait until the next replenishment of the product.

Overall summary of literature survey indicates that the mathematical model of EOQ gives accurate results for inventory management, but very few organizations follows that rigorously due to several reasons. As they always see the discount available in purchase of raw material or finished products. Very less importance is given to carrying cost (inventory cost) of the material or product.

Finished Products Inventory Management

Majority of organizations are producing the products in large varieties. This is for the business intention of covering wide range of customers. After certain years of establishment, the product catalogue becomes larger and hence which leads to huge inventory of finished products. Of course large finished products inventory means weak marketing efforts of the organization. The finished products inventory can be mobilized by any suitable marketing strategy.

Finished products inventory system becomes critical when the manufacturing system is established very smoothly, or there are very less amount of troubles in manufacturing methodologies and there is effective utilization of men and machineries in the manufacturing of the products.

Modern industries have identified the ways to tackle finished products inventory, some of the points are elaborated as following:

The organization has already established certain products in the market, and they are very well adopted by customers. Do not disturb this, and continue these products in the market with proportionate efforts.

The organization is also developing new products in the market at a very faster rate. These products are made with varieties of design features. These products are to be made in limited editions only, so that this is also working as market refresh strategy. The customers are getting

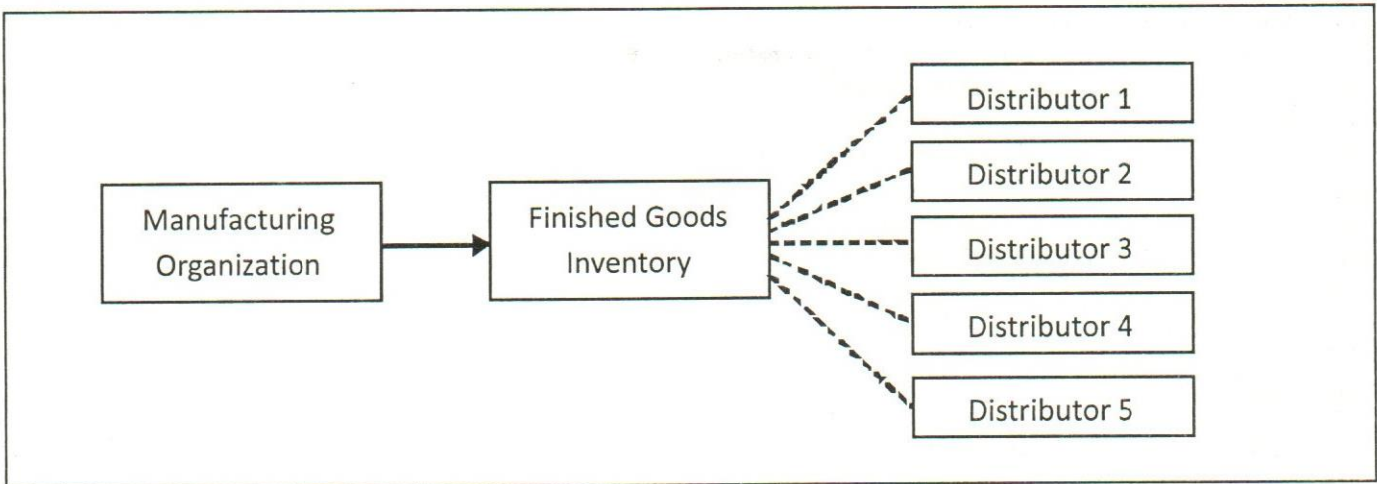


Figure 1: Strategy for Finished Products Inventor

continuously new varieties and their escalating demands are now satisfied.

These new products are manufactured with limited quantity, in such a way that these products costing are beyond the break-even point of manufacturing. The economic batch quantity (EBQ) may be calculated with following equation.

$$EBQ = \sqrt{\frac{2C_o D}{C_c}}$$

Where, EBQ = Economic Batch Quantity,
 Co = Cost of each product
 D = Expected demand
 Cc = Carrying cost / unit / period

In the above equation, carrying cost increases if the finished products inventory becomes large. But for low

values of carrying cost, EBQ is always higher. For the suggested new strategy the long term finished goods inventory trouble is resolved, so products may be manufactured in a single batch and sold accordingly. Once again develop new product and push in to the market.

Vendor Managed Inventory:

In the modern concept of Supply Chain Management (SCM) the permanent goal is to give best customer services through coordinated management of raw materials and finished products inventory. Vendor managed inventory system involves vendor representative and empowered to even know the inventory level available at the organization. The vendors or original equipment manufacturer (OEMs) knows raw material inventory available at the organization or, so they always remain alert and update about the further need of supply. In case

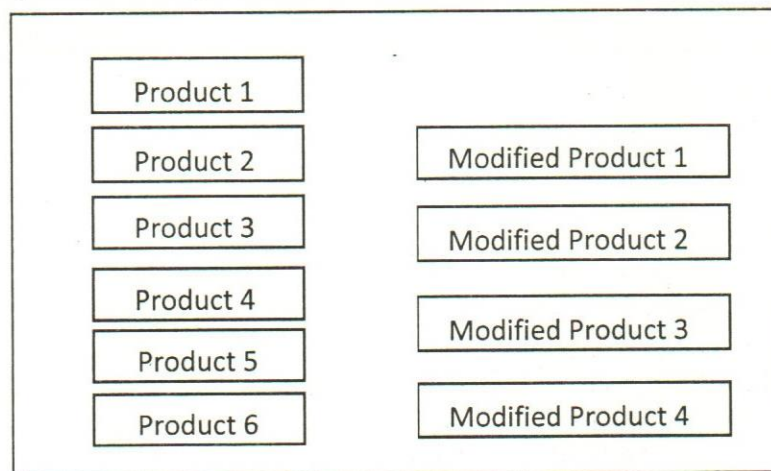


Figure 2: Vendor Managed Inventory

of finished goods inventory the distributors are allowed to view the inventory available with manufacturing organization, so they can become aware about the exact inventory and they can plan for the further requirements. This concept is adopted by many modern organizations like Maruti Udyog Limited, and they keep their finished products inventory data on internet, so distributors know about the stock available and they feel comfortable in further order requirements. This method is known as JIT II.

Advantages

Applying above mentioned strategies may be advantageous in several ways. New and continuous product development process keeps the brand image live on the minds of customers. Customers are always attracted towards the new variety products or better designed products. Finished goods inventory problem is resolved, as products are manufactured in limited quantity beyond the break even cost.

Using Vendor management system is use of technology for latest stock of inventory of the manufacturing organization by several distributors gives benefit to both sides and overall it will be best customer services.

Many garment industries, automobile industries, fashion wear designers, ball pen industries, toy industries, game industries, book publishers, etc. are using this strategy.

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Governance is the process whereby people in power make decisions that create, destroy or maintain social systems

—Maria Ramos

Rediscovering Six Sigma: Comparison with Other Quality and Productivity Improvement Techniques

DARSHAK A. DESAI

Six Sigma has emerged as one of the most effective quality and productivity improvement strategies. After its conception at Motorola, many success stories were charted by a number of multinationals. From the researches and surveys conducted and published so far, it appears that Six Sigma is not being explored by the Indian industries to its full potential. This is mainly due to incorrect impression at all levels that Six Sigma is a costly affair and it involves lots of statistics. Due to this most of the industries are refraining to attempt Six Sigma and resorting to different quality and productivity improvement tools and techniques, sometimes inappropriately. Thus to introduce Six Sigma comprehensively a comparison of same is made with other quality and productivity improvement tools and techniques in this paper. The assessment revealed that Six Sigma is the inclusive blend of all the quality and productivity improvement tools and techniques to a considerable extent.

For sustainable growth in the highly competitive global market Indian industries need to address quality, productivity and profitability simultaneously. Of late Indian industries are trying many tools and techniques which deal with either quality or productivity separately. But need of the hour is the application of inclusive methodology which can bring break through improvements in the projects on hand. Six Sigma is one of the most effective breakthrough improvement strategies having direct impact on bottom line of the organization. After its conception at Motorola, there are many success stories reported highlighting considerable bottom line improvements by Six Sigma across the globe. Six Sigma is the methodology having statistical base focusing on removing causes of variations or defects in the product or core business processes (Desai, 2008).

To compete globally, mere customer satisfaction is not enough—one needs to delight the customers. Indian industries need to continuously pursue overall organizational excellence. Meeting the customers' requirements at minimum possible cost and time is the main mantra of success for any sort of business. Six Sigma is one such technique available to bring the breakthrough improvements almost in every sector through overall operational excellence. The pinpointed attack of this technique on root causes guarantees the targeted results, both in terms of improvements desired and time span fixed (Desai, 2012).

Six sigma is a systematic, highly disciplined, customer-centric and profit-driven organization-wide strategic business improvement initiative that is based on a rigorous process focused and data-driven methodology (Tang et al. 2007). Six sigma provides

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business leaders and executives with the strategy, methods, tools and techniques to change the culture of organizations (Antony et al., 2005). Six sigma as a philosophy seeks to measure current performance and determine how desired or optimum performance can be achieved. Any deviation in the performance of any critical-to-quality characteristic may be considered a defect (Eckes, 2001).

Indian industries, especially, large scale concerns, are employing quality and productivity techniques, such as, Toyota Production System, Single Minute Exchange of Dies (SMED), Pokayoke, Lean manufacturing, Statistical Quality Control (SQC), Total Quality Management, ISO certifications, etc. Though Six Sigma has found its place among many Indian industries as one of the most effective improvement strategies, still it is considered out of reach for many industries which are complacent with the quality and productivity improvement techniques they are following currently. This paper is an attempt to compare Six Sigma methodology with few other well-known quality and productivity improvement techniques. The basic aim is to draw similarities and otherwise among them for better understanding of Six Sigma methodology.

Six Sigma—an overview

Six Sigma is defined by many experts in numerous ways. Harry (1998) defined Six Sigma as a strategic initiative to boost profitability, increase market share and improve customer satisfaction through statistical tools that can lead to breakthrough quantum gains in quality. Tomkins (1997) defined Six Sigma as a programme aimed at the near elimination of defects from every products, process and transactions. As per Park (2002) Six Sigma implies three things: statistical measurement, management strategy and quality culture. It tells us how good products, services and processes really are, through statistical measuring of quality level. It is new management strategy under leadership of the top management to create quality innovation and total customer satisfaction. It is also a quality culture. It provides an atmosphere to solve many Critical to Quality (CTQ) problems through team efforts. Six Sigma fundamentally focuses on reduction in variability. This technique is a simple common sense concept for those who understand statistical principles of targeting the mean to the required nominal value and controlling variance around the mean. But it is much more than just a statistical approach to problem solving. It is a company-wide initiative to improve both top line and bottom line

through sustained customer satisfaction. The entire movement is driven by the voice of the external customer and concentrates on what is really important for the customer (Seth and Rastogi, 2004). Carey (2007) stated that the essence of Six Sigma is found in the reality that business processes are inherently unpredictable. Six Sigma provides a way of measuring the variability in a process as it delivers services to an end-user or customer. When most people talk about Six Sigma, they are thinking about the DMAIC methodology. This method is used for improving an existing process when it is not meeting customer needs.

Linderman et al. (2003) in defining Six Sigma stress up on process improvement and new product development by stating that Six Sigma is an organised and systematic method for strategic process improvement and new product and service development that relies on statistical methods and the scientific method to make dramatic reductions in customer defined defect rates. As per Mgnusson et al. (2003) Six Sigma is a business process that allows companies to drastically improve their bottom line by designing and monitoring everyday business activities in ways that minimise waste and resources while increasing customer satisfaction by some of its proponents. While as per Voelkel (2002) the business-oriented definition of Six Sigma states that it blends correct management, financial and methodological elements to make improvement to process and products in ways that surpass other approaches.

It is a business improvement approach that seeks to find and eliminate causes of mistakes or defects in business processes by focusing on process outputs that are of critical importance to customers (Snee, 2004). Six Sigma is a business system with many statistical aspects, and it naturally fits the business systems of most companies. It is an operational system that speeds up improvement by getting the right projects conducted in the right way (Lucas, 2002).

Six Sigma is a holistic approach to achieving near perfection, expressed in terms of no more than 3.4 errors per million opportunities (Wright and Basu, 2008). As per Shahin (2008) the corporate framework of Six Sigma embodies the five elements of top-level management commitment, training schemes, project team activities, measurement system and stakeholder involvement. Stakeholders include employees, owners, suppliers and customers. At the core of the framework is a formalized improvement strategy with the following five steps: define measure, analyze, improve and control (DMAIC).

Apart from above strategic, managerial and business description of Six Sigma, technically, sigma (σ) is a statistical measure of the quality consistency for a particular process/product. The technical concept of Six Sigma is to measure current performance and to determine how many sigmas exist that can be measured from the current average until customer dissatisfaction occur. When customer dissatisfaction occurs, a defect results (Eckes, 2001).

There are basically two methodologies in practice for Six Sigma improvement strategy as illustrated in Figure 1.

The process improvement technique is popularly known as DMAIC (Define-Measure- Analyze-Improve-Control) and another one aiming for design improvement is known as DFSS (Design for Six Sigma). The original problem solving process for Six Sigma developed by Motorola was MAIC. Later, DMAIC instead of MAIC was advocated by GE where D stands for 'Definition'. For DFSS methodology, there are different approaches in use such as DMADV (Define-Measure-Analyze-Design-Verify), IDOV

(Identify-Design-Optimize-Validate) and DIDES (Define-Initiate-Design-Execute-Sustain) (Park, 2002). Table 1 provides a glance on the DMAIC methodology which is much in use compared to DFSS approach.

Comparison of Six Sigma With Other Quality and Productivity Improvement Techniques

Six Sigma and TQM

McAdam and Lafferty (2004) state that many of the advocates of Six Sigma position it as a natural development of TQM. They argue that Six Sigma can build on the existing TQM culture to achieve tangible results. However, such a continuum raises conceptual difficulties. The current status of TQM is recorded as becoming increasingly focused on people and cultural issues in organizations from all sectors. They derived a conceptual model which shows that TQM has developed from being simply mechanistic to that of broad change philosophy having mechanistic and organic components, based on business and employee needs. Their model illustrates that emergence of Six Sigma is not as a replacement for TQM

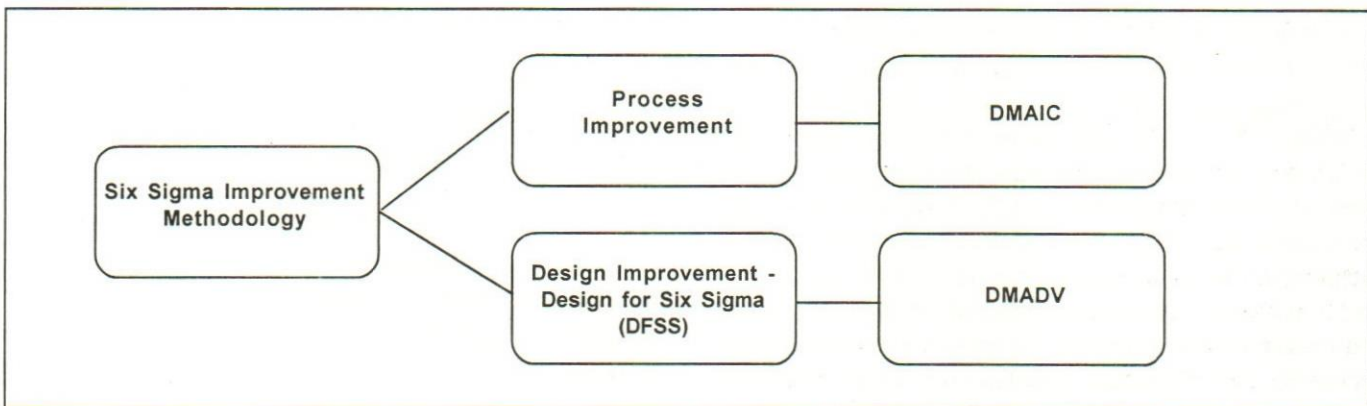


Figure 1 Six Sigma Methodologies

Table 1: DMAIC: A Glance

Define	This phase defines the project and identifies critical customer requirements and links them to business needs. It also defines a project charter and the business processes to be undertaken for Six Sigma.
Measure	This is a data collection phase. At the end of this phase, present state of the situation becomes crystal clear by knowing the baseline six sigma, that is, present sigma level of the project.
Analyze	Here, course of action is created to close the "gap" between how things currently work and how they should work to meet improvement goals. All root causes are analyzed and the most critical ones are fixed for improvements.
Improve	This phase involves improving processes/product performance characteristics for achieving desired results and goals. This phase involves application of scientific tools and techniques for making tangible improvements in profitability and customer satisfaction
Control	This phase requires the process conditions to be properly documented and monitored through statistical process control methods.

but as a means of refocusing the needs for business deliverables on the mechanized side of TQM.

As per Arnheiter and Maleyeff (2005) the roots of Six Sigma can be traced to two primary sources: Total Quality Management and the Six Sigma statistical metric originating at Motorola Corporation. From TQM, Six Sigma preserved the concept that everyone in an organization is responsible for the quality of goods and services produced by the organization. Other components of Six Sigma that can be terraced to TQM include the focus on customer satisfaction when making management decisions, and a significant investment in education and training in statistics, root cause analysis, and other problem solving methodologies. The main components of Six Sigma retained from TQM include a focus on the customer, recognition that quality is the responsibility of all employees, and the emphasis on employee training.

Motwani et al (2004) provided comprehensive differences between TQM and Six Sigma. Striking differences indicted TQM as focusing on quality while Six sigma focuses on strategic goals and applies them to cost, schedule and other key business metrics. TQM loosely monitors progress towards goods while Six sigma ensures that the investment produces the expected return. TQM emphasizes problem solving while Six Sigma emphasizes breakthrough rates of improvement. TQM focuses on standard performance while Six Sigma focuses on world-class performance, e.g. 3.4 PPM error rate. TQM provides a vast set of tools and techniques with no clear framework for using them effectively while Six Sigma provides a selected subset of tools and techniques and a clearly defined framework for using them to achieve results (DMAIC). TQM focuses on long-term results and expected payoff is not well defined while Six Sigma looks for a mix of short-term and long-term results, as dictated by business demands.

After the TQM hype of the early 1980s, Six Sigma, building on well-proven elements of TQM, can be seen as the current stage of evolution. As elementary methods and tools of TQM build a basis for any Six Sigma design and cultural elements have their foundation in general change management theories, the major difference between Six Sigma and TQM has to be seen in the direction of the program. Like TQM, Six Sigma requires a strong incorporation of the corporate control system to enable companies to objectively measure and monitor their longterm development within, and monitory outcome of, QM using statistical techniques. By this, the control

system is a key function between strategy and the operational level. At the operational level, Six Sigma builds on a set of well established traditional methods and tools, as well as new techniques for setting priorities on improvement projects and for measuring the monitory benefits ("net-benefit" calculation). These new tools have to ensure that the additional objective of profitability improvement can be achieved (Wessel and Burcher, 2004).

Harry and Schroeder (1999) argue that the main weakness of traditional TQM concepts is the exclusive focus on customer requirements. Six Sigma in contrast focuses on quality from both the customer's and investor's perspectives with the aim to meet customer requirements fully and profitably. Following eight characteristics account for Six Sigma's increasing bottom-line success and popularity with executives.

- Bottom-line results expected and delivered
- Senior management leadership
- A disciplined approach (DMAIC)
- Rapid (3-6 months) project completion
- Clearly defined measures of success
- Infrastructure roles for six sigma practitioners and leadership
- Focus on customers and processes
- A sound statistical approach to improvement

Other quality initiatives including TQM have laid claim to a subset of these characteristics, but only Six Sigma attributes its success to the simultaneous application of all eight.

Six Sigma and Cost of Poor Quality (COPQ)

An excellent Six Sigma strategy should directly attack the COPQ (Cost of Poor Quality), whose issues can dramatically affect a business. Wisely applied Six Sigma

Table 2: Sigma level and COPQ defining class of industry

Sigma Level	Defects per million	Cost of Poor Quality	Industry Class
6	3.4	< 10% of sales	World class
5	230	10 to 15% of sales	
4	6200	15 to 20% of sales	Average
3	67000	20 to 30% of sales	
2	310000	30 to 40 % of sales	Non-competitive
1	700000	> 40 % of sales	

techniques can help eliminate or reduce many of the issues that affect overall COPQ. The COQ figures are well in use as indicators to express the competitiveness of the industry along with Six Sigma measures, such as, sigma level and Defects per Million Opportunity (DPMO). Harry (1998) indicated these indices as show in Table 2.

Six Sigma and ISO 9000 Series

ISO 9000 series standards were first published in 1987, revised in 1994, and re-revised in 2000 by the ISO. The 2000 revision, denoted by ISO 9000:2000, has attracted broad expectations in industry. ISO 9000:2000 standards specifies requirements for a quality management system for which third party certification is possible, whereas ISO 9004:2000 provides guidelines for a comprehensive quality management system and performance improvement through self-appraisal.

A Six Sigma is applied in organization based on its top-line and bottom-line rationale. The primary objective of applying the ISO 9000 series standards is to demonstrate the company's capability to consistently provide conforming products and/or services. The ISO 9000 series standards have from their early days been regarded and practiced by industry as a minimum set of requirements for doing business. The new ISO 9000:2000 standards do not represent a significant change to this perspective. Six Sigma on the other hand, aims at world class performance, based on a pragmatic framework for continuous improvement. Six Sigma is superior in such important areas as rate of improvement, bottom-line and top-line results, customer satisfaction, and top-level management commitment. However, considering the stronghold of ISO 9000 in industry, Six Sigma and ISO 9000 are likely to be applied by the same organization, but for very different purposes.

Six Sigma and Lean Management

Six Sigma was founded by Motorola Corporation and subsequently adopted by many US companies, including GE and Allied Signal. Lean Management originated at Toyota in Japan and has been implemented by many major US firms, including Danaher Corporation and Harley-Davidson. Six Sigma and Lean management have diverse roots. The key issue driving the development of Six Sigma was the need for quality improvement when manufacturing complex products having a large number of components which often resulted in a correspondingly high probability of defective final products. The driving force behind the

development of Lean management was the elimination of waste, especially in Japan, a country with few natural resources (Arnheiter and Maleyeff, 2005).

Lean evaluates the entire operation of a factory and restructures the manufacturing method to reduce wasteful activities like waiting transportation, material hand-offs, inventory, and over-production. It reduces variation associated with manufacturing routings, material handling, and storage, lack of communication, batch production and so forth. Six Sigma tools, on the other hand, commonly focus on specific part numbers and processes to reduce variation. The combination of the two approaches represents a formidable opponent to variation in that it includes both layout of the factory and a focus on specific part numbers and processes.

Lean and Six Sigma are promoted as different approaches and different thought processes. Yet, upon close inspection, both approaches attack the same enemy and behave like two links within a chain - that is, they are dependent on each other for success. They both battle variation, but from two different points of view. The integration of Lean and Six Sigma takes two powerful problem-solving techniques and bundles them into a powerful package. The two approaches should be viewed as complements to each other rather than as equivalent of or replacements for each other.

Lean brings action and intuition to the table, quickly attacking low hanging fruit with kaizen events. Six Sigma uses statistical tools to uncover root causes and provide metrics as mile makers. A combination of both provides the tools to create ongoing business improvement (Bonnie Smith, 2003).

Six Sigma and Theory of Constraint (TOC):

Similar to the Six Sigma improvement process, the TOC five-step improvement process has been applied by many companies successfully. While different vocabularies may be used, both methods actually are very consistent with focusing on identifying key variables, designing critical measures, improvement key processes, changing current system to support improvement, and monitoring the results of improvement. Overall, these two strategies seem to complement each other. TOC could serve as the framework for continuous improvement, and Six Sigma could provide specific statistical tools and engineering techniques for implementing changes. (Ehie, I. and Sheu, C., 2005).

Concluding Remarks

Over the relatively short interval of time since Six Sigma was first conceived at Motorola, number of large multinational organizations took on the challenge of Six Sigma quality, during the 1990s. Many more businesses joined in the quest of quality and productivity improvement through Six Sigma during the first decade of the new century and benefitted at large. Over the years many useful systems have come into existence to strengthen the overall manufacturing function and to have much needed operational excellence. Toyota Production System, Single Minute Exchange of Dies (SMED), Pokayoke, Lean manufacturing, Theory of constraints etc. are a few well known examples. Other techniques especially on the front of Quality Engineering and Management such as Statistical Quality Control, Total Quality Management, ISO certifications etc. have also contributed to enhance the outcome of any business in one way or other.

Many Indian industries have successfully exploited this breakthrough business improvement strategy to their overall benefits. Still the penetration of Six Sigma in Indian industries is not as encouraging as it should be (Desai, 2006). The study of (Desai and Patel, 2010) comprehensively uncovered in the hurdles faced by Indian industries in implementing Six Sigma to their benefits. As evident from the study, availability of resources and internal resistance are the two most common hurdles faced by Indian industries in implementing Six Sigma drive. This is mainly due to wrong notion at top management as well as at operational levels that Six Sigma is a costly affair and it involves lots of statistics which is beyond the reach of practicing executives. Due to this most of the industries are not even giving a try to Six Sigma and resorting to different tools and techniques as explained above sometimes without assessing the appropriateness of their applications. Thus to introduce Six Sigma in even more rewarding way a comparison of same is made with other quality and productivity improvement tools and techniques in this paper. The comparison revealed similarities and other wise of Six Sigma with those tools and techniques and more or less demonstrated that Six Sigma is the comprehensive blend of all the quality and productivity improvement tools and techniques in use so far.

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What corporate governance means is that people outside looking into the company will see that the people inside who are practicing qualitative governance are making decisions on an intellectually honest basis and are applying care and skill in making business judgments. An example of intellectual dishonesty in the corporate context is Enron.

—King Report

Microfinance through Self-Help Groups: A Thematic Perspective

PRIYANKA MURRIA AND SATISH VERMA

The emergence of inclusive growth in policy development paradigm aims at inclusion of those who have somehow been excluded from the formal financial system. In this direction, microfinance through self-help groups seems to be one of the most pragmatic approaches as it aims at empowering poor both on social and economic front. In this study, an attempt has been made to present a thematic review focusing on the theoretical framework, socio-economic characteristics of the members of Self-Help Groups, and the impact of Self-Help Groups on the socio-economic conditions of the members of the SHGs. The study also makes an introspection into the problems being faced by Self-Help Group members and microfinance institutions in microfinance activities. In the present paper, a descriptive thematic code based on a review of various studies has been developed so as to throw light on each of the issues examined in the literature.

Self-Help Groups, Thematic Code

Section I

Introduction

In the recent years, most of the countries across the globe are in a sweeping mood to promote micro-finance not only as a positive rural development intervention but also as a rural development panacea. As a result, the developmental economists in underdeveloped and developing economies have increasingly become enthusiastic in promotion and development of micro-finance as one of the rural development initiatives. The purpose of such an initiative is to promote the welfare of the society as a whole by targeting the most talked developmental objectives of poverty alleviation and balanced regional development.

Micro-finance today though has become one of the most debated topics, but it is a much confused buzzword among the bankers and the policy makers. Micro-finance is more than just a word as it has much wider meaning and implications. It is an instrument and a tool that has power to collectively address poverty, empower the socially poor, address gender issues and thereby strengthen the society as a whole. Micro-finance has emerged as a powerful mechanism which ensures the social and economic empowerment of poor.

The Task Force on Supportive Policy and Regulatory Framework for Micro-Finance set up by NABARD in November 1998 defined micro-finance as "the provision of thrift, credit and other financial services and products of very small amounts to the poor in rural, semi urban or urban areas, for enabling them to raise their income levels and improve living standards" (Reddy, 2005). Micro-finance is thus defined as "any activity that includes the provision of financial services such as credit, savings, and insurance

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to low income individuals who fall below the nationally defined poverty line and poor individuals who fall just above that poverty line, with the goal of creating social value". The creation of social value includes eradication of poverty, improving livelihood opportunities through the provision of capital for micro-enterprise, promotion of savings for poor so that current problems and future risks can be minimized. However, how much above the poverty line has not been defined anywhere in the literature so far.

Thus, it can be said that the concept of micro-finance involves 'Banking for the poor and Banking with the poor'. Such banking initiatives open doors of finance for destitute and underprivileged people who otherwise do not have access to finance from formal financial sources due to lack of collateral security. Micro-finance targets the poorest segment of clients. They are self-employed and household-based entrepreneurs. Their diverse "micro-enterprise" includes small retail shops, street vending, artisanal manufacture, etc.

The concept of Micro-finance is not new as it has had its prevalence in the long past. The imprints of micro-finance can be traced back to Indonesia which points towards the formation of Indonesian People's Credit Banks which were set up in 1895 and which had close to 9000 units. Later on "the efforts were made to bring about revolution in Pakistan (now Bangladesh) by Akhter Hameed Khan in 1959 in form of formation of Academy for Rural Development" (Khandelwal Anil K, 2007).

However, the concept of microloans was popularized ostensibly by Muhammad Yunus who believed in the ideology that "peace prevails only when hunger is quelled". He started Grameen Bank in 1976 at the outskirts of Chittagong University campus in the village of Jobra, Bangladesh with only a meagre amount of \$27 as loan and made it a target to grant loans to the poorest of the poor. He started giving loans to even beggars. He was of the view that if beggars can go to houses for getting money, they can go to houses to sell a product also. "The Grameen Bank is now lending loan size of \$ 800 million a year with an average loan size of almost \$130, the bank has 7 million borrowers, 97 percent of them are women and an unmatched repayment rate of 98 percent"(Singh and Kumar, 2008). The microloans not only helped the poor in getting finance in Bangladesh and facilitated the lives of millions of poor but also earned Muhammad Yunus a Nobel Prize in the year 2006.

In India, a number of institutions have been set up overtime which were required to meet the credit

requirements of the new society and downtrodden. Despite, the multiagency approach adopted, a very large number of the poorest of the poor continued to remain outside the fold of the formal banking system" (Reddy and Manak, 2005). At this stage, it was realised that the poor really needed better access to these services and products, rather than cheap subsidized credit. Keeping in view the economic scenario, a strong need was felt for alternative policies, procedures, savings and loan products, other complementary services, and new delivery mechanisms, which would fulfil the requirements of the poorest, especially of the women members of such households. The emphasis, therefore, was on improving the access of the poor to Micro-finance.

The Ninth Five year plan (1997-2002) laid emphasis on 'Growth with Social Justice and Equality'. One of the objectives of Ninth Plan as approved by the National Development Council explicitly was:

"Promoting and developing participatory institutions like Panchayati Raj Institutions, cooperatives and Self – Help Groups".

Hence, it was the Ninth Five Year Plan that expressly laid down the objective of establishment of Self Help Groups in order to achieve the objective of "Growth with Social Justice and Equality". Meanwhile, in 1999, the Government of India merged various credit programs together, refined them and launched a new programme called Swarnajayanti Gram Swarazagar Yojana (SGSY). The aim of SGSY was to continue to provide subsidized credit to the poor through the banking sector to generate self-employment through a Self-Help Group approach.

The present, Eleventh Five Year Plan (2007-2012) aims at "Towards More and Inclusive Growth". The word inclusive growth means including and considering those who are somehow excluded from the benefits which they (poor) should avail. Micro-finance is a step towards inclusive growth via inclusive finance which moves around serving the financial and non financial needs of poor in order to improve level of living of rural masses.

However, the gap between demand and supply of financial services still prevails due to shortcomings of institutional credit system as it provides funds only for productive purposes, requirement of collateral and massive paper work leading to inordinate delays. Due to this, there is still exclusion of large number of poor from formal financial systems. Hence, as a response to failure of formal

financial system in reaching the poor and destitute masses, the micro finance was innovated and institutionalized in the Indian scenario. The basic objective of micro-finance is to provide access to financial services so that poor can come out of vicious circle of poverty.

In India, the financial institutions have not been able to reach the poor households particularly women who fall short of assets. Through participation of people in credit delivery and recovery and linking of the formal credit institutions to borrowers through the SHGs seems a possible solution. There is a general tendency to consider the SHGs as a panacea for all the ills of the poor community. Self Help Groups (SHGs) form the basic constituent unit of the microfinance movement in India.

The present study is a step in the same direction so as to assess the benefits, if any, flowing to the SHG members in terms of economic perspective including increase in income and savings enhancement using thematic codes. On the other hand, the study seeks to gain knowledge regarding the social impact of SHG financing in terms of employment generation, women entrepreneurship and spatial distribution of microfinance. In order to ascertain the impact of microfinance provided through SHGs, various thematic codes have been used. Thus, the present study gives justification for undertaking this exercise.

Section II

Objectives and Methodology of the study

Objectives of the study

The overall objective being examining various thematic aspects related to SHGs and also to assess thematically their impact on the members of the SHGs, this study proposes to concentrate on the following specific objectives:

1. Building a theoretical framework pertaining to Self-Help Groups;
2. Examining socio- economic characteristics of the members of Self-Help Groups;
3. Reviewing the impact of Self-Help Groups on the socio-economic conditions of the members of the SHGs; and
4. Highlighting the problems being faced by Self-Help Group members and microfinance institutions in microfinance activities.

Methodology

The studies undertaken to be reviewed pertain to the year 1997 onwards. Indeed, a significant amount of literature on SHGs has appeared from 1997 onwards. The studies undertaken for the purpose include both national and international studies. The overall objective is to examine the issues addressed in the studies under various thematic codes. Issue proposed to be examined has been laid down in section I. Section II brings out the objectives of the study and methodology adopted to comprehend the objectives enlisted in this section. Section III reviews the theoretical framework using the thematic codes. Section IV highlights the problems being encountered in microfinance activities. Section V contains the summary and conclusions based on thematic perspectives.

Thematic Perspective on Previous Studies

Review of literature gives the guidelines from the past researchers and provides a foundation to the theoretical framework for present investigation which have been address the following themes:

Concepts and Definitions of Self Help Groups

The studies carried out on the concepts and definitions of Self-Help Groups define Self-Help Group as a voluntary formation of small, homogeneous affinity group of people, formed with the objective of attaining certain collective goals, both social and economic in order to address some common need or respond to some common problem (Nair, 2000). The study defined SHG as a small, homogeneous affinity group. In rural India, people belonging to different castes, socio-economic status live in groups. Unity in diversity describes the rural scenario in India. Therefore, defining SHG as a homogeneous group among diversified structures requires rethinking. Another definition describes SHGs as a free association of people who come together for a common purpose (Satish, 2005). However, it was added that SHG comprises of individual members knowing each other and coming from same village, community and even neighbourhood. Both the definitions defined SHG as a voluntary formation. However, the success and quality of SHGs depend to a greater extent on the contribution of Non Government Organizations in the promotion of quality groups and providing them hassle free credit. Thus, these definitions fail to describe the role played by Non Government Organizations (NGOs) in the formation, stabilization, training and functioning of Self-Help Groups (SHGs).

The Self-Help Groups are primarily involved in lending their members' savings, supplement their income by borrowing from outside resources, determine themselves the terms and conditions of lending to the beneficiaries (Mcguire and Conroy, 2000). Thus, the studies worked out by Mcguire and Conroy (2000) reveal that the formation of SHGs is based on the principle of lending the members' savings. But poor people are too poor to save. Lending primarily should be based on the economic conditions by providing finance to the poorest segment by not asking them to first save amount and then lending followed by it. However, the studies fail to consider these aspects. Self-Help Group as defined by Singh and Kumar (2008) is a small informal association of poor having similar socio-economic background, who come together to realize group goals on the principles of collective liability and peer pressure. Further, SHG ensures prompt recovery of loans from the members and help poor especially women in establishing their creditworthiness. The study focused on the role of peer pressure in the prompt recovery of loans.

Socio-Economic Characteristics of Members of Self Help Groups

Social Characteristics of Members of Self Help Groups

The studies on the characteristics of SHGs from social perspective revealed that Backward, Scheduled Caste and Scheduled Tribe households constitute 67 percent of the total SHG membership (Puhazhendi and Satyasai, 2000). Panda (2003) observed that more than 90 percent of SHG members represent women SHGs with the repayment rates of more than 90 percent. Mahendra (2005) found that 97 percent of SHG clients in both the villages are Hindus and have dependent population of 58 percent. Shah (2008) conducted a study in Gujarat and found that majority of members of SHG were educated and spouses of SHG members were either self employed or getting a steady wage but were not involved in agricultural operations.

To analyze the characteristics of leaders of SHGs in comparison to other SHG members, studies were conducted in states of Andhra Pradesh, Tamil Nadu, Karnataka, Kerala, Uttar Pradesh, Rajasthan, Assam and Manipur. These studies revealed that the group leaders are economically sound and more educated in comparison to other SHG members (Sinha, 2005). Singh and Kumar (2008) reported that SHG leaders had benefitted more out of microfinance operation both financially and development of individual abilities than the other SHG members.

Economic Characteristics of Members of Self Help Groups

The empirical studies on consideration of economic perspective of Self-Help Groups in terms of income generating activities conclude that the members of SHG Group are engaged in occupations like manufacturing of pickles, dairy, grocery shops, diversification of agricultural activities (Dadhich, 2001). A study conducted by Nair (2005) pointed out that the clients of SHG group invested loan mainly in agricultural and allied activities including animal husbandry. Wanchoo (2007) stated that the SHG members were landless and were engaged in agricultural work on seasonal basis. It was pointed out that they are engaged in activities like forestry, mining, household industries, construction and transport.

Chugh (2008) reported that the members of women SHGs invest their money in activities like poultry, horticulture, kitchen garden, small grocery shops, tailoring, and readymade garment selling. Shylendra (2008) pointed that SHGs utilize the loans granted to them for carrying out economic activities like animal husbandry, agriculture and petty business. A study reported that SHG clients are engaged in activities like animal husbandry, milching of animals, poultry, trade (small shops, hawking), services (tea stall, Tiffin centre), manufacturing, metal accessories, urban manufacturing including soda manufacturing, pen refill making, cakes /biscuit manufacture (Ghildiyal, 2009). All the studies considered agricultural and allied activities as one of the income generating activity of SHGs. A study by Shah (2008) revealed that SHG members invest funds in off farm activities.

Socio Economic Impact of Self Help Groups on SHG Members

Social Impact of Self Help Groups

Employment Generation

One of the biggest problems before a developing country like India is rising unemployment level. The available literature has also tried to analyze the social impact of SHGs on the employment generation aspect. Puhazhendi and Satyasai (2000) observed employment level increase of 17 percent from Pre-SHG Period to Post-SHG period. Sehrawat, et al. (2011), who conducted a study in Haryana State, reported that from the selected beneficiaries, seventeen felt change in their employment status from unemployed to self employed; seven felt change in their employment status from wage unemployment to self-employment; fifty four felt expansion in their employment position. Only fourteen beneficiaries felt no change in their employment status from pre-SHG to post-SHG period.

The SHGs have also made a positive contribution to women entrepreneurship. A study carried out by Jha (2002) on three Microfinance Institutions in Bangladesh viz. ASA, Buro Tangile and Grameen Bank found that target customers of MFIs include landless poor particularly women. It was pointed out that the presence of women in all these groups was 90 percent -95 percent. Singh and Kumar (2008) also pointed out that Grameen Bank has 97 percent women clients which have a repayment rate of 98 percent. These studies were supported by Hossain and Knight (2008) who conducted a study in a village in central Bangladesh in two different phases i.e. early in July 2005 and later in December 2007, concluded that the MFIs had empowered local women by the provision of microfinance. Puhazhendi and Satyasai (2000) found that involvement in SHGs has contributed significantly to the self confidence, better communication skills of the participating women and their fair treatment in the family after formation of SHG. This was further supported by Vasimalai and Narendra (2007) who conducted a study on Kalanjiam members, a microfinance programme promoted by DHAN Foundation (MFI) operating in Tamil Nadu in the year 2002 and reported that the programme has had positive effect on women empowerment. The programme promotes leadership potential among women and helps in changing gender roles at household level. The results also revealed that nearly 40 percent of SHG members develop basic accounting skills of group account books after becoming Kalanjiam members. Shah (2008) also highlighted that microfinance enabled the women SHG members to organize in groups, address common problems using participatory method and thereby ensuring social empowerment of participating women. The studies reveal a positive impact of SHGs on lives of women SHG members and reflects that microfinance ensures a better life to them.

Spatial Distribution of Micro-finance

A spatial spread of microfinance in India indicates that it is more popular in its southern region. Microfinance also seems instrumental in reducing the gap between the rich and the poor. For example, Bansal (2000) found that the program had a dominant presence in South India and reported as its share in the SHG coverage rose from 60 percent to 68 percent from 1997-98 to 1999-2000. The study also found that through the number of SHGs credit linked in the central, the eastern and the western regions increased but their number in the north and the north

eastern regions had not expanded much. Further, the state wise analysis revealed that SHG Bank Linkage Programme (SBLP) was predominant in states, namely, Andhra Pradesh, Uttar Pradesh, Tamil Nadu, and Karnataka as these four states accounted for two-thirds of the SHG credit linkages, whereas Andhra Pradesh alone accounted for 40 percent. Bansal (2000) also found a severe regional imbalance in India.

Sriram (2005) also reported that expansion of linkage programme is skewed in favour of southern states especially Andhra Pradesh with 39 percent of total linkage share in the year 2003. These studies pointed out that northern and north eastern regions had only 5 percent of total share of the programme. Huge imbalance in the provision of microfinance was highlighted by Basu and Srivastava (2005) who pointed that in India less than 5 percent of poor households have access to microfinance as compared to 65 percent in Bangladesh and further said that around 75 percent of microfinance funds flow to southern states. Satish (2005) pointed out that SHG Bank Linkage had larger number of groups in southern region especially in Andhra Pradesh. Nair (2005) also reported more concentration of SHG Bank Linkage in southern states in which nearly 43 percent of credit flow to agriculture and allied activities with predominance of large farmers. Sinha (2005) conducted a survey on MFIs based in Andhra Pradesh, Tamil Nadu, Karnataka, Kerala, Uttar Pradesh, Rajasthan, Assam and Manipur observed that higher rate of interest from MFI client households for borrowing from informal financial services was charged in north and east than in the south.

Economic Impact of Self Help Groups

Poverty Alleviation and Change in Income

On exploring the issue of economic impact of SHGs on change in income levels and thereby leading to poverty alleviation, the literature reports mixed results. Nagayya (2000) observed that the credit supply through self-help groups is fast emerging as a promising tool for promoting income generating activities and alleviation of poverty among poor with main focus on the women. Jha (2002) in a study conducted in Bangladesh found that the borrowing from the MFIs has had a positive impact on raising the income levels of self-help groups and has also resulted in marginalization of moneylenders. Thus, rise in income level and reduction in borrowing from informal sources was highlighted as a result of financing from SHGs. Puhazhendi and Badatya (2002) made an attempt to assess the impact of the SBLP on SHG members in the Indian states of

Orissa, Jharkhand, and Chhattisgarh. The study reported that after joining the SHGs, the net annual income of SHG households increased by 23 percent. Panda (2003) also reported that provision of microfinance had led to increase in income of beneficiaries, and rate of recovery had been fairly good.

In order to evaluate the rise in income as a result of formation of SHGs, Shah (2008) conducted a study on the beneficiaries of self-help groups in Gujarat. It was found that the average income of beneficiaries was above the poverty line estimate. However, inter-district differences in the income levels for the three districts were also found. Rao (2008) made a case study analysis of women SHG members of MFIs in Hyderabad and reported that formation of SHG led to regular earnings of SHG members amounting to Rs. 60,000 per annum. Sehrawat et al. (2011) conducted a study in Haryana State to analyze the impact of SHG loan on SHGs. The findings revealed that in all the selected SHGs, the average annual income of beneficiaries increased by 10.74 per cent from before joining the SHG to after joining the SHG.

Some empirical studies highlighted the eradication of poverty as one of the implications of microfinance. Wanchoo (2007) pointed out that microfinance aims at poverty alleviation by creation of social value, provision of capital for microenterprise, insurance and saving for risk mitigation and consumption smoothing. Hossain and Knight (2008) observed that several governmental and non-governmental organisations (NGOs) in Bangladesh aim to decrease global poverty by adopting microfinance as a central element in their development programmes. The study concluded that Grameen Bank in Bangladesh has made a positive difference to the lives of the poor. It was also pointed out that MFIs in Bangladesh are targeting only the poorer segment of society.

Some studies, on the other hand, have pointed towards the darker side of microfinance. These studies have mentioned that the poor in order to repay their loans borrow from informal market at an interest much higher than market rates (Tiwari and Fahad, 1997). Mcguire and Conroy (2000) asserted that microfinance, of course, has helped in reducing poverty by increasing the income and consumption of poor households and thereby created positive social impacts on the members but pointed out that very poor may still be outside the ambit of microfinance. Shylendra (2008) also found a limited impact of SHGs on poverty alleviation. He observed that although SHGs had positively impacted women in terms of enhanced

women participation as in the case of Bangladesh and India but very poor were still excluded from the benefit of SHGs. A study by Singh and Kumar (2008) outlined a major role for microfinance in poverty alleviation and building of sound economic base for the microfinance clients. The study further pointed out that the microfinance funding did not lead to poverty alleviation because the credit financed out of microfinance investment did not generate significant net profit because repayment took place through reduction in consumption and not from returns to investment. Thus, the empirical studies fail to provide conclusive evidences.

Promotion of Savings

Some studies have also reported savings promotion as a result of SHG formation. Puhazhendi and Satyasai (2000) found that average household savings for the sampled households was a meagre Rs. 460 during the pre-SHG period which increased by 214 percent in the post-SHG period. Jindal (2005) also reported that the savings of 5,000 Self-Help Groups crossed Rs 2 crores in the first year after formation of SHG. Vasimalai and Narendra (2007) found that 87 percent of the members had no habit of saving before Kalanjiam (a credit programme offered by DHAN Foundation in Tamil Nadu) but after intervention of Kalanjiam, they were able to save on an average Rs. 100 per month. Shah's study (2008) reflected that SHG group members saved from Rs. 30 to Rs. 50 per month. It was further pointed that participants of developed region had highest monthly instalment and regularity in savings in comparison to less developed regions.

Some studies empirically stated that participation in SHGs ensured accumulation of savings among members. These studies pointed out that in the states like Andhra Pradesh, SHG members had individual savings of up to Rs.1,800 p.m. and in case of mature SHGs, it increases to Rs. 10,000 (Singh and Kumar, 2008; Shylendra, 2008). In addition, Shylendra (2008) stated that SHGs had especially helped poor women as savings habit as a result of SHG formation has enabled these women to meet their life cycle needs like housing, education and marriage.

Section IV

Problems Faced in Micro-finance Provision

The voluminous literature available on the issue of problems being faced in microfinance provisioning by institutions and the receipt of the same by clients thereof reveal that one major shortcoming is the exploitative interest rates charged by MFIs. A study was carried out by Jha (2002)

on three MFIs viz. ASA, Buro Tangile and Grameen Bank in Bangladesh. It was pointed out that the rates of interest differ in the three MFIs. In Grameen Bank, the rate was 20 percent p.a. on reducing balance basis, ASA charged 12.5 percent p.a. on declining method and Buro Tangile charged 24 percent per annum. It was stated that despite low transaction cost and negligible default rate, the monopoly profit through high interest rate is so exploitative that microfinance models in Bangladesh are acting as the "substitutes of traditional moneylenders".

Shylendra (2006) made an attempt to analyze the reasons behind the close down of 50 branches of two MFIs in Krishna District, Andhra Pradesh. It was pointed that the major cause of closedown of MFIs was exorbitant interest rates charged from borrowers. It was reported that the rate of interest charged by MFIs was higher than 20 percent which further included service and other charges leading to a much higher effective rate of interest. It was pointed that other problems imposed by MFIs include forced savings, unethical way of recovery of loan like confiscating title deeds, use of abusive language, etc. It was suggested that flexible recovery methods, flexible schedules, and increased participation of NGOs can help in solving the problem. Ghate (2007) pointed out that the MFIs in Andhra Pradesh charged usurious interest rates (28 percent) in 2005-06. George (2008) asserted that the rate of interest charged by MFIs in India is nearly 21-30 percent which is higher than that charged by commercial banks but is lower than moneylenders. It was pointed out that the main cause of high interest rate charged by MFIs was high opportunity cost in terms of delivery of credit and collection of repayment instalments due to geographical constraints in rural areas, scattered settlements and high cost of rural transport.

Shah (2008) focused on rates of interest charged by banks from borrowers and reported that the credit to poor was available at a very high interest rate. It was pointed that banks lend money to SHGs at 1 percent per month which amounts to 12 percent per annum and SHGs lend this amount to their members at 2 percent-5 percent per month which means a total of 24 percent -60 percent per annum which clearly indicates that interest rate is too high for poor people to repay.

Motwani (2005) conducted a study in Haryana which highlighted the malpractices by NGOs and revealed that NGOs operating in the study area were poorly paid and showed little interest in helping women. It was further reported that there was lack of motivation of field workers

to help SHG members. The major disappointing fact was that one of the group leaders was found to have misused the SHG funds for personal use. Ghate (2007) conducted a study on the respondents of Krishna district, Andhra Pradesh and revealed that members faced problems like holding of meetings in front of defaulter's house, wait by all members to get funds until repayment of earlier loan, use of abusive language by field workers. It pointed out that it was due to these cohesive activities that led to a number of suicides by SHG members in Krishna District.

Another lending problem is associated with the savings credit ratio of 1:4 which is very high. Singh and Kumar (2008) pointed that SHGs had excluded very poor on account of grant of loans only for productive purposes and saving credit ratio of 1:4 which was highly restrictive for poor people. Shylendra (2008) also pointed out that the major problem faced by SHGs was difficulty on part of poor to cope up with 1:4 saving credit ratio. It also pointed out other problems that included restrictive loan policies of commercial banks, inadequate training and widespread illiteracy.

Wanchoo (2007) reported that the problems associated with MFIs included high documentation, requirement of collateral security, non-reaching of products to the poor, delayed procedures and high transaction cost. The study further added that setting up of inappropriate structures, lack of commercial orientation, lack of proper accountability and scattered structure are the other problems which need monitoring and control. Sriram (2005) asserted that major problem faced by microfinance clients was high transaction cost involved in providing microfinance and non proper identification of borrowers resulting in large NPAs of banks making microfinance business unprofitable for banks.

The studies conducted by Sarkar (2008) pointed that despite the repayment rate of microfinance borrowers in India at 95 percent, more than 76 percent of old SHGs were not refinanced from the same source. The reason for non provision of the repeat loans was attributed to overbearing pressure on microfinance borrowers to repay the loan that forced them to borrow from sources other than earlier source which increased their reliance on moneylenders.

An overview of the above discussion reveals that around 75 percent of microfinance funds flow to southern states. In the northern region, a very less percent of share in SHG Bank linkage programme has been reported. Besides, the discussion on microfinance basically relates

to rural regions and villages and hence very few studies have been done on urban regions, for example, in Delhi State. Moreover, concrete work on microfinance representing actual scenario of Delhi has not been done anywhere in the literature. The present study is a step in the same direction in order to assess the benefits, if any, flowing to the SHG members in terms of economic perspectives including income and savings enhancement.

Section V

Summary and Conclusions

The provision of microfinance through self-help groups has emerged as an effective tool that has gained recognition as it follows group approach, and aims at meeting the needs of the poor. By following the group oriented approach, it seeks to benefit ordinary and downtrodden mass of people rather than individuals. It assumes importance as it tries to reduce poverty through social and collective action at grass root level. In addition, these interventions lead to increased social interaction among poor women within their households as well the community, besides greater mobility that increases their self-confidence and self-worth in the social circle. SHGs also lead to fair treatment in family and better communication skills. SHG approach has helped in reducing poverty by increasing the income and consumption of poor households and thereby created positive social impacts on the members. But the studies pointed out that very poor may still be outside the ambit of microfinance. Some studies highlighted cultivation of habit of regular saving and saving promotion as a result of SHG formation. SHG approach also contributes to both self and wage employment.

Despite the overwhelming success of microfinance programmes, still many improvement are sought. It is seen that the impact of microfinance is negligible for the households at the lower end of microfinance distribution. Further, the predicted impact on income is not found positive for every study as very poor may not get benefits from group approach. However, the literature also reveals a spatial spread of microfinance in India and indicates that it is more popular in the southern region. Keeping a view of the studies conducted in northern region, the thematic approach reflects that limited studies have been done in northern region which accounts for a very less percentage of share in SHG Bank linkage programme. At best, in the northern region, the discussion on microfinance basically relates to rural regions and villages, and hence very few studies have been done on urban regions. The

studies have highlighted the problems being faced in microfinance provision as the opportunity cost in terms of delivery of credit and collection of repayment instalments due to geographical constraints in rural areas, scattered settlements and high cost of rural transport. This has resulted into huge NPAs of the banks. On the borrower's side, it has been asserted that exploitative interest rates charged, forced savings, unethical way of recovery of loan like confiscating title deeds, use of abusive language, lack of motivation of field workers to help SHG members, misuse of funds of the group by group leaders, high saving- credit ratio of 1:4 is highly restrictive for poor to repay.

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Whenever the people are well-informed, they can be trusted with their own government.

— Thomas Jefferson

PDCA — Analysis for Quality and Productivity Improvement in BISE Plant of Apollo Tyres Limited Company

VIVEK A. DESHPANDE

Earlier, quality meant customer satisfaction or fitness for use. Now the meaning of quality has been rapidly changing as 'meeting the specifications', 'reduce the variability', and 'delighting the customer'. Quality for professional organization means, the output of the system must meet present needs of the society in an effective and efficient manner. In this case study, PDCA analysis was done to identify and solve the problem. We observe that out of 15 problems there were 4 major problems. By applying pareto principle we identified most urgent problem. The objective of the study is to reduce cure tyre scrap due to awling needle inside green tyre (GT). By using 4W+1H analysis and Cause-and-Effect analysis, root cause is found and the design of the awling needle is changed. Data is then collected & SQC technique is applied to check the quality. It is found that no. of rejected tyres are less compared to earlier case. By analyzing cost it is found that Rs. 3,06,020/- can be saved per year.

Company background

Established in 1976, Apollo Tyres Ltd is India's leading tyre manufacturer. In 1991, their 2nd plant started at Limda Baroda. The Research and Development of Apollo Tyres took place at this plant. All the activities in the R&D center are extensively supported by a series of highly sophisticated equipment that help the research scientists develop products as per customers' specific requirements. It is India's biggest manufacturing unit of Apollo tyres Ltd.

Product portfolio

The entire range of passenger car, SUV, MUV, light truck, truck-bus, agriculture, industrial, specialty, bicycle and off-the-road tyres; retreading material and tyres, and alloy wheels.

Problem identification

At Baroda (Limda Plant) which is the biggest plant in India of Apollo tyre, three different plant units are there. The focus is on BISE plant. The flow process at BISE plant is as given in Figure 1. The main focus of this study area was 'C' division in BISE PLANT at APOLLO TYRE Ltd. Green tyre from division 'B' is transferred to division 'C' and then further processing is done by different types of processes. In this division tyres are processed by different process like Jamming, Lubing, Awling and Curing. The objective is to identify the different problems in selected area and try to solve those problems by applying the different quality improvement tool and techniques. The main target is to reduce the rejection of the product and to increase productivity by different productivity improvement tools and technique. The line flow diagram of the division "C" is given in Figure 2. PDCA approach is selected for the study.

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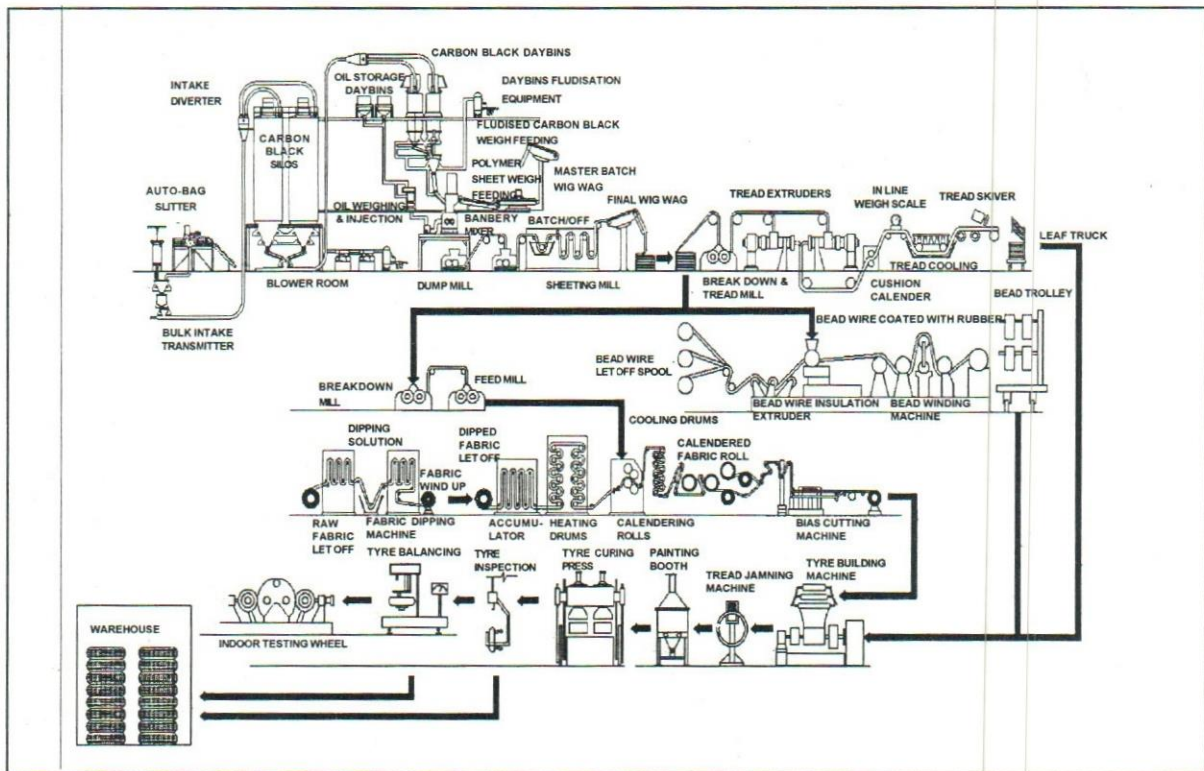


Figure 1. Flow Process diagram at BISE plant

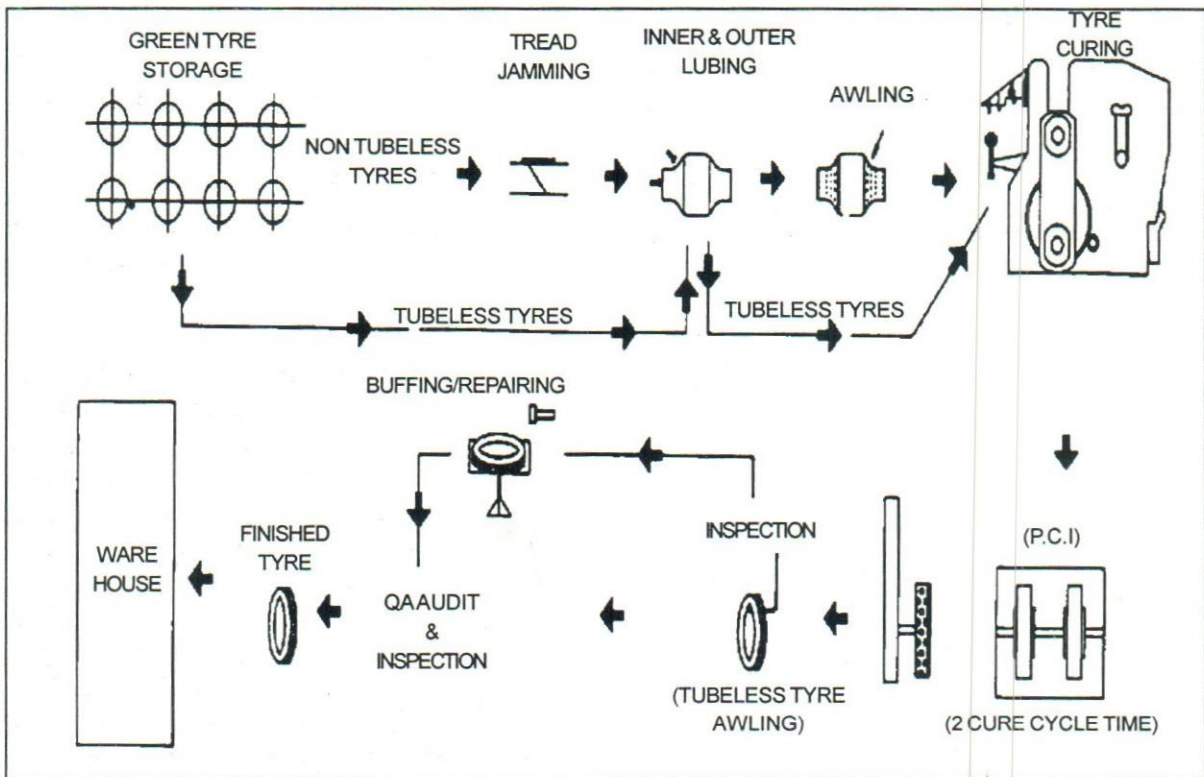


Figure 2. Flow diagram Curing

Methodology adopted

Dr. Deming in Japan

Dr. W. Edwards Deming [2, 3] was the first expert on quality to teach Japanese Statistical Quality Control. He first visited Japan in 1947 as a statistician. After three years he visited Japan again to teach Japanese engineers and managers about better quality products through S.P.C. His teachings covered a wide spectrum of Japanese Corporate e.g. Sony, Nissan, Toyota etc. Dr. Deming's contribution was to help Japanese understand S.P.C. in a simple way right up to production worker level.

Dr. Juran in Japan

Dr. Joseph M. Juran is regarded as the highest ranking quality guru. He has his consultancy "Juran Institute" in New York. Mumbai has a branch of Juran Institute. One of the most outstanding work done by Dr. Juran on Quality is publication in 1950s "Quality Control Handbook" which is widely referred even today as a standard reference book on Quality. After Deming returned Juran went to Japan to build on Deming's work there. His main message to Japanese managers was that "quality control is an integral part of management at all levels not just the work of specialists in quality control departments".

Deming Cycle or Plan-Do-Check-Act Cycle

Dr. W. Edward Deming is best known for reminding management that most problems are systemic and that it is management's responsibility to improve the systems so that workers (management and non-management) can do their jobs more effectively. Deming argued that higher quality leads to higher productivity, which, in turn, leads to long-term competitive strength. The theory is that improvements in quality lead to lower costs and higher productivity because they result in less rework, fewer mistakes, fewer delays, and better use of time and materials. With better quality and lower prices, a firm can achieve a greater market share and thus stay in business, providing more and more jobs.

Deming's philosophy is summarized in his famous fourteen points, and it serves as a framework for quality and productivity improvement. Instead of relying on inspection at the end of the process to find flaws, Deming advocated a statistical analysis of the manufacturing process and emphasized cooperation of workers and management to achieve high-quality products. Deming's quality methods centered on systematically tallying product defects, analyzing their causes, correcting the

causes, and recording the effects of the corrections on subsequent product quality as defects were prevented. He taught that it is less costly in the long-run to get things done right the first time than fix them later.

Deming's Fourteen Points

Deming formulated the following Fourteen Points [4] to cure (eliminate) the Seven Deadly Diseases and help organizations to survive and flourish in the long term:

1. Create constancy of purpose for improvement of product and services
2. Adopt the new philosophy
3. Cease dependence on mass inspection
4. End the practice of awarding business on price tag alone
5. Constantly and forever improve the systems of production and services
6. Institute modern methods of training on the job
7. Institute modern methods of supervision and leadership
8. Drive out fear
9. Break down barriers between departments
10. Eliminate numerical goals for the work force
11. Eliminate work standards and numerical quotas
12. Remove barriers to pride of workmanship
13. Institute a vigorous program of education and training for everyone
14. Create a structure in top management that will push every day on the above 13 points.

The Deming Cycle

Known as the Deming Plan-Do-Check-Act (PDCA) Cycle [5, 6], this concept was invented by Shewhart and popularized by Deming. This approach is a cyclic process for planning and testing improvement activities prior to full-scale implementation and/or prior to formalizing the improvement. When an improvement idea is identified, it is often wise to test it on a small scale prior to full implementation to validate its benefit. Additionally, by introducing a change on a small scale, employees have time to accept it and are more likely to support it. The Deming PDCA Cycle provides opportunities for continuous evaluation and improvement. The steps in the Deming PDCA or PDSA Cycle as shown in Figure 3 are as follows:

1. Plan a change or test (P).

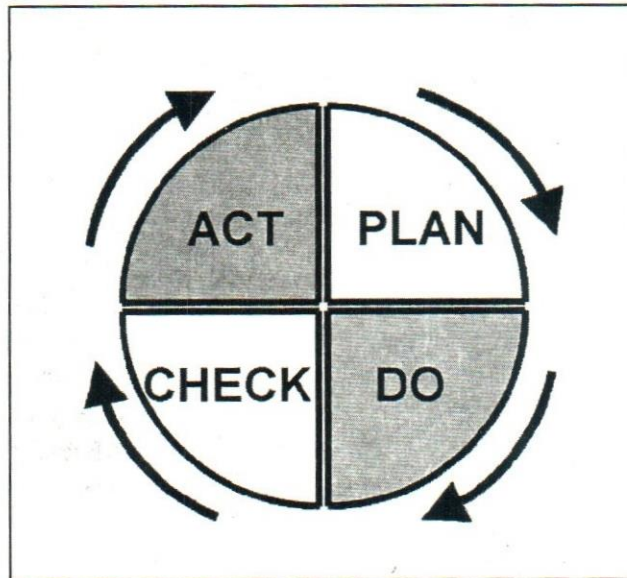


Figure 3. Deming's PDCA cycle

2. Do it (D). Carry out the change or test, preferably on a small scale.
3. Check it (C). Observe the effects of the change or test. Study it (S).
4. Act on what was learned (A).
5. Repeat Step 1, with new knowledge.
6. Repeat Step 2, and onward. Continuously evaluate and improve.

The four steps of PDCA are

1. **Plan:**
Recognize an opportunity and plan a change. Establish the objectives and processes necessary to deliver results in accordance with the specifications. Use some form of brainstorming or cause-and-effect diagram (i.e., Ishikawa "fishbone") to determine the problem.
2. **Do:**
Implement the processes and test the change, often with a small-scale study.
3. **Check:**
Monitor and evaluate the processes and results against objectives and specifications and report the outcome. Review the test, analyze results, and identify what you have learned.
4. **Act:**
Take action based on what you learned in the check step. Apply actions to the outcome for

necessary improvement. Review all steps and modify the process to improve it. If the change did not work, go through the cycle again with a different plan. If successful, incorporate what you learned into wider changes. Use what you learned to plan new improvements, beginning the cycle again.

Deming wheel with Juran's twelve steps: Refer Figure 4 for Deming wheel.

Twelve points of basic philosophy

- **PLAN**
 1. Identify work related problem
 2. Selection of problem
 3. Define the problem
- **DO**
 4. Analysis
 5. Identify causes
 6. Identify root causes
 7. Data analysis
 8. Develop solution
- **CHECK**
 9. Forces resistance and preparation
 10. Trial implementation

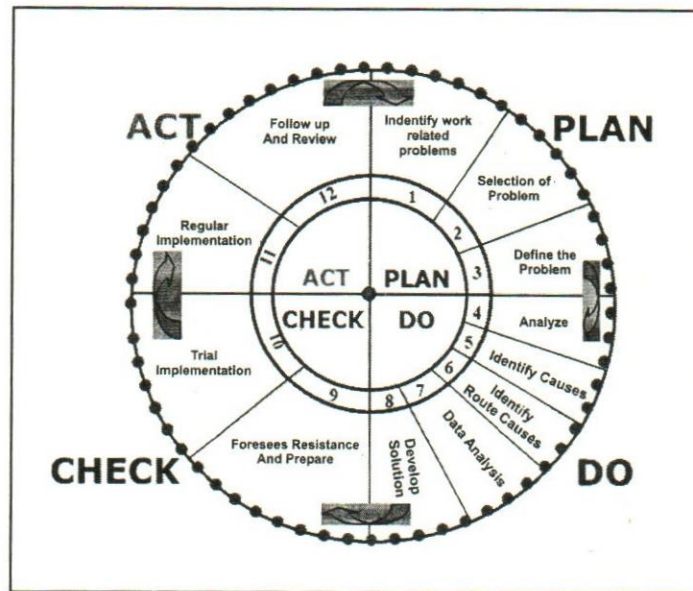


Figure 4. Deming's wheel

- **ACT**

11. Regular implementation
12. Comparison

PDCA approach for the present case-study

- **PLAN**

(1) Identify work related problem:

Brainstorming is a method used by a group to draw out ideas and sometimes find solutions to problems. It is a powerful way of maximizing, sharing and generating new ideas. It gives an insight into theories, understandings and experience and to enhance and extend their knowledge for developing skills for problem solving.

BRAIN STORMING: Problem in Green Tyre (GT) preparation

1. **JAMMING**

PROBLEM:

1. Improper jamming
2. Height of Trolleys is more than jamming machine
3. Jamming pressure disturbance

END EFFECT:

1. GT Is Blast during Curing Process

2. Production Time Increase
3. GT Is Blast during Curing Process

2. **LUBING**

PROBLEM:

4. Tyre Slipping during Lubing
5. Excess usage / Wastage of lube
6. Improper setting of gun angle.
7. Tank pressure variation

END EFFECT:

4. Uneven Spray during Lubing
5. Wastage of Lubing
6. Wastage of Lubing
7. Uneven Spray During Lubing

3. **AWLING**

PROBLEM:

8. Cured tyre scrap due to needle inside the GT
9. Index overlaps more than 2.
10. Slow Speed of awling Machine

END EFFECT

8. Rejection of Tyre Is Increase
9. May Be Hole Is Not Completely Fill During Curing Problem
10. Production Time Increase

4. STORAGE

PROBLEM:

- 11. Defective GT trolleys
- 12. Less space to maintain GT inventory
- 13. Difficulty for operator in identifying tread splice

END EFFECT:

- 11. Difficulty Tyre Handling
- 12. Difficulty Tyre Handling
- 13. Mixing Of Tread Splice

5. CURING

PROBLEM:

- 14. Late Supply of GTs
- 15. GT stored on floor.
- 16. GT trolley wheel jammed.
- 17. Multiple sizes in single line.
- 18. Poor housekeeping.
- 19. Delay transportation to GT.

END EFFECT:

- 14. Production Time Increase
- 15. Production Time Increase
- 16. Production Time Increase

17. Complication In Production Line

18. Effect on Productivity

19. Production Time Increase

6. OTHER

PROBLEM:

- 20. Poor traceability of GT.
- 21. Less space to maintain sufficient GT inventory.
- 22. Shortage GT's were not getting in the right time.
- 23. Excess lube applied on GT.
- 24. Rolling of GT on floor.

END EFFECT:

- 20. Production Time Increase
- 21. Difficulty in Material Handling
- 22. Production Time Increase
- 23. Wastage of Lube
- 24. Increase in Labor Cost

Selection of problem

The ABC Analysis: An analysis of a range of items that have different levels of significance and should be handled or controlled differently. It is a form of Pareto analysis in which the items (such as activities, customers,

Table 1: ABC analysis

A	B	C
1. Improper jamming	2. Height of Trolleys is more than jamming machine	11. Defective GT trolleys
4. Uneven Spray During Lubing	3. Jamming pressure disturbance	12. Less space to maintain GT inventory
5. Excess usage / Wastage of lube	6. Improper setting of gun angle.	23. Wastage Of Lube
7. Tank pressure variation	9. Index overlaps more than 2	
8. Cured Tyre scrap due to needle inside the GT	17. Multiple sizes in single line.	
10. Slow Speed of awling Machine	22. Shortage GT's were not getting in the right time	
13. Difficulty for operator in identifying tread splice		
14. Late Supply of GTs		
15. GT stored on floor.		
16. GT trolley wheel jammed.		
18. Poor housekeeping.		
19. Delay transportation to GT.		
20. Poor traceability of GT.		
21. Less space to maintain sufficient GT inventory.		
24. Rolling of GT on floor.		
Total=15	Total=6	Total=3

Table 2: Summary of ABC

Category	Description	Problem identified	Problem solved	Problem pending
A	Problems Which Require Minimum Involvement Of Other Department In Solving Them.	15	4	11
B	Problems Which Require Involvement Of Other Departments Is A Necessity In Solving Them.	6	1	5
C	Problems Which Require Management Sanction In Implementing The Solution.	3	0	3
	TOTAL	24	5	19

documents, inventory items, sales territories) are grouped into three categories (A, B, and C) in order of their estimated importance. 'A' items are very important, 'B' items are important, 'C' items are marginally important.

A (our problem): This is the problem which we can solve our own, we don't need help from other dept. or higher management.

B (we need help): This is the problem in which we need help from other dept. like store, utility, maintenance etc.

C (we need approval): This is the problem in which we have to need approval from higher management for more labor, cost and etc. Refer Table 1 for ABC analysis of the problems and Table 2 for its summary.

Selection of problem (voting method)

Relevance Criteria:

- 9 – Majority Agrees; 3 – At least one member agree;
- 1 – All members Disagrees

Refer Table 3 for selection of problem based on relevance criterion.

Table 3: selection of problem- voting method

No.	Identified Problem	Relevance
1	Improper jamming	3
4	Tyre Slipping during Lubing	9
8	Cured tyre scrap due to needle inside the GT	9
10	Slow Speed of awling Machine	9
13	Difficulty for operator in identifying tread splice	3
14	Late Supply of GTs	9
16	GT trolley wheel jammed.	3
18	Poor housekeeping.	1
19	Delay transportation to GT	1
21	Less space to maintain sufficient GT inventory.	1
24	Rolling of GT on floor.	3

Pareto Chart:

Pareto Analysis is a statistical technique in decision making that is used for the selection of a limited number of tasks that produce significant overall effect. It uses the Pareto Principle (also known as the 80/20 rule) the idea that by doing 20% of the work you can generate 80% of the benefit of doing the whole job. Or in terms of quality improvement, a large majority of problems (80%) are produced by a few key causes (20%).

Objectives:

- Separate the few major problems from the many possible problems so you can focus your improvement efforts.
- Arrange data according to priority or importance.
- Determine which problems are most important using data, not perceptions.

Table 4: Pareto analysis

Reason	Problem No.			
	Needle in GT (8)	Slipping of lubing (4)	Slow speed (10)	Late supply in GT (14)
No. of Tyres	32	24	20	14
Individual % of Rejection	35.55	26.66	22.22	15.55
Cumulative %	35.55	62.21	83.43	99.98

Refer Table 4 for % of rejection of tyres due to different reasons as found out by relevance criterion. Refer Figure 5 for Pareto chart. From pareto chart problem no. 8 (i.e. Cured tyre scrap due to needle inside the GT) is selected for further analysis.

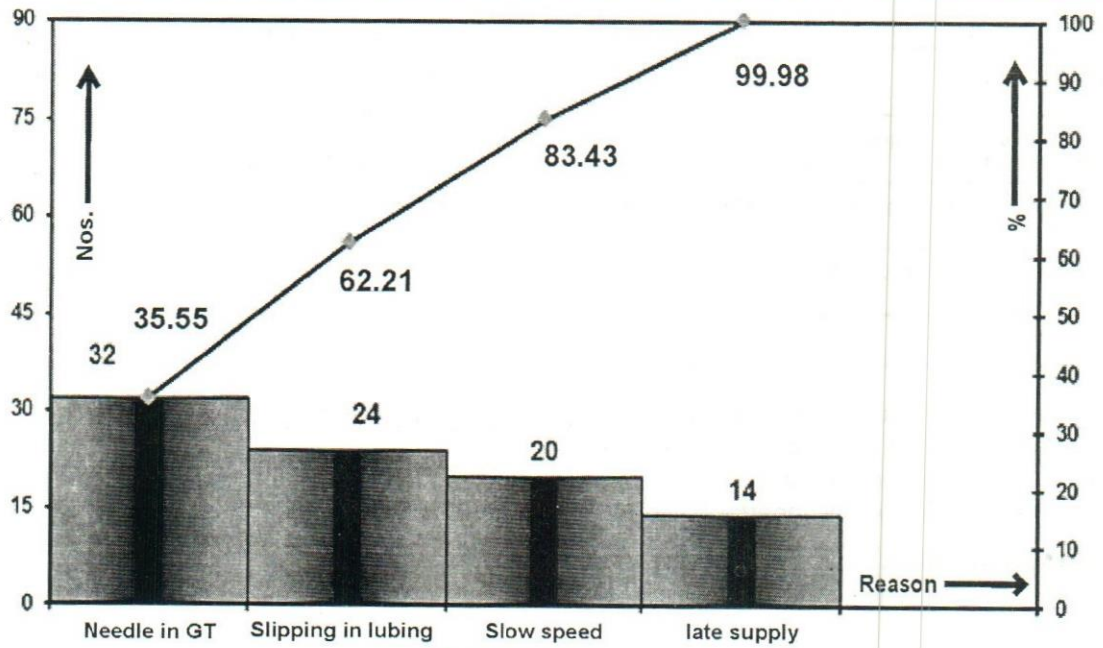


Figure 5: Pareto chart

Define the problem:

Cured Tyre scrap due to needle inside the Green Tyre during awling process.

What is awling?

In awling operation holes are made on green tyre

(GT) with the help of pneumatic drill. These holes help in removing entrapped air inside the GT. During this process needle breaks and it remains inside the GT, which is identified in inspection and then the GT is rejected. Refer Figure 6.

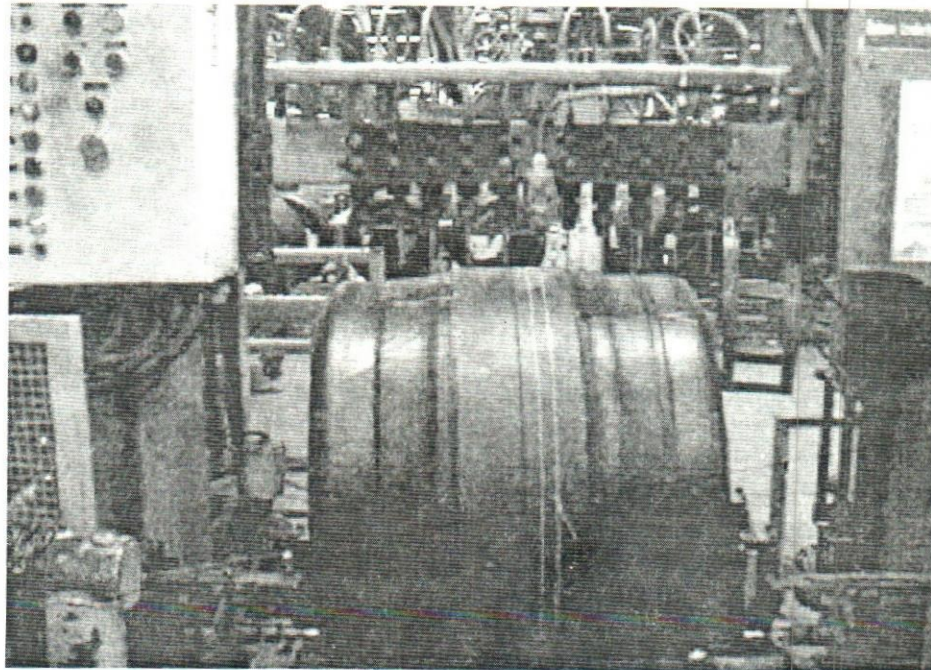


Figure 6: Awling process

Impact of the problem:

- Cured Tyre Scrap due to Awling needle [Avg 2/ week]
- High consumption of Awling needle [Avg 20/ week]
- Unsafe working condition [1 Near miss / week]

Machine specification:

Needle Length = 110 mm; Drill RPM = 2500;
No. hole per tyre = 216

Design of drill chuck & Awling needle: Refer Figure 7.

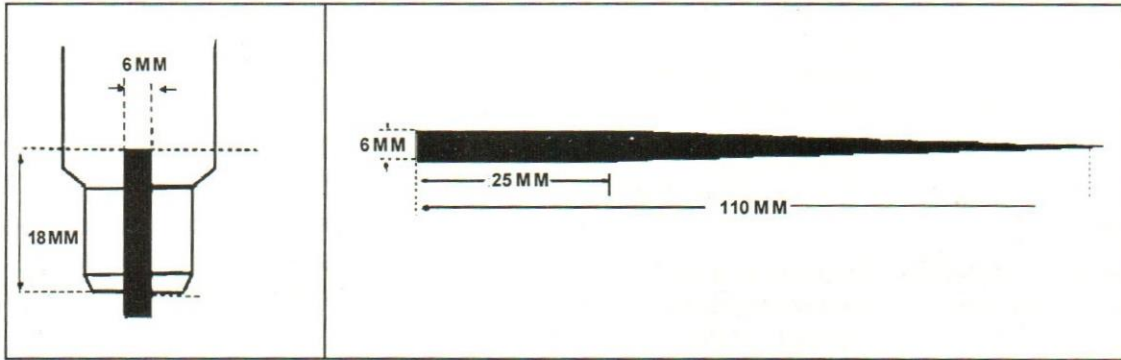


Figure 7: Design of drill chuck and Awling Needle

Our objective:

1. To reduce cure Tyre scrap due to Awling needle in side GT
2. To reduce consumption cost of Awling needle
3. Safe working condition
4. To increase in productivity

• **DO**

4. Analysis:

4W+1H analysis: Refer Figure 8.

- i. WHAT :- Awling Needle In GT
- ii. WHERE:- Awling Machine
- iii. WHEN:- During Awling
- iv. WHO:- Operator & Material
- v. HOW:- Loose Chuck & Needle Breakage

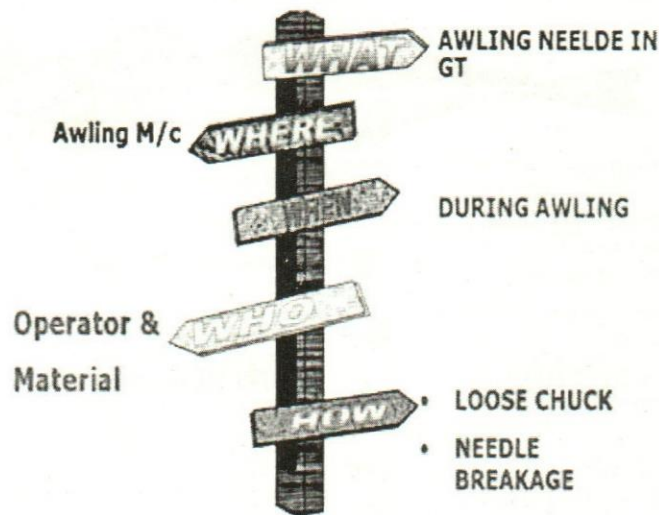


Figure 8. 4W+1H

5. Identify causes:

Cause-and-effect diagram:

A Cause-and-Effect Diagram is a tool that helps identify, sort, and display possible causes of a specific problem or quality characteristic. It graphically illustrates the relationship between a given outcome and all the factors that influence the outcome. This type of diagram is sometimes called an "Ishikawa diagram" because it was invented by Kaoru Ishikawa, or a "fishbone diagram" because of the way it looks.

Why should we use a cause-and-effect diagram?

A Cause-and-Effect Diagram is a tool that is useful for identifying and organizing the known or possible causes of quality, or the lack of it. The structure provided by the diagram helps team members think in a very systematic way. Some

of the benefits of constructing a Cause-and-Effect Diagram are that it:

- Helps determine the root causes of a problem or quality characteristic using a structured approach.
- Encourages group participation and utilizes group knowledge of the process.
- Uses an orderly, easy-to-read format to diagram cause-and-effect relationships.
- Indicates possible causes of variation in a process.
- Increases knowledge of the process by helping everyone to learn more about the factors at work and how they relate.
- Identifies areas where data should be collected for further study.

Refer to Figure 9 for Cause and effect diagram.

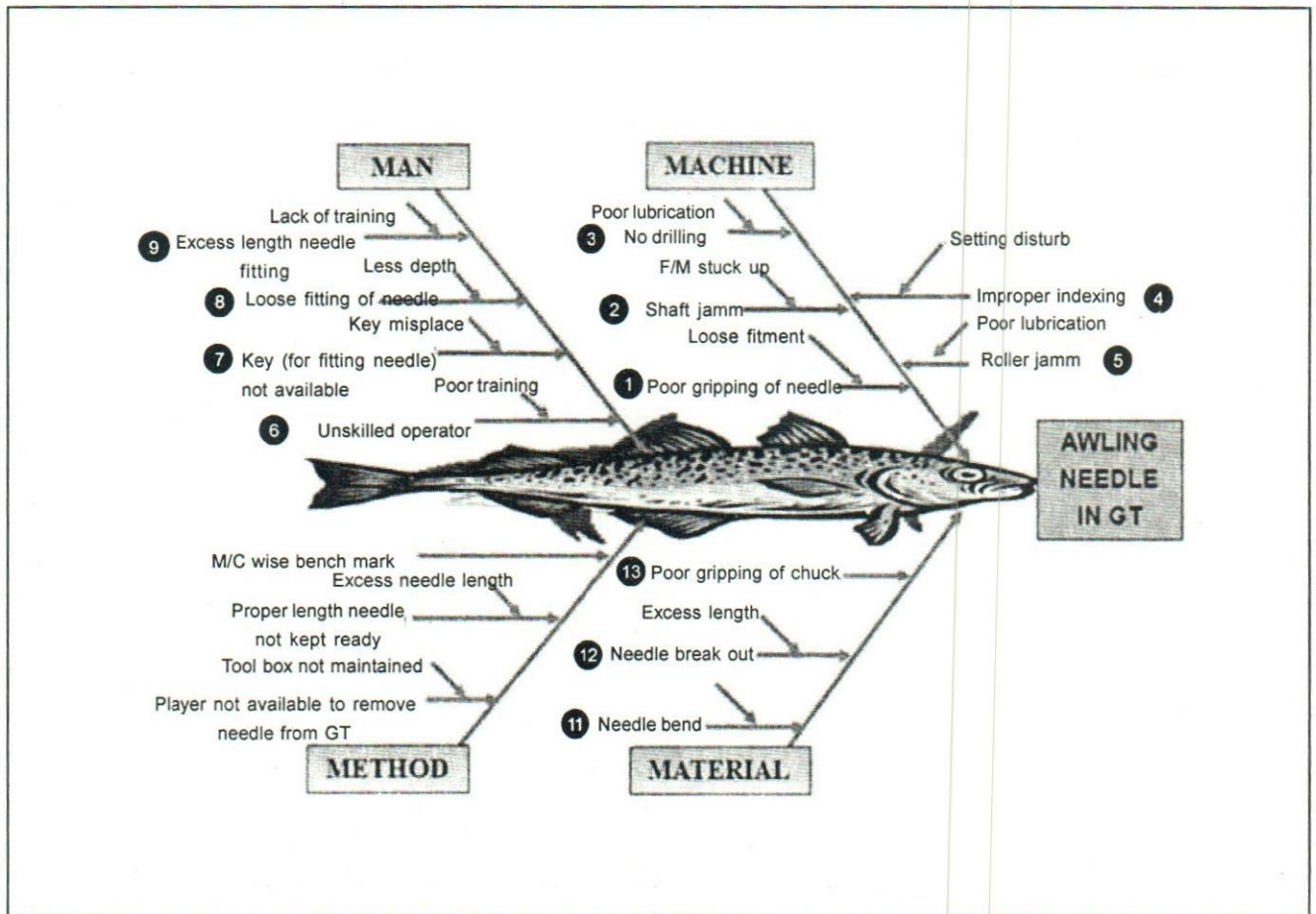


Figure 9: Cause & Effect diagram

6. Identify root causes:

Refer to Table 5 for Causes & Remedied for different types of category. Data collection based

on cause and effect diagram is given in Table 6. Root-cause can be identification from Table 7.

Table 5: Causes & Remedied for different types of category

Causes and remedy for machine category		
No.	Causes	Remedy
1	Poor Gripping Of Needle	Loose Fitment
2	Shaft Jamm	F/M Stuck Up
3	No Drilling	Poor Lubrication
4	Improper Indexing	Setting Disturbed
5	Roller Jamming	Poor Lubrication
Causes and remedy for man category		
6	Unskilled Operator	Poor Training
7	Key (For Fitting Needle) Not Available	Key Misplace
8	Loose Fitting Of Needle	Less Depth
9	Excess Length Needle Fitting	Lack Of Training
Causes and remedy for method category		
10	Player Not Available To Remove Needle From GT	Tool Box Not Maintain
11	Proper Length Needle Not Kept Ready	Excess Needle Length
12	M/C Wise Bench Mark	
Causes and remedy for material category		
13	Needle Bend	Sharp End
14	Needle Break Out	Excess Length
15	Poor Gripping Of Chuck	Loose Fitment

Table 7: Identification of root causes

Reasons	Occurrences
Poor gripping of needle	21
Needle break out	18
Improper indexing	5
Needle bend	4
No drilling	3
Loose fitting of needle	3
Excess length needle fitting	3
Unskilled operator	2
Poor gripping of chuck	1
Shaft jam	1

Validation of root causes:

1...Poor gripping of Needle; 4...Improper Indexing; 12...Needle breakout;

For implementation possibility refers to Table 8.

WHAT IS A WHY-WHY ANALYSIS?

It is a method of questioning that leads to the identification of the root cause(s) of a problem. Why-Why Analysis is a basic, fundamental tool in the development of the Root Cause Analysis (RCA).

Table 6: Checking for valid reason

No.	Terminal Cause	Method of Check	No. of Check	Qty. off	Validation
1	Poor gripping of needle	Needle checking	20	6	Yes
2	Shaft Jam	Shaft movement	4	0	No
3	No Drilling	M/C inspection	20	1	No
4	Improper Indexing	M/C inspection	5	4	Yes
5	Roller Jam	M/C inspection	2	0	No
6	Unskilled Operator	M/C inspection	4	1	No
7	Key not available	M/C inspection	2	0	No
8	Loose Fitting of Needle	M/C inspection	20	3	No
9	Excess length needle fitting	Check all M/C	20	3	No
10	Worker not available	Check all M/C	4	0	No
11	Needle bend	M/C inspection	20	3	No
12	Needle break out	Check all line up	20	8	Yes
13	Poor gripping of chuck	GT inspection	20	2	No

Table 8: Implementation possibility

No.	Terminal Cause	Possibility
1	Poor gripping of Needle	Less time effort money
4	Improper Indexing	High time effort money
12	Needle breakout	Less time effort money

HOW IT WORKS

Why-Why works by repeatedly asking the same question of a problem, breaking down the cause or solution into more and more explicit elements. At each stage, there can be multiple answers to the 'Why' questions, which results in a hierarchical tree-structure.

- Making this tree visible gives several advantages:
- It allows a group of people to share the mental model of the situation and hence work more harmoniously on it.
- It allows re-examination of parts of the analysis, so you can change, remove or add to it at any time. This supports the non-linear way in which we tend to think.
- It allows you to consciously not to follow some paths, digging only into the most likely areas.

7. Data analysis:

Terminal Cause [1]: Poor gripping of needle

Why: Less area of contact in chuck

Why: Chuck depth less

Root cause: Drill Chuck depth less

Idea: Modification in design of Chuck

Counter Measure: Use drill with chuck depth 28MM instead of 18 MM

Terminal Cause [12]: Frequently breakage of needle

Why: Needle bends due to excess length

Why: Very sharp ending of needle

Root cause: Excess length of needle

Idea: Reduction of needle length

Counter Measure: Use needle of 100 MM instead of 110 MM

8. Develop solution

New design of chuck & needle: Refer Figure 10.

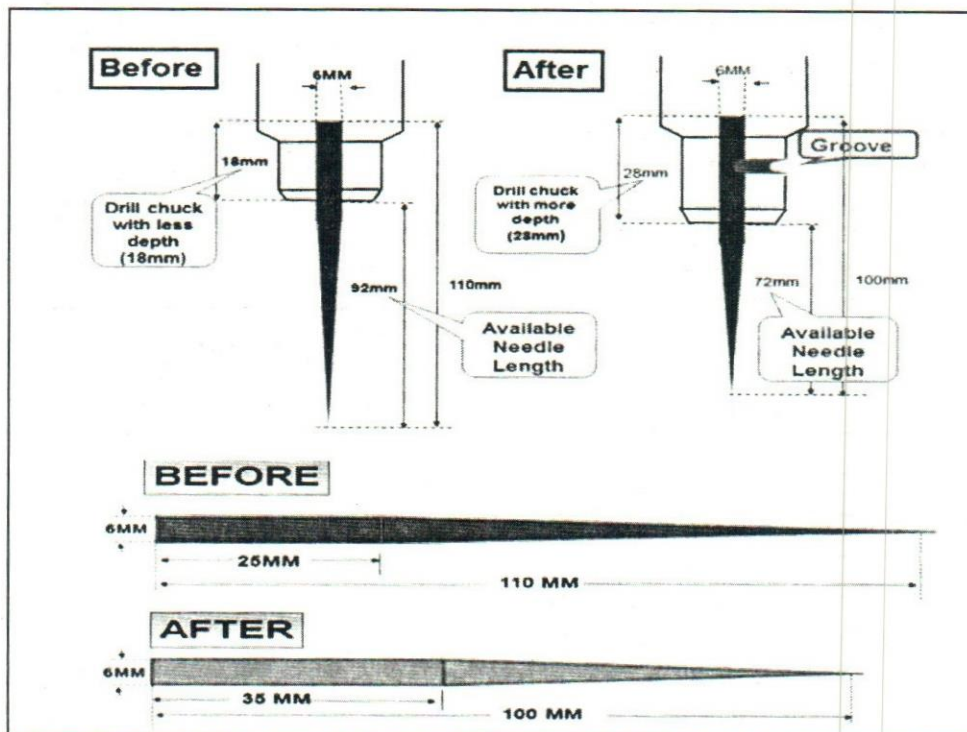


Figure 10: Design of Chuck & Needle

• **CHECK**

- 13. Forces resistance and preparation:
- 14. Trial implementation:

No. of needle breakage/week: Refer Table 9.

Table 9: No. of needle breakage/week

Machine No.	No. of breakage of needles (Avg.)
1	5
2	19
3	21
4	20

• **ACT**

- 17. Regular implementation
 - 1. Drill of Modified chuck depth will fix in all 4 Awling machine
 - 2. All 12 no. of needles with standard length will fix in all Awling machines
 - 3. New Awling operators will train.
- 18. Comparison:

Control chart for green tyre defect: Refer Table 10.

Control chart for needle breakage: Refer Table 11.
No. of tyres reject: Refer Figure 11.

Table 10: Control chart for green tyre defect

Before	After
$\bar{c} = \frac{\text{Total no. of defects in six week}}{\text{Total no. of week}}$	$\bar{c} = \frac{\text{Total no. of defects in six week}}{\text{Total no. of week}}$
$\bar{c} = 1.5$	$\bar{c} = 0.76$
$UCL = \bar{c} + 3\sqrt{\bar{c}}$ $= 5.174$	$UCL = \bar{c} + 3\sqrt{\bar{c}}$ $= 3.375$
$LCL = \bar{c} - 3\sqrt{\bar{c}}$ $= -2.174 = 0$	$LCL = \bar{c} - 3\sqrt{\bar{c}}$ $= -1.855 = 0$

Table 11: Control chart for needle breakage

Before	After
$\bar{c} = \frac{\text{Total no. of defects in six week}}{\text{Total no. of week}}$	$\bar{c} = \frac{\text{Total no. of defects in six week}}{\text{Total no. of week}}$
$\bar{c} = 20.33$	$\bar{c} = 5$
$UCL = \bar{c} + 3\sqrt{\bar{c}}$ $= 34.506$	$UCL = \bar{c} + 3\sqrt{\bar{c}}$ $= 11.708$
$LCL = \bar{c} - 3\sqrt{\bar{c}}$ $= 6.803$	$LCL = \bar{c} - 3\sqrt{\bar{c}}$ $= -1.708 = 0$

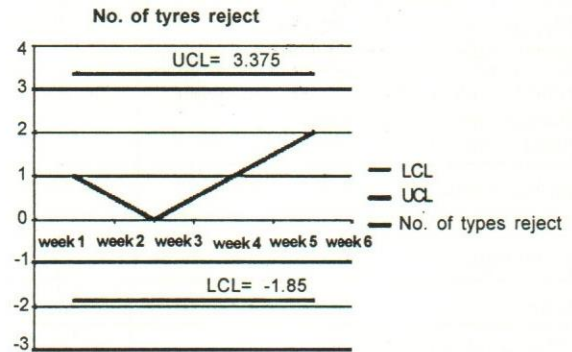
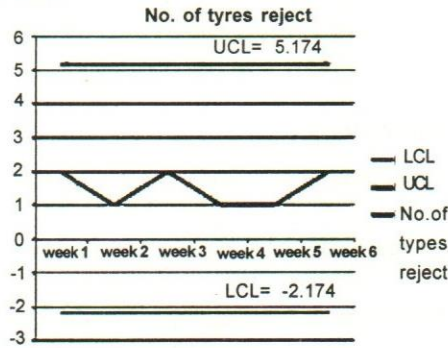


Figure 11: No. of tyres reject

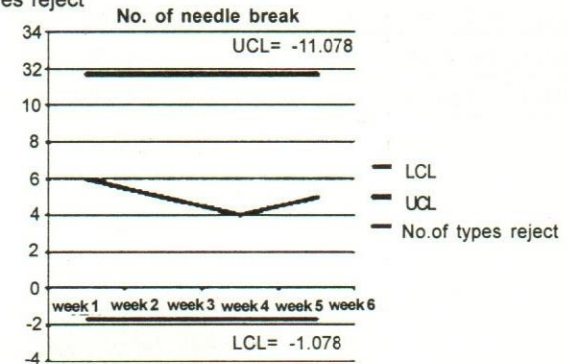
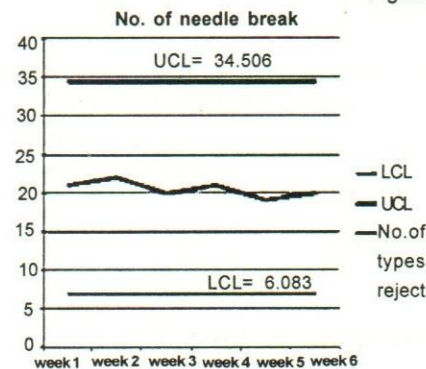


Figure 12: No. of Needle break

No. of needle break: Refer Figure 12.

- **INTANGIBLE BENEFITS**
 1. Improve Housekeeping.
 2. Enhancement of Moral of All Employees.
 3. Job Satisfaction Improve.
 4. Self Confidence Improve.
 5. Improved Communication Skill.
 6. Leadership Quality Improve.
 7. Better Team Work.
- **TANGIBLE BENEFITS (COST COMPERISON)**

Before:

Details	Cost
Cost Of Cured Tyre Scrap Due To Awling Needle Inside GT (3 week = 6* 5000)	Rs. 30,000
Cost Per Month Due To Consumption Of Needle After Implementation (3 week = 60 * Rs.59)	Rs. 3540
Cost Per 3 week	Rs. 33,540

After:

Details	Cost
Reduction Of Cured Tyre Scrap Due To Awling Needle Inside GT (3 week = 3* 5000)	Rs. 15,000
Saving Per Month Due To Less Consumption Of Needle After Implementation (3 week = 15 * Rs.59)	Rs. 885
Cost Per 3 week	Rs. 15,885

Cost saving:

Detail	Cost
1. Cost per 3 week [Before]	Rs. 33,540
2. Cost per 3 week [After]	Rs. 15,885
3. Saving per 3 week	Rs. 17,655
4. Saving per annum	RS. 3,06,020

Conclusion

1. By applying PDCA analysis we found out the reason for maximum number of rejections which comes out to be the braking of the Awling needle in the tyres during the Awling process.
2. Improper gripping of the tool was main reason for maximum number of rejections. Based on these results, we have designed a new Awling needle and its holding chuck and we have carried out the routine processes on Awling machine.
3. We have also carried out cost analysis and compared the values with the previous data and got annual savings of Rs. 3,06,020.

Scope of future

1. The cost saving analysis has been done considering only one aspect that is of gripping of the tool. If other aspect such as Improper Indexing is considered then the amount that can be saved annually would increase.
2. Moreover as we have considered the problem of failure of needle in green tyre only for our analysis. We can even carry out the analysis of the problems such as slipping of Lubing, late supply of green tyres or slow speed of the machines which may also turn out to be future scope of study.

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Do your little bit of good where you are; its those little bits of good put together that overwhelm the world."

— Desmond Tutu

Worldwide Governance Indicators—Comparison of Select Countries

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The World Bank's recent report on Worldwide Governance Indicators (WGI) published in 2013 provides aggregate and individual governance indicators for 215 economies estimated for six dimensions of governance. The six dimensions of WGI are:

- **Voice and Accountability** (captures perceptions of the extent to which a country's citizens are able to participate in selecting their government, as well as freedom of expression, freedom of association, and a free media).
- **Political Stability and Absence of Violence** (measures perceptions of the likelihood that the government will be destabilized or overthrown by unconstitutional or violent means, including politically-motivated violence and terrorism).
- **Government Effectiveness** (captures perceptions of the quality of public services, the quality of the civil service and the degree of its independence from political pressures, the quality of policy formulation and implementation, and the credibility of the government's commitment to such policies).
- **Regulatory Quality** (captures perceptions of the ability of the government to formulate and implement sound policies and regulations that permit and promote private sector development).
- **Rule of Law** (captures perceptions of the extent to which agents have confidence in and abide by the rules of society, and in particular the quality of contract enforcement, property

rights, the police, and the courts, as well as the likelihood of crime and violence).

- **Control of Corruption** (captures perceptions of the extent to which public power is exercised for private gain, including both petty and grand forms of corruption, as well as "capture" of the state by elites and private interests).

The WGI measures for all the six dimensions are useful as a tool to compare broad cross-country governance effectiveness and also for evaluating broad trends over time. However, they are often too blunt a tool to be used in formulating specific governance reforms in particular country contexts.

These WGI measures are developed based on the views of a large number of enterprise, citizen and expert survey respondents across 215 industrial and developing countries. The WGI measures are complementary to a large number of other efforts to construct more detailed measures of governance, often just for a single country. The disaggregated individual indicators underlying the composite WGI scores help in gaining more insights into the particular areas of strengths and weaknesses identified by the data. Percentile rank of WGI for 20 major countries in the world including India is compiled for the years 2002 and 2012 has been compiled and presented in the following tables for each of the six dimensions of governance.

Dimension 1: Voice and Accountability

Sr. No.	Countries	2002	2012
1	Finland	100.00	96.70
2	Norway	97.60	100.00
3	Japan	76.00	83.40
4	Korea	68.80	69.70
5	Malaysia	36.50	37.90
6	China	06.30	04.70
7	India	58.20	58.30
8	Philippines	52.40	47.90
9	Taiwan	74.00	72.00
10	Singapore	49.50	54.00
11	United Arab Emirates	27.90	19.00
12	Russian Federation	37.50	19.90
13	France	85.60	89.60
14	Germany	94.70	93.40
15	Switzerland	95.70	98.60
16	United Kingdom	90.40	92.40
17	United States	92.80	86.30
18	Brazil	59.10	60.70
19	South Africa	67.30	65.40
20	Australia	95.20	96.20

Dimension 3: Government Effectiveness

Sr. No.	Countries	2002	2012
1	Finland	100.00	100.00
2	Japan	83.40	88.50
3	Korea	79.50	84.20
4	Malaysia	81.50	80.40
5	China	55.10	56.00
6	India	51.70	47.40
7	Philippines	53.70	57.90
8	Taiwan	76.60	83.70
9	Singapore	93.70	99.50
10	Iran	33.70	35.90
11	United Arab Emirates	77.10	83.30
12	Russian Federation	43.90	40.70
13	France	89.80	87.60
14	Germany	92.20	93.30
15	Switzerland	98.00	97.60
16	United Kingdom	93.20	91.90
17	United States	91.20	90.40
18	Brazil	58.50	50.20
19	South Africa	74.10	63.60
20	Australia	91.70	94.30

Dimension 2: Political Stability and Absence of Violence

Sr. No.	Countries	2002	2012
1	Finland	100.00	97.60
2	Greenland	-	100.00
3	Japan	85.58	78.20
4	Korea	48.08	51.66
5	Malaysia	61.06	44.55
6	China	32.21	28.44
7	India	15.87	11.85
8	Philippines	18.75	14.69
9	Taiwan	65.38	73.93
10	Singapore	88.46	98.68
11	United Arab Emirates	76.44	73.46
12	Russian Federation	24.04	20.85
13	France	77.88	63.51
14	Germany	82.69	71.09
15	Switzerland	97.60	98.10
16	United Kingdom	64.90	60.19
17	United States	50.00	68.25
18	Brazil	55.29	47.87
19	South Africa	35.58	44.08
20	Australia	86.20	80.50

Dimension 4: Regulatory Quality

Sr. No.	Countries	2002	2012
1	Singapore	100.00	100.00
2	Japan	66.20	83.70
3	Korea	75.00	77.00
4	Malaysia	67.60	69.90
5	China	33.30	43.50
6	India	40.20	34.00
7	Philippines	50.00	51.70
8	Taiwan	81.40	86.10
9	Iran	07.80	06.70
10	United Arab Emirates	83.30	72.70
11	Kuwait	62.70	52.20
12	Russian Federation	43.10	38.80
13	France	80.40	83.30
14	Germany	92.60	92.30
15	Switzerland	98.00	95.20
16	United Kingdom	96.60	94.70
17	United States	94.10	87.60
18	Brazil	61.30	54.50
19	South Africa	69.60	63.20
20	Australia	91.70	97.10



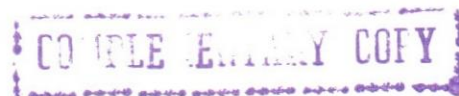
Dimension 5: Rule of Law

Sr. No.	Countries	2002	2012
1	Switzerland	100.00	96.70
2	Norway	97.10	100.00
3	Japan	83.70	87.20
4	Korea	77.00	79.60
5	Malaysia	64.10	65.90
6	China	39.20	38.90
7	India	51.20	52.60
8	Philippines	38.30	36.50
9	Taiwan	75.60	82.90
10	Singapore	90.90	95.70
11	Iran	29.20	19.90
12	United Arab Emirates	71.80	66.80
13	Russian Federation	23.90	23.70
14	France	84.70	90.00
15	Germany	93.80	91.90
16	United Kingdom	94.30	92.90
17	United States	92.80	91.50
18	Brazil	45.00	51.70
19	South Africa	54.50	57.80
20	Australia	95.70	94.80

Dimension 6: Control of Corruption

Sr. No.	Countries	2002	2012
1	Finland	100.00	98.10
2	Denmark	99.50	100.00
3	Japan	82.44	91.87
4	Korea	69.76	70.33
5	Malaysia	62.44	65.55
6	China	33.36	39.23
7	India	38.05	34.93
8	Philippines	39.02	33.49
9	Taiwan	75.12	73.68
10	Singapore	98.54	97.13
11	United Arab Emirates	84.88	83.25
12	Russian Federation	22.44	16.27
13	France	84.39	89.95
14	Germany	93.66	93.76
15	Switzerland	96.10	97.61
16	United Kingdom	95.61	92.34
17	United States	93.17	89.47
18	Brazil	58.54	56.46
19	South Africa	68.78	53.59
20	Australia	92.20	95.69

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