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FROM THE DESK OF THE EDITOR

Warm welcome to the first issue of "**Amity Journal of Management (AJM)**"

With the objective of enhancing research activities and to provide a platform to young researchers working at the grass root level, Amity Business School of Amity University Madhya Pradesh is launching its **Amity Journal of Management**. This bi-annual journal would aim to contribute significantly in all fields of management, social & developmental economics etc. The first issue of AJM has focused on the "Management of Social and Economic Issues". Information aspects of social influence may also have influences on purchasing behaviour (Mangold et al., 1999). Consumer conformity towards a product or service is also influenced by social and cultural environment. Latest form of capitalism works on the concept of creating values from business. This capitalism is noble because it can elevate our existence, and it is heroic because it lifts people out of poverty and creates prosperity. A model is suggested in this issue to eradicate leading problem of malnutrition in India through public sector and private sector participation. Taking guidance from our founder president's quote that "education in a country has also to keep pace with the structural changes in its culture and society", we have selected two articles on social infrastructure. One is dealing with the factors accountable for catastrophe and hurdling the traffic system and other one dealing with the impact of social networking sites on the personal life. Any social development cannot be achieved without economic development. It is observed that a competitive banking system is important to the growth of a country, simultaneously market strength is necessary for the stability in the banking system. The article "financial critique of banking business in India" has contributed significantly on the financial health of the public sector and private sector banks working in India.

Dr. Anil Vashisht
Chief Editor (AJM)

DOES CONSUMER CONFORMITY AFFECT CONSUMER ATTITUDE - A COMPARATIVE STUDY OF METRO AND NON-METRO CITIES

Utkal Khandelwal* Dr. Naval Bajpai**

ABSTRACT

The purpose of this paper is to find out the components of consumer conformity through review of literature and then develop a simple and precise model of consumer conformity. Further, this paper measures the impact of brand equity on consumer attitude and undertakes comparative study for understanding the same in metro and non metro customers in India. This study is useful because in many ways Metro and non-metro customers are different in their consumer behaviour. Linear regression and z-test was used to measure the impact of these attributes on consumer attitude and difference in metro and non-metro customers respectively.

The paper identifies ten different antecedents of consumer conformity through extensive review of literature and then develops a simple model of brand equity for the study. Furthermore, consumer conformity in formation of positive consumer attitude is found high in metro cities as compared to that in non-metro cities. Regression result between consumer attitude and consumer conformity clearly explain that the higher level of consumer conformity provides higher level of positive consumer attitude among customers of both the metro and non-metro cities. Marketers have to understand the various components of consumer conformity in order to enjoy the substantial competitive and economic advantages.

Keywords: *Consumer Attitude, Interpersonal Influence, Social Comparison, WOM*

1. INTRODUCTION

A human being is a social being so commonly all the actions performed by a human being are to get social satisfaction whether it is generated through conscious or unconscious mind. People require to be acknowledged in social situations can be a powerful way for marketers to sell products. For living in a society individuals generally perform actions which may not go against the group. The value of conformity emphasizes self-restraint in everyday interactions, manifested in such qualities as obedience, self-discipline, politeness, and honoring parents and elders (Schwartz, 1992).

Conformity in general is defined as the tendency of group members to establish a group norm and the tendency of individuals to comply with the respective norm (Burnkrant and Cousineau, 1975). This is clear in the definition that inclination towards group norm or social norm comprised conformity. Consumer conformity is defined as compliance with group norms, susceptibility to group influence, and behavioural changes in consumption behaviour due to a reference group (Lascu and Zinkhan, 1999). In simple words, consumer conformity may be defined as consumer actions or behavior at the time of purchasing and consuming in correspondence with socially accepted standards. There are broadly two levels of conformity in the society higher level of conformity and lower level of conformity. People with a high level of conformity value tend to make decisions that conform to the expectations of their close social environment, while those with a low level of conformity value are likely to focus more on their own personal needs and care less about others' expectations (Bearden et al., 1989). Some researchers connect this type of conformity in terms of gathering information for the adoption of a new product. In a consumption context, conformity is associated with consumers' information acquisition (Rogers, 1995). In terms of new product adoption the two different levels of consumer in context of

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conformity display distinct behavior. High conformity consumers are more preventive in their information inflow and rely more on personal sources such as friends and neighbors for product information and purchase advice in order to conform to the expectations from one's social environment (Clark and Staunton, 1994). As such, consumers with a more approving attitude towards personal advice are likely to be less innovative and adopt fewer new products. However individuals having low level of consumer conformity have larger belief in all major sources. This study tries to find out the factors affecting consumer conformity, its impact on consumer attitude and comparative study of understanding the same in metro and non metro customers. Metro and non-metro customers are different in their consumer behaviour in many ways. Joshi and Mishra (2011) find that awareness level of the respondents is higher in the metros as compared to the non-metros in India. Datt & Sundharam (1990) explain a similar phenomenon which justifies the results of this study. They explain that one of the serious problems facing India's economy is the sharp and growing regional imbalances among India's metro and non-metro regions in terms of per capita income, poverty, infrastructure and socio-economic development.

2. PREVIOUS RESEARCH

There are some researchers who not only focus on level but also made certain dimensions of consumer conformity. Deutsch and Gerard (1955) established two distinct dimensions of consumer conformity: normative and informational. Normative consumer conformity refers to the conforming of behavior to be in line with the perceived expectations of other consumers, for example, purchasing of those products in which a consumer wants to fit in with his or her own social group. Informational consumer conformity involves conforming to others' purchase beliefs and decisions because of their knowledge and expertise. In this type of consumer conformity, consumers don't want to fit in but want to justify their purchasing decision. Park and Feinberg (2010) find that both dimensions of conformity are distinct and have separate antecedents. Normative consumer conformity is influenced by internal consumer characteristics, whereas informational consumer conformity is related to external virtual community characteristics. In terms of understanding how consumer used the information, Henry (2001) said that learning drawn from our understanding of human need for intimate social interaction, group acceptance and conformity to group norms will be employed to question the viability of proposals such as future growth of virtual communities and significant expansion in the range of media programming content.

2.1 Consumer Conformity as an antecedent of Consumer Attitude

A substantial body of research indicated that consumer conformity had a significant impact on consumer decision making process. Venkatesan (1966) is the early contributor in this field. He finds the normative social influences on consumer attitude. Further research suggests that the informational aspect of social influence may also have influences on purchasing behaviour (Mangold et al., 1999). A consumer needs information to evaluate options in decision making (Solomon, 1994). When consumers are exposed to information in a community, they evaluate and use it. In decision making, when need information, they will find new information or use the information that has been stored.

2.2 Consumer Conformity: An exploration through literature

It is very important to identify factors on which consumer conformity is dependent. Although a great deal has been written about consumer conformity, still there is no clear understanding of how the factors purported to be associated with it contribute to its development.

On the basis of review of literature we have found following factors on which organizational commitment of employees is reliant.

It is right to say that our success is dependent on others because formal authority is not a variable of success but willing cooperation of others is the important tool for success. Interpersonal Influence arises through interpersonal communication. Interpersonal communication may be defined as "communication that takes place between two persons who have established relationship; the people are in some way 'connected" (DeVito, J. A., 2004). Thus Interpersonal Influence is to control the behavior of others through interpersonal communication. The function of interpersonal processes is reliant upon the individual's attending to and acting upon the beliefs, thoughts, and expectations of others. The influence that others have on individual decisions is often due to the Individualistic apprehension or considering about reactions to his/her behavior. Interpersonal influence in consumer behavior is moderated by the extent of consumer sensitivity to social comparison information concerning product purchase and usage behavior (Calder and Burnkrant 1977).

At the time of studying consumer behavior, many researchers faced problem in the explication of conditions under which normative influences are likely to add considerably to the formation of behavioral intentions. As Miniard and Cohen (1983) have pointed out, to the extent consumers' behavior is influenced by concerns over what others might think of them or how others might act towards them as a function of their product choice and usage, the identification and separation of normative from personal reasons for preferring a product would appear to be quite useful. It is clear from the statement that people are influenced by the social comparison and the selection of goods and services are highly affected by this. On the same statement Bearden and Rose (1990) intend that sensitivity to social comparison information, motivated by such factors as a fear of negative social evaluation, is one such moderating variable. Lennox and Wolfe (1984) identified "attention-to-social-comparison-information", as a factor of consumer conformity.

There is mixed evidence in the literature about the relationship between public self consciousness and conformity in consumer setting. Public self-consciousness arises as a perceptual dimension of social sensitivity but, perhaps, not a motivational one, at least for men. It seems that individuals high in public self-consciousness are aware that people around them form impressions of them based on their product choice and usage behavior. However, it is unclear whether they are also motivated to act in a manner likely to elicit particular types of attributions or reactions.

The important psychological factor related to the attention of individuals to social comparison information is public self-consciousness. Fenigstein et al. (1975) define public self- consciousness as the consistent tendency of persons to direct their attention towards themselves as social objects. It is clear that recognition is the prominent dimension of public self-consciousness. Fenigstein et al. (1975) evaluate public self-consciousness and envisaged that "people who are high in public self-consciousness should be more sensitive to the type of impression called for in social situations and more inclined to act in accord with these impressions than people who are low in public self-consciousness." However, Burnkrant and Page (1982) concluded from their data that persons high in public self consciousness "are not more inclined to act in accord with the reward contingencies inherent in social situations." Contrary to this conclusion, Miller and Cox (1982) found that women who scored higher on the public self-consciousness level tended to use more makeup than those with a lower score. Solomon and Schopler (1982) found that females, but not males, exhibited a significant correlation between their attitudes toward conformity in fashion and their public self-consciousness.

A value is a belief, a mission, or a philosophy that is meaningful. Every individual has his/her own set of values known as personal values. A number of studies have pointed to differences in hierarchical or status-oriented values because these are the certain variables of value building in individuals. Your personal values may change as per your status, Shavitt et al. (2006). The hierarchical nature of U.S. society rewards those who set goals and achieve them, whereas the same orientation is frowned upon in Denmark's society.

Different societies possess different levels of individualism and collectivism. Triandis & Gelfand (1998) proposed that some societies are *horizontal* (valuing equality) whereas others are *vertical* (emphasizing hierarchy). Horizontal individualism measures in terms of imparting equal values and the societies which possess the characteristics of status in value imparting come under vertical individualism. This distinction resembles the power distance continuum at the national level (Hofstede, 2001). The horizontal/vertical difference is also abstractly related to personal values such as power, achievement, self-direction, and conformity (e.g., Schwartz & Bilsky, 1990). Shavitt et al. (2006)

established that American or British individualism differs from Swedish or Danish individualism in much the same way that Korean or Japanese collectivism differs from the collectivism of the Israeli kibbutz. Below is the classification of the various motives on the basis of Horizontal and Vertical differences.

making is a type of problem-solving activity; thus, the consumer needs information to evaluate options (Solomon, 1994). There are various sources through which consumers try to retrieve information. It may be classified into two broader groups: sources that are paid for this purpose and nonpaid non interest kind of source. The credibility of the source

Table 1: Motives Characterizing Horizontal and Vertical Individualism and Collectivism

	Horizontal (Self at the Same Level as Others)	*Vertical (Self in a Hierarchy Relative to Others)*
Individualism (independent self)	Being distinct and separate from others Being self-directed, self-reliant Modesty, not conspicuousness Expressing uniqueness	Improving individual status via competition Seeking achievement, power, prestige Standing out Display of success, status
Collectivism (interdependent self)	Maintaining benevolent relationships Common goals with others Social appropriateness Sociability Cooperation	Maintaining and protecting in-group status Deference to authorities and to in-groups Conformity Harmony

*(Source: Shavitt et al. 2006)

In terms of consumer conformity Kim and Markus (1999) explain conformity in product choice may be a leaning to vertical

collectivism cultures. Lower levels of conformity may be observed in horizontal cultural contexts, which emphasize sociability but not deference or hierarchy (Triandis & Gelfand, 1998).

A sizeable body of research indicated that word-of-mouth (WOM) had a significant impact on consumer decision making process. WOM is defined as "the informal communication directed at other consumers about ownership and characteristics of particular goods and services and/or their sellers" (Westbrook, 1987). WOM is one of the biggest tools in the hand of the consumer in terms of future purchasing of the reference group. Blodgett et al. (1997) claim that WOM was often regarded as related to consumers' satisfaction or dissatisfaction with previous purchasing experience. Consumers engage in WOM to satisfy their personal information needs (Bloch et al., 1986). This clearly explains that WOM is a tool in the hands of the consumer to get information related to any product and service. Consumer decision

becomes high when there is no benefit. When consumers are exposed to information in a community, they evaluate, use, and store the information, and if they need information, they will find new information or use the information that has been stored. Information about consumer decisions comes from three sources: the seller, other consumers, and other neutral sources (Markin, 1974).

Expanding globalization may increase the number of challenges and opportunities in marketing. The basic advantage is that the consumers get exposed to a plethora of domestic and foreign products and brands, among which choices have to be made. Understanding the bases on which they decide between those alternatives poses another strategic challenge for marketing management. By this there is the arousal of new challenge that preference among consumers in general for the products of countries in the advanced economies over those originating in less developed countries (Jaffe and Martinez, 1995). Most recently, Brown and O'Cass (2006) found that "consumer ethnocentrism" had negatively affected Australian consumers' willingness to buy wine produced elsewhere. This clearly shows the consumer animosity, Consumer animosity refers to a study of the impact of anger and negative attitudes between nations or regions upon consumer trends and habits. The positive form may be distinguished as Ethnocentrism**.** An ethnocentric attitude is one that would consider purchasing products from a foreign nation immoral and unpatriotic.

Jung et al. (2002) and Ang et al. (2004) have identified two types of animosity. "Personal stable animosity" is rooted in individuals' personal experiences. In contrast, "Personal situational animosities", are temporary negative sentiments caused by specific current circumstances. This prejudiced tendency is appropriately summed up by Klein et al. (1998) as "consumer animosity", a term which carries a somewhat more outward-directed and active implication of resulting action on the consumer's part than does the inward-looking and abstract notion of "ethnocentrism".

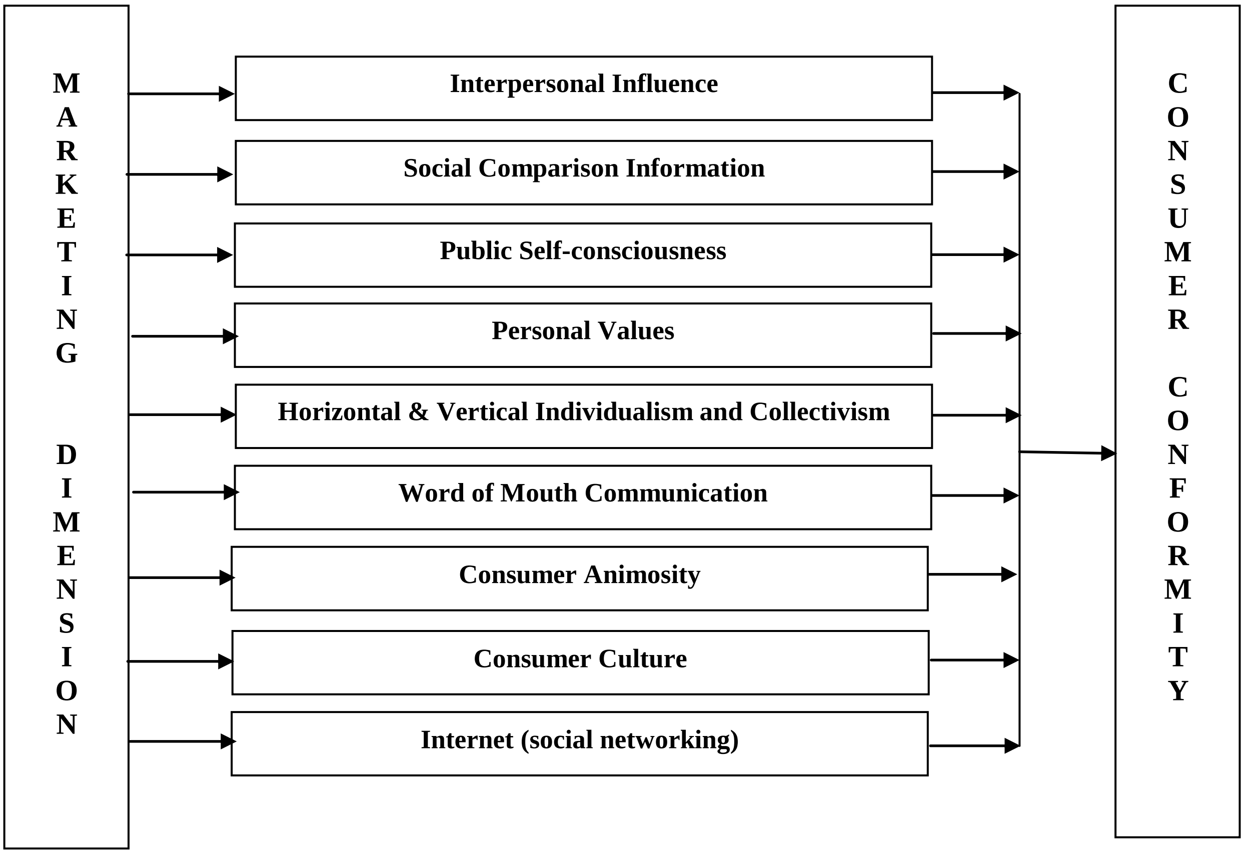

Figure 1: Proposed model of consumer conformity to test the difference between Metro and Non-metro cities.

Consumer culture is an arrangement in which consumption, a set of behaviors found in all times and places, is controlled by the consumption of commercial products. It is also a structure in which the diffusion of existing cultural values, norms and customary ways of doing things from generation to generation "is largely understood to be carried out through the exercise of free personal choice in the private sphere of everyday life." Consumer culture denotes an economy in which value has been divorced from the material satisfaction of wants and the sign value of goods takes precedence (Baudrillard, 1998). In consumer culture predispositions toward social emulation, matching, and imitation expressed through marketplace choices are accompanied by a penchant for differentiation, individuality, and distinction also expressed through marketplace choices. These motives are spread in terms of products and services. These dynamics are often thought to have been generated by the purposeful social engineering of marketers (Williams, 1982), and to have spread from roots in the fashion industry into all parts of social life (Frisby & Featherstone, 1998).

The internet has unlocked new windows for establishing new forms of conforming influences.

With the emergence of internet and worldwide acceptance, consumers are now able to communicate on a global scale and share information in a way that was not previously possible. Consumers now have more interaction on internet. For example, a survey by Nielsen and NetRatings (Bausch and Han, 2006) reported that social networking websites showed 47 percent growth year over year. About 45 percent of internet users are social networking users (Bausch and Han, 2006). Online chatting, forums, blogs, online games, and instant messaging are new forms of communities in which consumers can share and communicate common interests and common goals, and influence others.

This new method of communication evolves the new virtual community. This evolution may open a new dimension in marketing. According to Inside Research (2007), network research spending was forecasted to be $69 million in 2008 as compared to $40 million from the previous year. It clearly shows the future potential of this market so the marketers need to reshape the nature and scope of consumer conformity.

3. RESEARCH METHODOLOGY

The present study is conducted using a theoretical model to measure consumer conformity. Methodology can be broadly explained by understanding theoretical model, framing hypotheses; sample and sample profile; tool and design of the study. A detailed description of all these are as follows:

3.1 Theoretical Model of Consumer Conformity

For conducting any research it is very important to conceptualize the thought. For the present study, a model of consumer conformity is developed. On the basis of extensive literature survey researchers have identified nine variables which have a straight impact on consumer conformity. Literature reveals that these nine variables are antecedents of consumer conformity. Figure-1 exhibits this proposed model of measuring Consumer conformity.

*3.2 Research Question and Hypotheses*s

In the light of existing literature, the following research questions are framed:

1. There exists a different degree of understanding towards consumer conformity in metro and non-metro cities.

2. Consumer conformity enhances the consumer attitude level in both metro and non-metro cities.

Difference in consumer conformity was measured through measuring the summated difference in metro and non-metro cities. For measuring the statistical significant differences, main hypothesis was constructed. In addition to this, another two hypotheses were constructed to measure the linear impact of consumer conformity on consumer attitude level of metro consumers and non-metro consumers respectively. These three hypotheses are as follows:

H_1: There is a significant difference in the degree of consumer conformity in metro and non-metro cities.

H_2: Consumer conformity has significant linear impact on consumer attitude of metro city.

H_3: Consumer conformity has significant linear impact on consumer attitude of non-metro city.

3.3 Sample and sample profile

Subject of the present study are the consumer who visit to various shops and malls in metro and non metro cities. Sample drawn for metro city constitutes the consumers of National Capital Region of India i.e. New Delhi and sample drawn for non-metro city non-metro city constitutes the consumers of Gwalior and Mathura region of India. For sampling, Convenient Sampling technique is used. Individual respondent was the sampling element.

Subjects of the present study are selected from the various stores and malls of metro and non-metro cities. Total 250 subjects are randomly selected from each metro and non-metro city and will be given the same questionnaire, in which, respondents indicated their opinion about marketing dimension in both the cities (i.e. metro and non-metro city).

3.4 Tool

It has already been discussed that the present study is focused on the measurement of degree of difference in consumer conformity of a metro and non-metro consumers. Consumer conformity is measured through nine independent variables. These ten variables are collected through literature. Each variable is measured using a five point rating scale ranging from 'strongly disagree' to 'strongly agree' with 'neither agree nor disagree' as the middle point. Internal consistency of the scale is checked and Cronbach's alpha is found to be 0.87. Based on the literature, each question in the questionnaire is constructed.

For checking the validity of the scale we applied content validity technique. We systematically evaluated how well the content of a scale represents the measurement test at hand. Due to the subjective nature of this technique we also used a more sophisticated technique referred to as criterion validity.

For measuring the difference between means of metro and non-metro consumers, z-test for two populations is employed. In addition, for measuring the linear impact of consumer conformity on consumer attitude in metro and non-metro cities, simple regression technique is employed.

4. DATA ANALYSIS & INTERPRETATION

Data analysis is done using MS Excel software. Analysis is done using three steps: z-test for comparing means; regression for measuring linear impact of consumer conformity on consumer attitude in metro and non-metro city. Z-test result and regression results are presented from table-2 to table-4. Following section focuses on these 3 tables and their statistical interpretation:

Table 2: z-test for comparing two means (Consumer Conformity) in Metro and Non-metro cities

	Consumer Conformity (Metro city)	***Consumer Conformity (Non-metro city)***
Mean	34.512	33.22
Known Variance	3.9858	9.2
Observations	250	250
Hypothesized Mean Difference	0	
Z	5.625735065	
P(Z<=z) two-tail	1.8472E-08	
z Critical two-tail	1.959963985	

Table 3 (b): *ANOVA table for Consumer Attitude and Consumer Conformity in Metro city*

	df	*SS*	*MS*	*F*	*Significance F*
Regression	1	973.6240944	973.6240944	12816.34741	1.6809E-215
Residual	248	18.83990561	0.075967361		
Total	249	992.464			

Table 3 (c): *t − value and p − value for the regression result between Consumer Attitude and Consumer Conformity (CC) in Metro city*

	Coefficients	*Standard Error*	*t Stat*	*P-value*
Intercept	0.427572724	0.30157864	1.417781835	0.157509685
CC	9.874964444	0.08722749	113.2093079	1.6809E-215

For finding out the significant difference in means of metro and non-metro city in terms of consumer conformity z-test is applied. Computed z value is coming as **5.63** which falls in the rejection region (at 5% level of significance). This indicates rejection of null hypothesis and acceptance of alternative hypothesis. Hence, null hypothesis of no difference is rejected and alternative hypothesis of significant difference is accepted. Hence, it can be concluded that there is a significant difference between degrees of consumer conformity (at 95% confidence level) between metro and non-metro cities. Sample result clearly exhibits that mean of metro city is higher than that of non-metro city. Hence, it can be significantly concluded that consumer conformity in metro city are clearly better (mean=38.84) than non-metro city (mean= 33.52).

Table 3 (a) exhibits regression statistics for Consumer Attitude and Consumer Conformity in Metro city. R^2 value is coming as 98.1% which is an indication of strong predictor model. Standard error is relatively low. Table 3 (b) shows that F-value is significant which exhibits overall significance of regression model. Table 3 (c) exhibits $t - value$ and $p - value$ for testing the slope of the regression model. Significant $p - value$ corresponding to $t - value$ is an indication of linear relationship between dependent (consumer attitude) and independent variable (Consumer Conformity) in metro city.

Table 4: *Regression Results between Consumer Attitude (Non-metro city) and Consumer Conformity (Non-metro city)*

Table 4 (a): *Regression Statistics for Consumer Attitude and Consumer Conformity in Non-metro city*

Regression Statistics	
Multiple R	0.978184592
R Square	0.956845096
Adjusted R Square	0.956671084
Standard Error	0.6316577
Observations	250

Table 4 (b): *ANOVA table for Consumer Attitude and Consumer Conformity in Non-metro city*

	Df	*SS*	*MS*	*F*	*Significance F*
Regression	1	2193.95012	2193.95012	5498.739682	2.8676E-171
Residual	248	98.94987966	0.39899145		
Total	249	2292.9			

Table 4 (c): *$t - value$ and $p - value$ for the regression result between Consumer Attitude and Consumer Conformity (CC) in Non-metro city*

	Coefficients	*Standard Error*	*t Stat*	*P-value*
Intercept	-0.17924249	0.452175124	-0.39640061	0.692150376
CC	10.03462399	0.135322348	74.15348732	2.8676E-171

Table 4 (a) exhibits regression statistics for Consumer Attitude and Consumer Conformity in Non-metro city. R^2 value is coming as 95.7% which is an indication of strong predictor model. Standard error is relatively low. Table 4 (b) shows that F-value is significant which exhibits overall significance of regression model. Table 4 (c) exhibits $t - value$ and $p - value$ for testing the slope of the regression model. Significant $p - value$ corresponding to $t - value$ is an indication of linear relationship between dependent (consumer attitude) and independent variable (Consumer Conformity) in non-metro city.

5. DISCUSSION

The main focus of this study is to identify consumer conformity in general and to explore the degree of difference in metro region and non-metro region. Consumers of these two regions are not same; marketers have to understand this difference and to take competitive advantage and long term sustainability, they have to formulate policies and programs for these two regions differently. This study provides them a conceptual model in order to formulate their policies.

It is clearly evident from Table 2 that consumer conformity or compliance with group norms or susceptibility to group influence for general buying decision score is high for metro city as compared to non-metro city. The reason can be explained as the metro customers have high level of conformity value they tend to make decisions that conform to the expectations of their close social environment as compared to the non-metro customers. Another reason may be the metro people have more impact of interpersonal influence, social comparison and self-consciousness. Miniard and Cohen (1983) have also pointed out the same and explain that the consumers' behavior is influenced by concerns over what others might think of them or how others might act toward them as a function of their product choice and usage. The identification and separation of normative from personal reasons for preferring a product would appear to be quite useful. Marketers in order to affect consumer attitude through consumer conformity have to focus over interpersonal influence, social comparison influence, public self consciousness, social values, degree of individualism and collectiveness, word of mouth communication, degree of consumer animosity, culture and effective use of internet.

Table 3 (a), 3 (b), 3 (c) and Table 4 (a), 4 (b), 4 (c) exhibits the result of regression (linear) between consumer attitude and consumer conformity for metro and non-metro cities. Regression is performed by taking all ten variables as independent variables and consumer attitude as dependent variable. Regression results between consumer attitude and consumer conformity clearly explain that the higher level of consumer conformity provide higher level of positive consumer attitude among customers of both the metro and non-metro cities. Consumer conformity is undoubtedly a requirement of consumer attitude towards buying decision.

6. LIMITATIONS OF THE STUDY

Though we have taken all possible steps to provide the findings in a holistic way but as a natural phenomenon of any research present study is also not free from some limitations. A list of limitations observed on the present study is given as below:

- Due to time constraint we could not cover more metro and non-metro cities. Therefore, the results of this study are not confirmatory as such but rather they give an idea in order to formulating the marketing policies.
- Based on literature in these fields, a research framework was constructed. It is found that consumer display different attitude to the different types of product and services.
- We have explored a list of 9 antecedents. More antecedents could have been explored for a comprehensive study.
- Probability sampling is a better option to have a true representation of the population but due to limited resources it could not be used.

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ANALYSIS OF THE FACTORS ACCOUNTABLE FOR CATASTROPHE & HURDLING THE TRAFFIC SYSTEM

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ABSTRACT

The present paper studies, the records of road accidents that took place during the last 4-5 years and specifically focused in the year 2012- 2013 and impact of these accidents on the lives of the sufferer's family with reference to Indore City. It describes the main causes behind the incidents i.e. avoidance of traffic rules, physical use of roads, highway incidences, crossing of speed limit, wear and tear of vehicles, road space rationing, movements and crossing of animals in between the roads etc.

It also describes the failure of government authorities, their supervision and market disciplines to follow the traffic obligation and bringing awareness among the masses to follow the same.

Administrative segment of Indore city needs to learn the steps from developed countries to make the road infrastructure strong enough to control the whole process required to correct the traffic system.

Finally, changes in regulation, supervision & construction of roads with better quality of raw material would spread happiness across the population of Indore

The factor analysis a statistical tool is being used to determine factors which influence the traffic system & road development. Simultaneously the graphical representation on the basis of composition of demographic profile of the respondents is also depicted in the study.

The principle conclusion of the present study is that while these road mishaps represent a massive regulatory failure, such failures are inherent until corrective measures are taken. Apart from this, under- constructed roads which are not being completed in a particular time must be constructed. It also emphasizes more on regulating authorities, state government authorities, municipal corporations, road development authorities etc to increase the understanding among the people by taking necessary measures to remove and diminish the mishaps due to bad conditions of roads & avoidance of following the traffic rules and therefore must strengthen masses towards the cause. This in turn calls for some major actions such as: spreading awareness to follow traffic rules, revising the licensing policy for drivers and taking stringent action towards the person who disobeys rules.

Keywords*: - Traffic system, Roads, Infrastructural development, Traffic system.*

1. INTRODUCTION

1.1 Traffic Congestion

Traffic congestion is a condition on networks that occurs as use increases, and is characterized by slower speeds, longer trip times, and increased queuing. The most common example is the physical use of roads by vehicles. When the traffic demand is such that the interaction between vehicles slows the speed of the traffic stream, congestion is incurred. As demand approaches the capacity of a road (or of the intersections along the road), extreme traffic congestion sets in. When vehicles are halted for a considerable period of time, this is colloquially known as a **traffic jam**.

Traffic congestion occurs when a volume of traffic or modal split generates demand for space greater than the available road capacity. There are a number of specific circumstances which increase or aggravate congestion; most of them reduce the capacity of a road at a given point or over a certain length, or increase the number of vehicles required for a given throughput of people or goods. Traffic congestion has a number of negative effects:

- Wasting time of motorists and passengers ("opportunity cost"). As a non-productive activity for most people, congestion reduces regional economic health.
- Delays, which may result in late arrival for employment, meetings, and education, resulting in loss of business, disciplinary action or other personal losses.
- Inability to forecast travel time accurately, leading to drivers allocating more time to travel

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"just in case", and less time on productive activities.

- Wasted fuel increases air pollution and carbon dioxide emissions (which may contribute to global warming) owing to increased idling, acceleration and braking. Increased fuel use may also in theory cause a rise in fuel costs.
- Wear and tear on vehicles as a result of idling in traffic and frequent acceleration and braking, leading to more frequent repairs and replacements.
- Stressed and frustrated motorists, encouraging road rage and reduced health of motorists. Emergencies: blocked traffic may interfere with the passage of emergency vehicles travelling to their destinations where they are urgently needed.
- Spillover effect from congested main arteries to secondary roads and side streets as alternative routes are attempted ('rat running'), which may affect neighborhood amenity and real estate prices.

2. OBJECTIVE OF THE STUDY

2.1 To study the impact of road accident due to avoidance of traffic rules, speed measures, and creating awareness among the masses of Indore city.

2.2 To identify the factors creating hurdles in making the traffic system effective .

3. LITERATURE REVIEW

Several studies have been carried out related to optimization of regional traffic systems using multiple objectives concerning externalities taking traffic dynamics into account. In 1978, Gershwin et al. had already developed a system which could be used to optimize traffic systems by using traffic lights, ramp metering and reserved lanes taking route choice and mode choice into account.

The optimization could be travel time, fuel consumption or a combination of the two Gershwin, S.B. et.al. .More recently Lu, Z. L. (2006) applied a bi34 level multi-objective programming model and need a genetic algorithm as solution to determine the optimal solution for ramp metering control. Schmöcker, J.-D. et.al. (2008) used a multi-objective fuzzy logic approach similar to earlier studies. Anderson, J.M. et.al.(2007) used to optimize traffic lights, taking into account both emissions and traffic delays. They proved the feasibility of their approach.

Mathew, and Sharma (2006) the network design problem is formulated as a bi-level optimization problem in which emission costs and travel time costs are taken into account. They also showed the feasibility of their approach. A grid search algorithm was used by Zuurbier, et.al. (2007) to determine the optimal application of Variable Message Signs. They used an objective function consisting of a weighted sum of the effects of the air quality and accessibility, and showed that there are different optimal solutions for the individual as well as combined objectives. Ahn, K. and Rakha (2008) have done a research on the effects of route choice in terms of energy use and emissions of pollutants. This research shows that a user equilibrium or system optimum in terms of travel times does not necessarily result in minimizing energy use or emissions.

Delhomme et al. (2009) observed that it is not practical to conduct a rigorous outcome based evaluation of the effectiveness of mass media campaigns in road safety. They concluded that the best evidence comes from broad literature reviews or meta-analyses of mass media campaigns. From a synthesis of findings from descriptive studies and meta-analyses in the public health and road safety domains, they found that campaigns were enhanced by the following key elements:

- In combination with other activities such as enforcement, education and/or legislation
- Using a theoretical model
- The campaign is based on prior research
- Choosing a single theme rather than multiple themes
- Addressing a specific target audience
- The target audience is segmented (e.g. by demographics, attitudes, values etc.).

In link traffic flow analysis motorway simulation seems to be more common than simulation of ordinary two-lane or two-way traffic roads. One of the reasons here is that in two-lane road the interactions between vehicles traveling in opposite directions have to be modeled. The platooning and overtaking are not only dependent on traffic situation but also on the road environment (sight distances, passing control). This way the problem is much more complicated than in the motorway environment. Probably the most well known programs in this area are the Swedish VTI-model (Algers et al. 1996) and the Australian TRARR (Hoban et al. 1991), both basically developed in the 1970's.

Traffic safety related questions have been quite a hard problem for simulation. In traditional simulation programs the drivers are programmed to avoid collisions. Thus, they do not exist. Some trials for analysis of conflict situations through simulation can be found (Karhu 1975; Sayed 1997), but a general approach to the problem and widely used safety simulation tools are still missing. Traffic safety simulation belongs to the field of human centered simulation where the perception-reaction systems of drivers with all its weak points have to be described. This kind of approach is sometimes called nano simulation in order distinguish it from the traditional microscopic simulation.

Rao and Grenoble (1991) proposed a model to study the effects of traffic congestion on JIT mode of material supply for a developed nation like USA. The framework suggests various alternatives for improving logistics performance. One of them is called pooled delivery, in which a carrier picks up shipments from various suppliers and makes a single delivery to the buyer’s plant. However, no significant work has been reported from the developing nation.

3.1 Cameras emerge as an automated enforcement system:

Cameras were first used in order to try to deter people from running red lights. The cameras were installed at busy intersections to catch all the violators. As technology advanced the use of the system also advanced and they were applied to many more areas of traffic. Digital cameras and video cameras were thus developed.

Red light runners (RLR) as well as speeders could now be caught with a picture. Speeding cameras were primarily used in school zones and construction zones in the hope that they would slow down speeders. Proponents of the system claimed that they lessen the number of accidents associated with speeding and running red lights. With this system there is no contact between the violators and law enforcement.

The cameras capture a photo of the vehicle and possibly the driver and the ticket is sent through the mail to the owner of the vehicle. The photo records the date, time of day, time elapsed since the beginning of the red signal, and possibly the speed and a copy is sent along with the citation to the owner. The system is operated by the vendor of the camera system and not a law enforcement agency and it is up to their discretion as to who to issue the citations too. The company is usually paid by the state on a commission based on the number of tickets issued.

3.2 According to the U.S. Department of Transportation there are 10 requirements that the automated enforcement system should meet:

3.2.1 The ability to capture, transmit, process, store and recover captured images so that data may be managed in an efficient manner;

3.2.2 Sufficient resolution to satisfy court standards for the image-reading of vehicle license plates, clear detail of the vehicle, and identification of the vehicle operator (if necessary);

3.2.3 The capability to prevent the spreading of overexposed portions of an image (anti-blooming) that may result from vehicle headlights or sunlight from highly reflective surfaces.

The fines assessed, are based on photos or videos captured automatically when a vehicle enters the intersection after the signal has changed to red and range from \$50 to \$271 dollars. A portion of this fine went to the state while the private company received a percentage. The cameras used in the systems cost about \$50,000 to \$60,000, with installation, including detectors, equipment cabinet, and mounting pole, adding approximately an additional \$25,000. Monthly operating costs are approximately \$5,000 for a breakdown of the cost of tickets and the commission made by the companies in certain states.

3.3 Technology behind the cameras:

3.3.1 35mm/Wet Film

There are currently three different types of camera systems that are in use at different intersection around the country. The first and most common type used is the wet film or 35mm. This automated enforcement system places a 35mm camera at intersections normally to catch red light runners. Sensors are placed in the ground, (either loop sensors or piezoe sensors) before the pavement marking that defines the intersection; this is usually the stop bar or a crosswalk. When the light turns into the red phase, the system is activated meaning that the camera is ready to take pictures of any vehicle that enters the intersection at this point.

In order to differentiate between the vehicles that are running the red light and vehicles that might be caught in the intersection when it turns red, the system is usually set up with a "grace period". The common period is 3/10 of a second although an international standard of 1/2 of a second exists. The camera will not snap pictures until 3/10 of a second after the red phase of the light starts. There is also the possibility of cars turning right on red or cars attempting to stop that might set off the cameras. Because of this a minimum necessary speed is usually required to activate the system. This usually ranges from 15 to 20 miles per hour. Also the placement of the sensor is very important. In one case where this system was in use in Pasadena California, 95 percent of the pictures taken were of non-violating vehicles that were trapped trying to make a left turn in the intersection when the light turned red. The sensors were placed in such a way that they tried to continue to make the left turn and get out of the intersection, the automated enforcement was triggered and a picture was taken.

3.4 Digital

The second type of cameras used is a result of the quickly changing face of video technology. Digital cameras have the ability to produce pictures with a higher resolution, more sharply detailed images of the vehicle, and are able to prevent reflections of headlights from smearing the image. Some manufactures claim that they are able to get a clear image of a car that is traveling over 200 miles per hour. The cameras can also take either black and white or colored pictures but the majority is colored. The setup for digital cameras is much like that for the wet film. They are stored in special boxes or the crossbars for the traffic signals and are connected to sensors found in the road. One slight difference in the setup between the two is that digital cameras require two sensors so that the presence of both the vehicles as well as speed can be detected. These cameras thus are not only limited to red light runners but can also be used to identify speeders. They are activated just like the wet film cameras. Thus usually you will not be caught for speeding unless you also run a red light because the system is only triggered while the light is red.

The benefits of digital cameras over wet film besides resolution and quality of the images is the ease in collecting and sending the data. The image that is taken by the camera can be electronically transmitted directly to be reviewed. This speeds up the time in which tickets can be sent out to the owners of the vehicles. It also cuts down on cost like those associated with film, processing, and the manpower of going out and retrieving and changing the film.

There are a couple of problems with the use of digital cameras. One is the fact that unlike the wet film, digital images are very easy to tamper with. This topic will be covered more in the ethical issues but it is important to point it out here. Another problem with this type of enforcement system is the fact that the cameras become inactive while they are capturing an image. This means that if there are multiple violators, the second or third car through the red light will not be caught because the camera is busy capturing the image of the first car.

4. RESEARCH METHODOLOGY

The study is based mostly on restoring the primary data collected through the method of random sampling. The place of survey we have chosen is Indore. Close – ended questionnaire is being used for the primary data collection .We administered to 330 respondents .Our thrust , to determine the factors which affect the traffic system , as well as to determine the awareness level among the masses, due to which there are a number of hurdles in the traffic system. A set of 24 statements reflecting various attributes of the problem. The respondents were requested to rank the statements on a 5-point likert scale basis (from strongly disagree to strongly agree).Factor analysis is used to identify the factors which helps in cramming the factors responsible for hurdling the traffic system .The Software package SPSS 18.0 version has been used for analysis, interpretation & results .

4.1 Demographic profile of the respondents:

Out of 330 respondents, 225 were males & 105 were females. Respondents belong to different age groups between 18-35 were 165, 26-35 were 36.4%, 36-45 were 8.2%, 46-55 were 1.8% & 56 & above were 3.6%. Apart from this, the category of respondents which we found are as follows:-

Table 1:- Characteristics of respondents:-

N=330	% Of Respondents
Gender	
Male	68.40%
Female	31.60%
Age:	
18-25	50%
26-35	36%
36-45	8%
46-55	2%
56 & above	3.60%
Occupation	
Professional	59.70%
Student	28.50%
Govt employees	8.20%
Business	1.80%
Others	1.80%
Type of vehicle	
2-Wheeler	37%
4-Wheeler	30%
3- Wheeler	16%
Others	17%

Analysis, Interpretation & Results

Reliability Measurement:-

Twenty eight variables were identified for use in the survey. Cronbach's Alpha is the most widely used measure of reliability, which asses the consistency of a scale. The generally agreed upon lower limit for Cronbach's Alpha is 0.7, although it may decrease to 0.60 in exploratory research. The variables used resulted in a Cronbach's Alpha value of 0.731 & hence establish the reliability of the scale developed by the authors.

Table 2:- KMO & Bartlett's Test.

Table 2 :Reliability Statistics

Cronbach's Alpha	N of Items
.731	28

Factor Analysis:

KMO measure of sampling adequacy & Bartlett's test of sphericity:-

KMO measure of sampling adequacy is an index used to test appropriateness, adequacy of the factor analysis .The minimum required KMO is 0.5.The table below shows that the index for this data is 0.631 & chi-square statistics is significant (0.000 < 0.05).This means the principal component analysis is appropriate for this data.

Table 3: KMO & Bartlett's Test.

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.631
Bartlett's Test of Sphericity	Approx. Chi-Square	3987.229
	df	276
	Sig.	.000

Bartlett's test of sphericity is used to ensure that the variables are uncorrelated in the population. High correlation is required among the variables for the application of factor analysis .Therefore, we test for the null hypothesis that the population correlation matrix is an identity matrix (I.e. each variable correlates perfectly with itself, but is uncorrelated with the other variables). The result of Bartlett's test (the chi-square value is 3987.229 at 0.000 significance level) clearly rejects the null hypothesis that the population correlation matrix is an identity matrix. Therefore we can proceed with factor analysis.

According to Kaiser Criterion, only the first seven factors should be used because subsequent Eigen values are less than one.

Table 4:Total Variance Explained

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	5.211	21.712	21.712	5.211	21.712	21.712	3.388	14.115	14.115
2	3.798	15.824	37.536	3.798	15.824	37.536	3.387	14.114	28.229
3	1.915	7.980	45.516	1.915	7.980	45.516	2.195	9.146	37.375
4	1.503	6.262	51.778	1.503	6.262	51.778	2.097	8.736	46.111
5	1.403	5.847	57.625	1.403	5.847	57.625	1.712	7.134	53.245
6	1.199	4.995	62.620	1.199	4.995	62.620	1.706	7.108	60.354
7	1.084	4.516	67.136	1.084	4.516	67.136	1.628	6.783	67.136
Extraction Method: Principal Component Analysis.									

This output gives the variance explained by the initial solution .This table gives the total variance contributed by each component. We may note that the percentage of total variance contributed by the first component is 21.712, by second component is 15.824 & by the third component is 7.980.It may be noted that the percentage of total variances is the highest for the first factor & it decreases thereafter. It is also clear from this table that there are total three distinct factors for the given set of variables.

Rotated Component Matrix:

The Table 4 below is the most important table for interpretation. The maximum of each row (ignoring sign) indicates that the respective variable belongs to the respective component. The variables 'Following Traffic Rules, increase in construction of more number of zebra crossings & speed trackers are highly correlated & contribute to a single component. '**Increase the number of Zebra crossing**', '**Parking area' , 'Requirement more number of footbridges /Footpaths /Flyovers etc ,' 'Awareness ,' 'Alternative roots' , 'Forecast travel time' etc** contribute to the second component. 'Natural calamity, stress, frustration, Peak hours, Wear & tear of roads and vehicles etc, contribute to the rest of the components respectively.

Table 4 :- Rotated Component Matrix[a]

Components	Component						
	1	2	3	4	5	6	7
Noise Pollution	.779						
Speed trackers	.695						
Stop use of mobile phones/drink etc	.689						
Peak Hour entry				.397			
Road infrastructure				.263			
Screening before allotting License	.523						
Increase the number of Zebra crossing		.786					
Parking area		.733					
Required more number of footbridges /Footpaths /Flyovers etc		.652					
One way /Two way traffic restricted area		.611					
Awareness		.591					
Alternative roots		.575					
Forecast travel time		.492					
Stress			.800				
Natural Calamity			.695				
Wear – Tear value of vehicles			.644				
Motivates				.771			
More number of reversible lanes.				.611			
Follow speed limit				.436			
Traffic police behavior							
Effective traffic signals					.825		
Follows traffic rules						.753	
Contribution							.670
Physical use of road should be banned							.604

Extraction Method: Principal Component Analysis. Rotation Method: Varimax with Kaiser Normalization.

a. Rotation converged in 11 iterations.

5. INTERPRETATION OF RESULTS

Table 5.1: Interpretation of the Results:

Factor No.	Labels	Factor Name	Statement	Factor Loadings
F1	**S20**	**Smooth Running**	Increase in the number of vehicles in cities have contributed in air /noise pollution /global warming	**0.779**
	S13		Use of speed tracker (speedometer/camera) in public transport can minimize the risk of road-mishaps.	**0.695**
	S6		Alternative roots can reduce traffic load in peak hours.	**0.689**
	S8		Natural Calamity causes problem in smooth running of traffic	**0.523**
F2	**S17**	**Physical movement**	Use of zebra crossing is must for the pedestrians to being on the safer side from heavy traffic.	**0.566**
	S19		Parking of public/private vehicles on road hinders the traffic .	**0.635**
	S16		Construction of footpaths/Foot-over bridges /Fly overs etc on the roads can reduces the traffic .	**0.585**
	S18		Restrictions on movement of four wheelers /heavy vehicles/Buses/ Lorries etc should be stop , so that it may reduce accidents & traffic jams.	**0.446**
	S2		Education and awareness of drivers towards traffic rules and public safety standards can help in smoothening of traffic.	**0.591**
	S3		Physical use (Shaadi, Baarat, Welcome gate, animal walking, etc.) of road should be banned	**0.575**
	S7		Inability to forecast travel time doesn't cause hurry to the traveler.	**0.492**
F3	**S11**	**Maintenance of Vehicle and roads.**	One should not drive, when he/she is in any kind of Stress and frustration which leads to severe accidents.	**0.800**
	S10		Wear and Tear in vehicle condition results in frequent accidents	**0.695**
	S12		Improved road infrastructure is not necessary to reduce accidents/traffic load.	**0.644**
F4	**S23**	**Responsibility & Authority**	Police authority should also follows the traffic rules , to motivate general public to do the same	**0.771**
	S15		Implementation of reversible lanes with different time schedule system can reduce the traffic congestion.	**0.611**
	S4		Mentioned speed limit should be followed.	**0.436**
F5	**S22**	**Penalized**	Traffic Police should charge the penalty strictly on the person whoever breaks the rules and create violence.	**0.865**
	S21		Effectively working signals are necessary to control the traffic.	**0.825**
F6	**S1**	**Awareness**	As an aware citizen I always follow traffic rules.	**0.753**
F7	**S24**	**Cooperation**	Contributions & support of citizens in creating traffic awareness can control the traffic to the greater extent	**0.670**
	S5	**Vendors**	Vendors should not be allowed to roam among the sides of the traffic signals.	**0.604**

5.1 Naming Of The Factors:-

A factor loading represents above is self - explanatory, where its states the correlation between an original variable & its factor. The signs are interpretive just like any other correlation coefficient. On each factor 'like signs' of factor loading means factors & factors are positively correlated & 'opposite signs' of factor loadings means that factor loadings & factors are negatively correlated. The names of the factors, statement labels & factor loading are summarized in the above Table **5 which** has been formulated from SPSS data output.

6. CONCLUSION & FINDINGS

In the present study, as per the Complexity of traffic control on a network grows it becomes more difficult to coordinate the actions of the large number of heterogeneous traffic management instruments that are available in the network. One way of handling this complexity is to divide the main problem of coordination into smaller coherent sub problems that can be solved with a minimum of interaction. In the literature no consensus exists about the best configuration of the traffic managing multi-agent system and how the activities of the agents that comprise the multi-agent system should be coordinated. The decomposition of a problem into various sub problems is an active field of research in the world of distributed artificial intelligence.

In the paper an attempt has been made to highlight some of the design based issues of road accident concepts. This concept can be applied to the existing and proposed corridor. It should be viewed along with the other safety policies applied to India and not individually. The other design concepts having bearing on safety, such as stopping sight distance, shoulder rollover etc is not highlighted in view of space constraints.

Traffic research still cannot fully predict under which conditions a "traffic jam" (as opposed to heavy, but smoothly flowing traffic) may suddenly occur. It has been found that individual incidents (such as accidents or even a single car braking heavily in a previously smooth flow) may cause ripple effects (a cascading failure) which then spread out and create a sustained traffic jam when, otherwise, normal flow might have continued for some time longer.Work – in – Progress & under –construction roads are also responsible for the growing number of accidents in the city.

7. SUGGESTIONS

7.1.1 To change the attitude and behavior of the drivers and riders by creating awareness for public safety:

7.1.2 Promote a positive attitude towards enforcement laws and infuse sense of courtesy and concern among road users.

7.1.3 Regularly monitoring relevant local and international road statistics and developments in order to ensure improvements.

7.1.4 Ensure protection of the environment and take appropriate steps for prevention of noise and air pollution.

7.1.5 Inculcate a sense of discipline amongst road users and educate the public including school children on road safety.

7.1.6 To reach out to Government, Media, Corporate and Community to solicit their support to prevent colossal waste of human life on Indian roads as India holds the dubious distinction of highest road crash fatalities in the Indore city.

7.1.7 To work as a pressure group to create political will and help improve road safety situation.

7.1.8 Sensitize masses by raising awareness about road traffic injuries, their grave consequences and thus build community involvement around the issue of Road Safety.

7.1.9 Develop cost effective road safety programs to increase knowledge, awareness and skills amongst the Indian road users.

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IMPACT OF SOCIAL NETWORKING SITES ON PERSONAL LIFE

Dr. Vijay Kumar Pandey

ABSTRACT

As per estimate India has 150 million Internet users, and now has the 3rd largest Internet population in the world after China (at 575m) and the US (at 275m), (Aggarwal, 2013). Not only internet users are increasing day by day but users of social site are also increasing. According to a Facebook statement as on December 31, 2012, it has 1.06 billion monthly active users (MAUs) worldwide including 71 million in India (Press Trust of India, 2013). Young generations are becoming more computers savvy and mobiles have become part of their life. This has also fuelled by latest electronic gadgets like tablets and smart phones. With the increasing dependency on social sites for social communication has arisen the need for exploring impact on their personal life. This study is aimed to explore the impact of social Network Site on personal life.

Keywords: *Social Networking, Attitude, Opinion.*

INTRODUCTION

A social networking site is described as "a website where individuals can set up an online profile, describing his/her interests. Most sites support the maintenance of pre-existing social networks, but others help strangers connect based on shared interests, political views, or activities." From this, it is evident that the main use of social networking sites is interaction and communicating with others. We use them to keep up to date and in touch with existing friends and relations, or to create new relationships. The amount of additional features and services offered by different social networking sites often relates to their popularity. For instance, in a study which ranks the amount of traffic of social networking sites, Facebook, MySpace and Twitter are the top three most popular sites. These sites offer a diverse range of aids and methods in which to communicate online. Globalization, interaction, participation and usability are encouraged through these sites; therefore they relate to the (growing) fundamental concepts of modern, 'digital' society.

Social networking websites are designed to enable individuals to connect to one another through various means. These means are commonly real-life existing friendships or family relation to one another, common interests, shared beliefs and opinions. This idea of shared interaction with one another has existed long before the age of the Internet. Humans, by their very nature, not only thrive off these social bonds, but also require these intimate ties in order to continue their existence.

Social networking websites bring about numerous advantages. One such advantage is the idea of maintaining relationships. Social networking websites allow us to collate the people in our lives, whether they are in the present or the past, in to one area. This merging of the present and the past is hugely beneficial when it comes to making relationships last.

This benefit is also realized by business organization and they have also started using social sites for understanding customers and promotions of their products.

This study is conducted to explore the impact of social Network Site on personal life.

REVIEW OF LITERATURE

Edward Snowden, a 29-year-old IT administrator for the defense contractor Booz Allen Hamilton, the person responsible for leaking a series of agency documents on the collection of telephone data of millions of Americans, said "I can't allow the US government to destroy privacy, internet freedom and basic liberties," (Julian Borger, 2013). Now the US government is trying to justify the on collection of personal data through internet that it helps in tracking terrorist activities. It really raises the ethical issues and we should not peep into the personal life of the people but is it not, true that in the era of internet, we all are losing our privacy.

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An article by (Marr, 2013) has warned the users of social sites that how a simple like can disclose your intimate details as well as personality traits you might not want to share with anyone. The work conducted by researchers at Cambridge University and Microsoft Research shows how the patterns of Facebook 'Likes' can very accurately predict your sexual orientation, satisfaction with life, intelligence, emotional stability, religion, alcohol use and drug use, relationship status, age, gender, race and political views among many others. It is quite scary that those "revealing" 'Likes' can have little or nothing to do with the actual attributes they help to predict and often a single 'Like' is enough to generate an accurate prediction.

We should wonder why social sites analyze and peep into private information. The simple answer is the entire Facebook business model is based on the effective use of your data. They provide users social media free of cost and in turn sell advertising and insights based on what they learn about users. Facebook uses 'big data analytics' to collect, store and analyze data. This allows Facebook to sell much targeted advertising - e.g. 'someone living in Delhi, who is single and who is interested in cricket and likes burger'. This kind of knowledge is a marketer's dream!

But it is more than that, USA Today revealed how Facebook tracks users across the Web. Basically, when users create an account, Facebook inserts a 'tracking cookie' into their Web browser that allows Facebook to track each website they are visiting. This means when users are logged into Facebook and then browse the web (completely separately from their Facebook activities) Facebook knows what sites they are visiting (Marr, LinkedIn, 2013), (Acohido, 2011).

Researchers have also explored uses of social sites in organizational context. A report published in August 2010 by My Job Group ('Social media in the workplace') and based on a survey of 1,000 respondents, sought to paint a picture of the use of social networking sites in the UK and how it is affecting workplace productivity. In terms of time spent on social media sites, 55 per cent of respondents admitted accessing these sites while at work. A total of 16 per cent of respondents spent over 30 minutes and six per cent spent an hour or more per day (though there may also be an element of self-reporting bias). The survey also asked participants how they thought that social networking sites had affected their productivity at work. Over half (around 55 per cent) said that they were just as productive as before, with 11 per cent saying that they were less productive. The survey notes that respondents may simply be substituting their use of social media sites for the activities they were engaged in previously, such as emailing, telephoning and sending SMS messages from their mobile phones (texting).

However, some small-scale survey evidence shows that among higher skilled workers, only slightly fewer than 15 per cent have access to social networking sites at work. This may indicate that employers are prohibiting use of such internet sites to avoid having to manage any negative consequences. However, in some of the high-profile cases of unfair dismissals for what employers believe is inappropriate use of social networking sites, the location of the employee when posting comments is immaterial. This potentially means that any employers who believe they have protected themselves through a blanket ban on use of social media through company IT systems may be misguided. This also means that employers who do not provide IT access to some staff or do not have IT in their workplaces cannot afford to ignore the issue (My Job Group, 2010).

On the above background I would like to propose following objectives of the study.

OBJECTIVES OF THE STUDY

- To design, develop and standardize the questionnaire to measure the impact of social networking sites on the personal and professional life of the people.
- To identify the underlying factors that might have an impact of social networking sites on the personal and professional life of the people.
- To evaluate benefits and problems of social site users on their personal life

RESEARCH METHODOLOGY

The Study

The study was exploratory in nature survey method is being used to complete the study.

Sample Design

- **Population**
  Users of Social site in National Capital Region of India
- **Sample size**
  A sample of 100 social site users
- **Sample Element**
  Sample Element was individual social site user
- **Sample Technique**
  Convenient sampling method was used for collection of data .

Tools for Data Collection

Data was collected with Self –Designed Questionnaire, Five point Likert type scale was used, where 1 shows minimum agreement and 5 shows maximum agreement with the statement.

Tools for data analysis

- **Item to Total Correlation:** Item to Total Correlation was applied to measure internal consistency of questionnaire.
- **Reliability Test:** Reliability Test was applied to check the reliability of the questionnaire.
- **Factor Analysis:** Factor Analysis was conducted to identify the underlying factor.

RESULT AND DISCUSSION

Internal Consistency Test

Consistency of the questionnaire was checked through item to total correlation. Under this correlation of every item with total was measured and the computed value was compared with the standard value (i.e. 0.1942). Out of 17 statements, 2 statements were found to be inconsistent and dropped from the questionnaire.

Table-1: Showing Results of Internal Consistency

Sl. No.	Statement	Correlation Value	Consistency	Accepted/Dropped
1	Browsing for information	0.400088207	Consistent	Accepted
2	FUN, Time pass	0.497873149	Consistent	Accepted
3	Socializing	0.321944799	Consistent	Accepted
4	Consulting	0.472694688	Consistent	Accepted
5	Share my experience	0.479707721	Consistent	Accepted
6	Time management	0.152562742	Inconsistent	Dropped
7	Due to social site activity I ignore my responsibility	0.318947744	Consistent	Accepted
8	My behavior is Changed	0.205105161	Consistent	Accepted
9	Fear of antisocial element	0.166974935	Inconsistent	Dropped
10	I do constructive work on social sites	0.258630645	Consistent	Accepted
11	I feel my study is affected	0.582938971	Consistent	Accepted
12	Networking	0.549113735	Consistent	Accepted
13	Enjoyment	0.576191918	Consistent	Accepted
14	Creating lead for business	0.481648715	Consistent	Accepted
15	I lost privacy due to use of social sites	0.418907512	Consistent	Accepted
16	Security problems	0.478941347	Consistent	Accepted
17	Face-To-Face Isolation	0.343384206	Consistent	Accepted

Reliability Test

Reliability test was carried out using SPSS software and the reliability test measure is given below:

Reliability Statistics

Cranach's Alpha	N of Items
.686	16

It is considered that the reliability value more than 0.6 is good and it can be seen that the reliability value of Cranach's Alpha was found higher than the standard value.

Factor Analysis

Principle component factor analysis with Varimax rotation was applied. The factor analysis resulted in 5 factors for the impact of social networking .The details about factors, the factor name, variable number and convergence and their Eigen value are given

Table-2: Showing Results of Factor Analysis

Sl No.	Factor Name	Total	% of variance	Variable	Loading
1	Information	3.131	19.569	I feel my study is affected	0.652
				Socializing	0.607
				Browsing for information	0.598
				Fun,Timepass	0.572
				I lost privacy due to use of social sites	0.544
2	Business	2.042	12.765	Creating lead for business	0.774
				Enjoyment	0.732
3	Opinion	1.52	9.503	Due to social site activities I ignore responsibility	0.764
				Security problem	0.661
				Consulting	0.454
4	Networking	1.288	8.049	I do constructive work	0.734
				Networking	0.528
				Share my experience	0.517
5	Attitude	1.086	6.785	My behavior has changed	0.765
				Face to face isolation	0.435

CONCLUSION

The study is has developed a scale for impact of social networking on personal life. Socializing was the most important factor for using social sites but in return they agreed that their study has been affected and they risk their privacy. The study suggests that young generation should use social sites in such a way that it does not affect their study and while posting any photo or update they should be careful that it can't be misused. The study also suggested that business organization uses social sites for finding leads or search customers. Last but not least study suggested that they feel physical isolation and change in behavior due to use of social sites. We must be very clear that joy of meeting people physically cannot be replaced by social site updates.

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LEADING IN MALNUTRITION: A CASE OF MADHYA PRADESH IN INDIA

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ABSTRACT

This paper is an outline of the status of malnutrition in Madhya Pradesh with a scholastic view. It summarizes various empirical evidences encountered by the author's interaction with the grass root level activist to find out the causes of malnutrition in the state of Madhya Pradesh, with the help of certain incidental facts and figures. It brings out the fact that there is an integrated failure of the system, and hence offers a conceptual model of integrated approach in coordinated with all the government as well as non government machinery to combat malnutrition.

***Key words**: Malnutrition, hunger index, nutrition.*

INTRODUCTION

The dotted mud houses in Shahadole are pitch dark at night, the children in the village with lean limbs, swollen bellies and dirt all over them, are a perfect picture of malnutrition and the disastrous condition that exists in the village. They do not have enough food to keep them alive, let alone the fact that they have never ever seen the gates of school. The lesson that these children learn from childhood is, how to survive on a liquid made from a mixture of 8 liters of water in 1 kg of rice, for long periods.

Also, Shyamlal, who lives in Mahalwari village in Khalwa, has a shocking saga of starvation and debt to reveal. Four of his children are severely malnourished and he is not in a position to provide food or medicines to them. In order to save his children from the clutches of death, Shyamlal borrowed some grain from a moneylender in his village and because there was no medical facility available in his village he also borrowed Rs.800 to take his children to private doctor. Never the less after all this his children and now he is heavily indebted to the moneylender to whom he has to pay Rs.800 plus double the amount of grain he borrowed ("A sad picture of chronic hunger and unaccountable system", A Malnutrition Report prepared by, Right to Food Campaign Madhya Pradesh Support Group and Vikas Samvad, 2010)

"Welcome to: India, Towards Global Leadership in Malnutrition"

Today, the number of hungry people has, for the first time in history surpassed the one billion mark and now stands at 1.02 billion. Not only will the goal of the 1996 World Food Summit of halving the number of hungry people by 2015 not be reached, but more alarming is the fact that, the number of hungry people is increasing by about 4 million every year. It would be quite excruciating to know the fact that India contributes and is leading alarmingly in this global syndrome.

In India, around 43% of its children under the age of 5 are malnourished or under-nourished.

Malnutrition is more common in India than anywhere else in the world. It is estimated that one in every three malnourished child (approx. 33% of total malnourished children) in the world lives in India. India's Global Hunger Index (GHI) 2008 score is 23.7, which gives it a rank of 66th out of 88 countries. India has consistently ranked poorly on the GHI. The severity of the situation can be analysed by the fact that in terms of GHI even Bangladesh lies below India.This score indicates the continued poor performance at reducing hunger in India. (Table 1 & 2)

The India State Hunger Index (ISHI) 2008 was constructed in a similar fashion as the GHI 2008 to allow for comparisons of states within India and for comparison of Indian states to GHI 2008 scores and ranks for other countries. The India State Hunger Index (ISHI 2008) score was estimated for 17 major states in India, covering more than 95 percent of the population of India (Table 2). In India, malnutrition however varies in different states from 13%- 55% from Meghalaya to Madhya Pradesh. In terms of the states in India, Madhya Pradesh is in extremely alarming situation with the highest percentage of malnourished children below the age of five.

Madhya Pradesh is India's flag bearer in malnutrition. It carries India's highest malnutrition burden, with 60% of its children under the age of five who are malnourished, and approximately 6 million children whose future is at risk. Madhya Pradesh (MP) with a total population of 60 million is one of the poorest states in India with over 37% of its total population living below the poverty line. Scheduled Castes (SCs) and Scheduled Tribes (STs),

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two of the most marginalised groups, constitute 35% of the population and account for 60% of the poor. The paper therefore delineates the case of Malnutrition in the state of Madhya Pradesh in India and discusses a concept model for identifying the key areas of improvement and integration of various efforts in dealing with the situation.

DESCRIBING MALNUTRITION

To describe "Malnutrition", as per the American Dietetic Association, "is a failure to achieve proper nutrient requirements, which can impair physical and/ or mental health. It may result from consuming too little food or a shortage or imbalance of key nutrients." The definition of the malnutrition accentuates the requirement of proper nutrition for the child for his/her growth. The growth is not only for the physical but also for the mental health of the child. The vicious cycle of the malnutrition is linked with poverty, poor health and over all low productivity of the people. The reasons of malnutrition can be traced as low availability of food/nutrient items due to unawareness of the masses, poor health facility, early and child marriage, improper guidance to the mother and a malnourished mother who is unable to supplement enough colostrums which is essentially required for the growth and development of the child. The cycle of the malnutrition is vicious and is generated out of the poverty; contributing to the poor nourishment which results in poor health of the manpower in the country (Fig 1). The problem is highly aggravated with the various social evils such as early marriage, malpractices, criminal incidences etc. Also Early marriage in adolescent girls, who are malnourished themselves and have not, yet attained physical and mental maturity, leads to early pregnancy and birth of undernourished children.

The conceptual framework of the cause of malnutrition was developed by UNICEF in 1990's as a part of UNICEF nutrition strategy in the document *Strategy for Improved Nutrition of Children and Women in Developing Countries.* The two manifestations for the strategy has been the child death due to malnutrition which is the result of low/improper intake of the child as well as the mother. The malnutrition leads to either the non survival of the mother or the infant below the age of five years or both. It is also the immediate cause of diseases of pre-natal, natal or post natal period. The unavailability of the nutrition to the mother and the child results in the inability to fight the disease. UNICEF document *Strategy for Improved Nutrition of Children and Women in Developing Countries* examined the causes of this outcome (Fig2). If seen may find a direct relationship of the diseases with the low availability of minimum food requirement in the region for the mother and the child itself. A poorly nourished mother cannot provide for enough colostrums for the child; nevertheless her own survival is at stake. The poor food infrastructure support is supplemented by the miserable health infrastructure which may provide

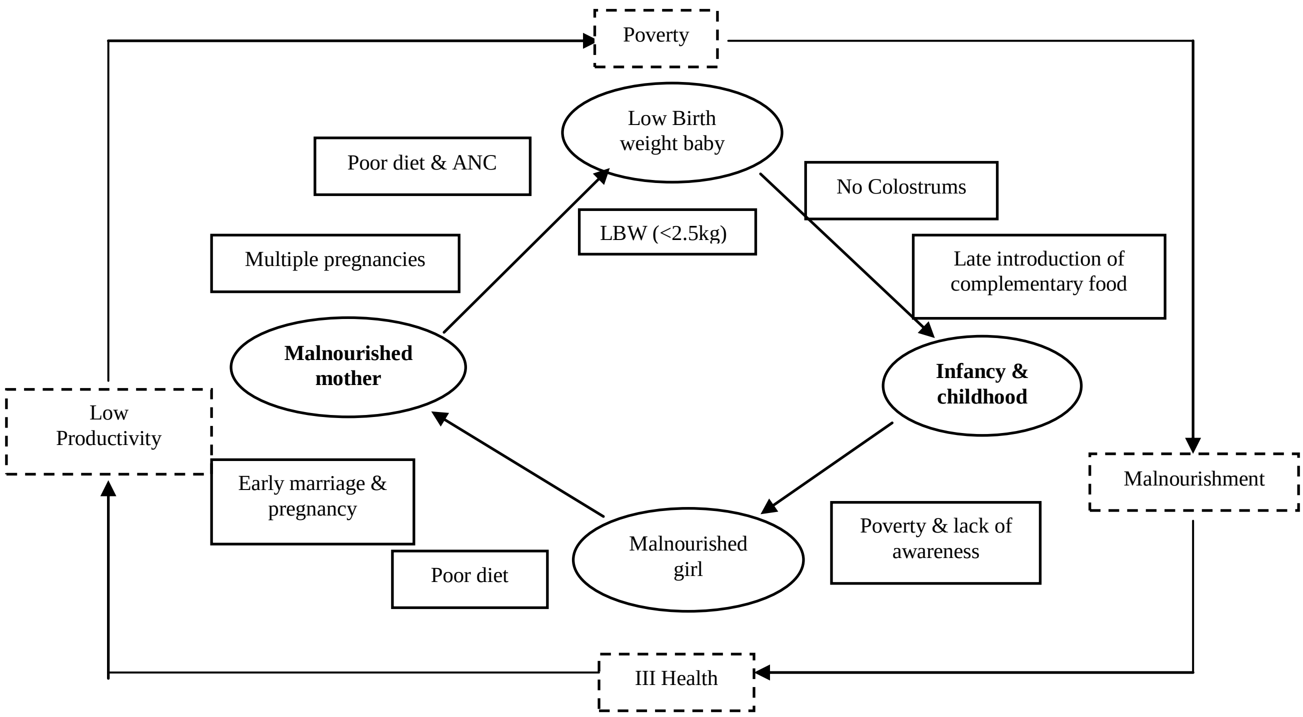

Fig 1. Cycle of Malnutrition

for the basic amenities of health services and maternal care.

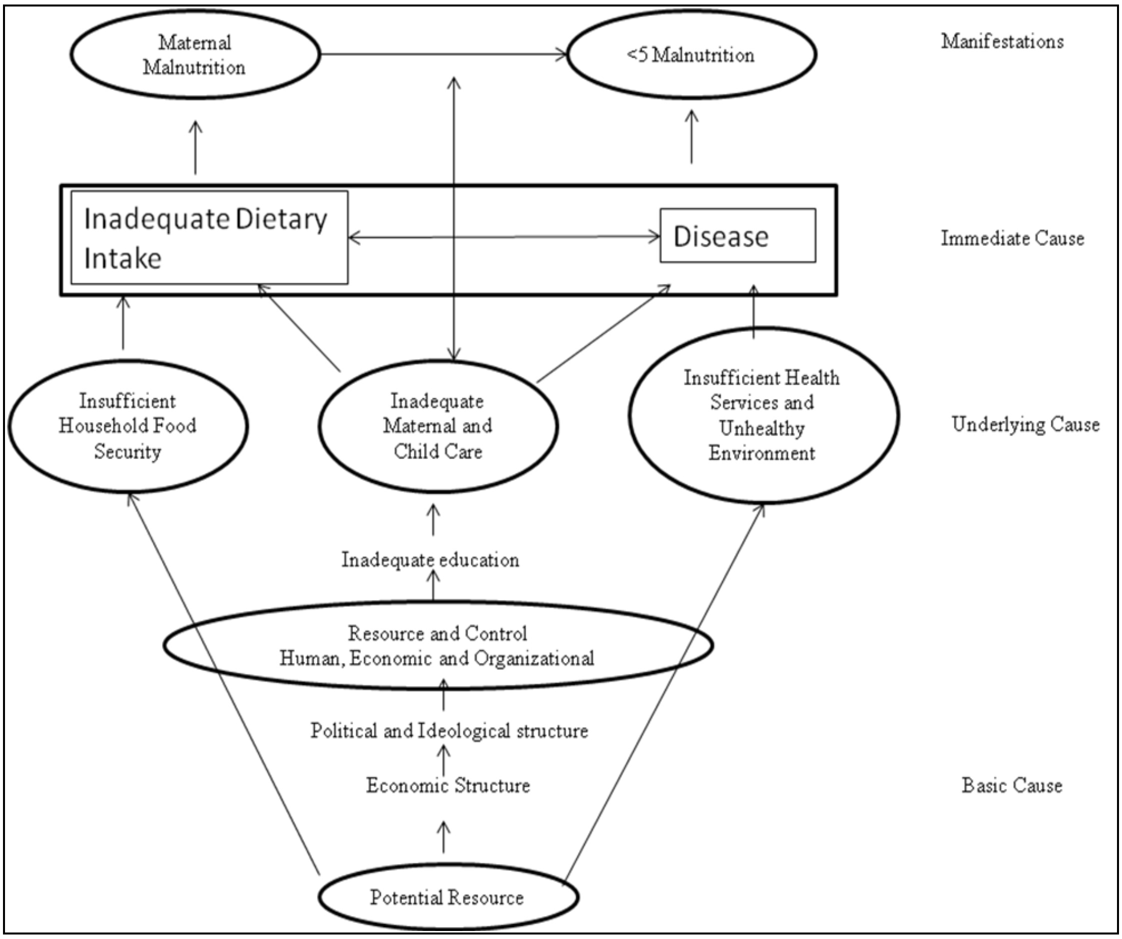

Figure 2 Causes of Malnutrition

Source: UNICEF Document (1990); *Strategy for Improved Nutrition of Children and Women in Developing Countries*

It may be said that the manifestations are an outcome of multilateral under development that may be attributed as the basic causes. The role of formal and the non formal institutions, that include political and ideological superstructure, economic structure and potential resources are important constituents. Although more refined versions of this framework have since been developed, (e.g., adding female education just below the underlying causes and distinguishing human, economic and organizational resources), all of them contain the basic elements which are the root causes in the larger development problem. These issues may be related to the socio-cultural context of the state as well as the geographically heterogeneous states. For instance, food secure households may still contain malnourished children because the burden of women's agricultural and other work (as well as other factors such as inadequate caretaker knowledge) may compromise the quality of child care. Moreover, efforts to *increase* household food security may increase or decrease child (and maternal) malnutrition, depending upon how this is achieved. Similar contingencies exist between Care and Health. If this has been widely appreciated and taken seriously, one would expect to see a strong focus on women's time allocation, household division of labor and community child care arrangements in a wide range of sectoral development work (e.g., agriculture, rural development, income generation, workforce preparation, etc.). Also the basic reason may be the constituent of the emphasis on understanding the causes which reflects a view that the perception of the problem by actors at any level of society has a major influence on which actions are deemed relevant and how resources are deployed.

The UNICEF strategy suggests that an analysis of the *basic causes* may be undertaken, specifically the human, economic and organizational resources potentially available at each level (household through international) and how these resources are controlled at each level (formal and non-formal institutions, political and ideological superstructure and power). The strategy suggests that the analysis of these basic causes should begin at the household/community levels in relation to the relevant causes in a given setting and only proceed to higher levels when the necessary resources cannot be mobilized at the lower levels. Analysis of these basic causes is to be accompanied by essentially political actions such as awareness-raising, advocacy, cultivation of strategic allies and other actions to build political commitment and re-direct resources in appropriate ways. However in context to the heterogeneous construction of the social and geographical system despite scheme initiative of the national and state agencies their is a significant gap and systematic attention in training, and intrinsically this becomes the most difficult aspect to operationalize any strategy to combat the malnutrition, which becomes very explicit in the case of Madhya Pradesh, India.

STATUS OF MALNUTRITION IN MADHYA PRADESH INDIA AND BASIC CAUSE

The two real stories stated in the beginning of the paper describe the ground level reality of the undernourished families and state of affairs in the state of Madhya Pradesh. The published national statistics (National Family Health Survey (NFHS 3) indicates that MP had the highest rates of under nourished children under 3 years (60%) in the country. (Report Vikas Samvad 2010) The poor quality and low funding of the public health system has resulted in the growth of an unregulated and poor quality private sector. For poor households, use of the private sector has led to high out-of pocket expenditures (often pushing people further into poverty). The score India's Global Hunger Index 2008 score of 23.7 places it in the "alarming" category and Madhya Pradesh thus with a score of 30.87 falls into the category of extremely alarming case of malnutrition. (Table 3)

On survey and exploration of different literature it was found that various districts like Satna, Badwani, Chatterpur, some tribes and villages like Majhgava, Dachera, Hardua, Suapahari, Ramnagar-Khukhla and Nakjher are seriously affected by malnutrition. (Refer Table 5) Most of the adhivasies of Tikamgarh in Madhya Pradesh are dependent on the wild sarnai grass which is their traditional food for survival. Apparently the intake of the grass extinguishes the hunger feeling but gives rise to diseases which ultimately leads to death. In addition, the people of Jatashankar village of Chatarpur district are also depended on wild grass. The children in this village go to school not to study, but to drink water from the drain running through school.

It was very pathetic to find that most of the people in these districts earn their livelihood either from selling the forest product or sometime from the National Rural Employment Guarantee Scheme (NREGA), but NREGA schemes do not offer job opportunities to all and even if some people get jobs through NREGA, they are not timely paid for that. Most of the people complain that the panchayat heads i.e., Sarpanch are not helpful, they keep their job cards with them and do not provide them with adequate and timely payments. Even in most of the cases villagers do not have job cards. As reported panchayat members are hand in glove with govt. officials in swindling the money allocated under NREGA scheme by government of India. People don't have their own land for farming; they live in mud- houses.

Malnourishment and starvation has taken its toll twice on Subash Bheel (a resident of Hingua village, in Badwani district in Madhya Pradesh) who lost 2 of his children (Rakesh and Gaurav) in a period of two months. Subhash is a landless tribal with no means of livelihood. In the year 2010, the panchayat could provide work for only two days and each day's work fetched a meagre amount of Rs 20. Subhash's family consists of 9 members to be fed with barely, ½ a kg of flour (Atta) at his house in a day. Under such deplorable conditions, a helpless and hopeless Subhash said that, he could not even provide medical facility to his dying children. The lives of three more innocent children of this village, had been laid down at the altar of malnutrition and food insecurity.

THE MADHYA PRADESH GOVERNMENT INITIATIVES AND THE REALITY OF INITIATIVES

Due to the daily deteriorating condition, the state government has initiated the following programs to get a hold on to the prevailing situation. The alarming rate of malnutrition in Madhya Pradesh has always kept the government on the scanner. A number of programmes have been chalked out by the state to wash out the problem of malnutrition, but it is found that they are all undertaken by the state only for name sake, since the results are not reflective of the magnitude of the efforts claimed by the state agencies. Some of the efforts and schemes of the Government of Madhya Pradesh are as mentioned ahead.

INTEGRATED CHILD DEVELOPMENT SCHEME MADHYA PRADESH

The integrated child development scheme has been one of the major initiatives supported by the state government. It aims at reaching poorest and the unsupported remote areas of the state with a large network of Anganwadi centres. Along with providing the nutrition services anganwadi centers (AWC) aim at providing: Pre-school education, Health check-ups, Immunization, Referral services, Growth monitoring, Health and nutrition education.

Each Anganwadi centre is scheduled to be opened in every village based upon the strength of village which has an appropriate space of accommodating 40-80 children in properly ventilated rooms. The centre must have appropriate drinking water facility as well as separate toilets for male and female with soap, towel and mirror in it. The centre is provided with enough utensils where the nutritious food can be prepared for all children in a separate room. Each child up to 6 years of age is entitled to get 300 calories and 8-10 grams of protein, each adolescent girl to get 500 calories and 20-25 grams of proteins, each pregnant woman and each nursing mother to get 500 calories & 20-25 grams of protein, each malnourished child to get 600 calories and 16-20 grams of protein. Also the centers are entitled to prepare charts for education and indication of the conditions of malnutrition. The Anganwadi's are provided weighing machines to properly record the weight of young girls, pregnant women and all children. Suitable vitamin, iron and stomach infection tablets are available with the centre's and are to be distributed to all the needful.

Despite the commitments made by the government the actual facts show an entirely different picture. To take care of the health of children and to provide them the benefits of Integrated Child Development Scheme, an Aganwadi Centre was established in the Gaildubba village of Patalkot valley in 2007. District administration took an initiative to establish AWC in remote area. But, the AWC of Gaildubba is now converted into a Guest House for government authorities. The villagers are yet fighting for converting the guest house turned AWC back into AWC for children.

NUTRITION REHABILITATION CENTRE'S MADHYA PRADESH

Malnourished children are referred by Anganwadi workers to Nutrition Rehabilitation centres in order to rehabilitate the nutrition condition in children. The centre works on the guidelines of IAP where a malnourished child is kept for 14 days under the daily observation of a child specialist. The centre records all the information regarding the child including the status of health nutrition as well as socio economic conditions and accordingly the child is categorized on the basis of the age, height and weight. The centres are facilitated by the health department where a child is supposed to be completely rehabilitated and provided with best health care.

THE CASE MENTIONED BELOW SHOWS THE REAL GOVERNMENT EFFORTS TOWARDS IMPLEMENTATION OF NUTRITION REHABILITATION CENTRE SCHEME

Although the four districts namely, Satna, Khandwa, Sheopur and Shivpuri where deaths of 325 malnourished children have been reported between May to September 2008, the number of malnourished children admitted in the NRC centers is either nil or negligible. On 30th Sept 2009 in Jawa block of Rewa district 36 tribal children of Kol community from 22 villages were brought to Nutrition Rehabilitation Centre, Jawa for admission but only 10 children could be admitted in NRC and remaining 26 were sent back. Now, these children may survive or die! Government has not taken any responsibility. While National Family Health Survey loudly discloses the situation of the State, it is noticed that there is a lack of coordination among the two departments. Taking children to NRC is the responsibility of Department of Women and Child development and operationalization of NRC is the responsibility of Health Department. If too many children are admitted to NRC it will prove that there is malnutrition, thus the better strategy would not to take the o children to NRC and leave them to die, because if the child dies in NRC Government cannot deny the death due to malnutrition.

PUBLIC DISTRIBUTION SYSTEM MADHYA PRADESH

Another effort by the state government in order to fight malnutrition is by providing appropriate food grains to all the people through its Public Distribution System. Under this scheme a family living below poverty line with a blue card as well as Annaodaya card holders is entitled with 35 kgs of ration. The Chief Ministers ambitious Annapura Yojana where all the poor people need to get appropriate ration below the ration rates is also implemented through Public Distribution System.

But the case below speaks about the truth of government initiatives. Sivram, a landless wage earner from village Medhapani lost his 18 months old daughter, Shivani. He did not possess a ration card and hence was forced to borrow 1000 rupees recently to buy grains but was failed to save his child.

MID DAY MEAL SCHEME MADHYA PRADESH

In Mid-Day Meal Scheme every child in every Government and Government aided Primary Schools is provided with a prepared mid day meal containing a minimum content of 300 calories and 8-12 grams of protein daily in schools for a minimum of 200 days. If the government is providing dry rations instead of cooked meals then within a time period of three months it should not providing cooked meals in all government and government aided Primary Schools in all or at least half the Districts of the State (in order of poverty) and must within next three months extend the provision of cooked meals to the remaining parts of the State.

The Food Corporation of India ensures that fair average quality grain for the Scheme is available on time. The State and the Food Corporation of India both do joint inspection of food grains. If the food grain is found, on joint inspection, not to be of fair average quality, then it will be replaced by the Food Corporation of India prior to lifting.

The case mentioned below speaks a different story. "The main problem is that whatever the state provides under schemes to curb malnutrition can only be supplementary nutrition, whether it is through ICDS (the Integrated Child Development Scheme) or mid-day meals. It is hard to tackle malnutrition if non-availability of food and livelihood is the problem," says Director of Women and Child Welfare Department (WCD) Kalpana Shrivastava.

EMPLOYMENT GUARANTEE SCHEME MADHYA PRADESH

This scheme provides employment to all the young people of the state so that there is an integrated development of village with the employment of the local poor people for at least 100 days a year at the minimum wage rate. Labor Security cards are also issued under this scheme to provide employment security to the laborers.

If the government policy has been implemented properly then why is unemployment still prevailing in these areas? Malnourishment and starvation has taken its toll twice on Subash Bheel (a resident of Hingua village, in Badwani district in Madhya Pradesh) who lost 2 of his children (Rakesh and Gaurav) in the last two months. Subhash is a landless tribal with no means of livelihood. This year, the panchayat could provide work for only two days and each day's work fetches a meager amount of Rs 20. Subhash's family consists of 9 members to be fed with barely, ½ a kg of flour (Atta) at his house. Under such deplorable conditions, a helpless and hopeless Subhash says that, he could not even provide medical facility to his dying children.

DEENDAYAL ANTYODAY UPCHAR YOGANA MADHYA PRADESH

Deendayal Antyodaya Upchar Yojana was instituted on 25th September 2004. This scheme was designed for socially and economically disadvantaged people of the society for providing access to quality health care to the needy people like SC, ST and BPL families. This scheme also includes people below poverty line. Government under the scheme gives free health services up to the maximum limit of Rs. 20000 a year in government health centres. Government issues 1 family health card to families below poverty line. The card consists of the photograph of the head of the family with the details of all other family members. All the details of the health check-ups of all the members is recorded in the card.

The real picture regarding the implementation of this scheme is depicted below. Lalanman son of

Madhu Mavasi is a resident of Bhatnala Majhgava M.P. His daughter couldn't even survive one year after her birth as she was very weak at the time of her birth and moreover they could't get any support from Anganwadi . Presently he has 2 sons, they too are very weak. There financial condition is not so sound .He doesn't have any job card , ration card, Deen Dayal Antyodaya card and voter- Id card.

BAL SAJEEVNI SCHEME MADHYA PRADESH

Under Bal Sanjeevni Scheme, campaign is organized in Madhya Pradesh in two rounds every year. In the campaign, records are made of the children falling under Grade 4 and grade 3 level of malnutrition. Once data is recorded, they focus on reducing the number of children falling under these categories by 1 percent. This is done by providing medical treatment to these children, providing counselling to the parents of malnourished children by telling them the significance of nutritious food and training them to prepare nutritious diet from low-cost and locally available food material.

Here is the real picture of the implementation of the Bal Sanjeevni Scheme. If we calculate the number of children malnourished according to Bal Sanjeevni report and taking 0.92 percent as the severe malnutrition percentage in the District, the number comes to 2941, it reduces to 2546 if apply the rate of severe malnutrition as 0.80 percent. This clearly shows that the Government is directly vanishing off 395 children out of the records. This is the reality of Balsanjeevni Abhiyan the promising program to eradicate child malnutrition or eradicating Children itself? Similarly, in Khandwa district, 12th round of Balsanjeevni Abhiyan claimed malnutrition to be around 47 percent but when the grass root organizations working in the area conducted a sample survey, the figures turned out to be around 70 percent. Likewise the Government of Madhya Pradesh has been claiming that the ratio of undernourishment has come down to somewhere around 49 percent while according to NFHS III malnutrition proportion for the state of Madhya Pradesh is at 60.3 percent.

ANTYODAYA ANNA YOGANA MADHYA PRADESH

Under this scheme government provides food grains to the Antyodaya beneficiaries at affordable (low) prices. In this scheme the government issues cards to the poor people. Only card holders can claim for the food grains. Sometimes in a condition where an Antyodaya beneficiary is unable to purchase the food grains due to punery then in such cases they are provided food grains free of cost. But to provide free food grains government needs to verify the situation.

The present situation is entirely different. In Bhainsa Tola village of Damoh district, within a span of two months, 7 tribal children died due to malnutrition. The lack of availability of medical facilities in the village, adds to the difficulties of these tribals. Around 10 families here are on the verge of collapse due to starvation and they have not yet been given Antyodaya cards.

The state of Madhya Pradesh requires a thrust of understanding of the issues that are related to malnutrition. We may not find any gap in the intentions of the state as per the layout of the schemes and policy interventions. But somehow the results of the schemes do reflect the inaccuracy of the implementation of the schemes. On search of the literature and the various plans of the government the authors could not find any specific strategic campaign to combat malnutrition. There have been national level exercises such as NAREGA or ICDS supported by UNICEF but they fail due to the state level commitment of outreaching these schemes as per the discussions in above section.

CONCEPTUAL MODEL TO COMBAT MALNUTRITION IN MADHYA PRADESH

Perhaps the state has to reflect back to the framework of UNICEF as per Fig.2 and develop a core concept and level of understanding for the areas of improvement and coordination for the implementation of various schemes at local level. Fig 3 provides for a perceptive reflection of the causes of sustained malnutrition in the state of Madhya Pradesh, based on the various analyses of the schemes and their cases. The conceptual model below Fig.3 explicitly describes the cause of malnutrition in India. If one superimposes the framework of cause of malnutrition Fig2 as described by UNICEF, it will be found that the basic issues of malnutrition in the state of Madhya

Pradesh are only an outcome of inadequate alignment of state policy and schemes.

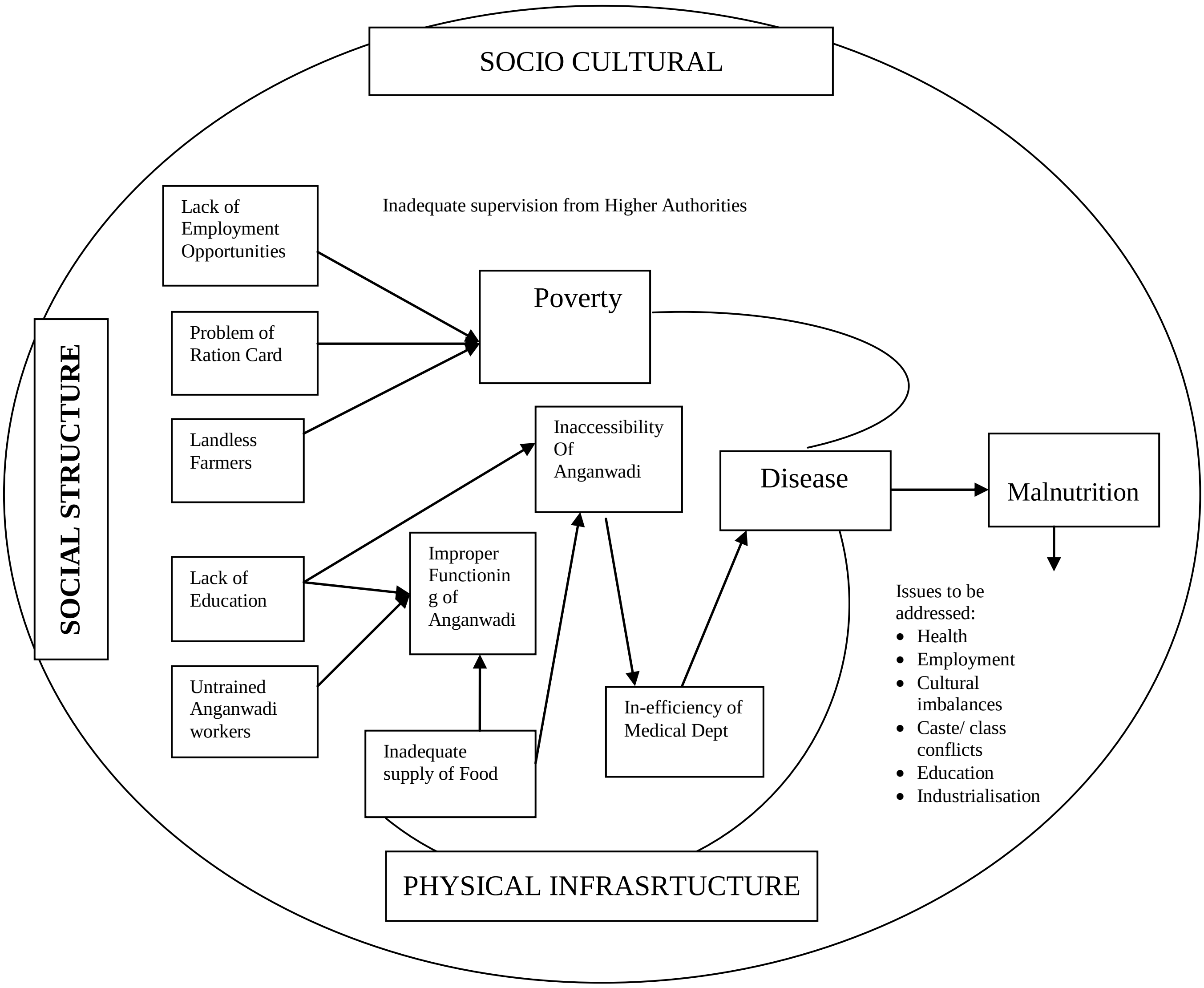

Figure 3 Conceptual Model for reference of State to Combat Malnutrition

Source: Self

The situation becomes more critical when the causes are traced back to the inadequate supervision of the higher authorities. Perhaps the state has never been vigilant in defining the key indicators of imbalances of social infrastructure, industrial infrastructure, agricultural produce as well as rise in socio-cultural heterogeneity. As per the cases above and the Fig3; malnutrition in Madhya Pradesh is a manifestation of an un-harmonized effort of the government machineries. The failure of delivering at all fronts has made the population susceptible to all the ironies of poverty, hunger and suffering. The tribals and the population are still trying to believe and have pride in being the part of the largest state of the biggest democracy. Though India has been dubbed as a welfare state, little is done for the welfare of the poor, as is evident from the situation of the state of Madhya Pradesh. The state spends fortunes on trifle and inane things, but it seems very little responsible for the ever increasing deaths occurring due to malnutrition. It has been aptly said that, hunger is now considered as a curse which some in the society have to live with, though actually, it is the reflection of our misplaced emphasis towards growth for a few. If we go by the data provided by the Government of Madhya Pradesh, about 57 lakhs of children in Madhya Pradesh are malnourished. Government seems to be having its siesta and still claiming to achieve Millennium Goals. It means that government wishes to watch dreams but there are no ground schemes to make them a reality. The state of Madhya Pradesh though claims to have strategies to contain the situation but perhaps the issues are related to the operationalization of these strategies. The harmonization of the efforts of government is some of the major concerns along with the prioritization of the goals along with adequate supervision.

If the Government does not initiate talks on child health today, the future of the State is likely to deteriorate. A billion people are hungry because they do not have the means to produce food for themselves or purchase it. The majority of these hungry people are rural small-scale food providers, workers and their families, who are unable to grow sufficient food or earn enough income from their production and labour to meet their food and health needs. Hunger and malnutrition are chronic structural problems and worsening in the wake of the food price, financial, energy and climatic crises. The food price crisis has hit particularly hard. Those who depend on markets are affected by global prices for their access to food. Not only have most governments and international institutions failed to reduce hunger and poverty and build on the findings of international processes designed to find ways forward but they have, instead, adopted and implemented policies that have exacerbated the problems. There is an urgent need to change the power and economic structures and policies that have caused the current crises. No sincere efforts are being made by the State for remedy of malnutrition. 82% percent tribal children in the State are suffering from anaemia – as per the report of Prashant Kumar Dubey. The state has been clearly indifferent in dealing with the situation. Starvation deaths are a shame for a country hoping for an 8% GDP growth and a respectable place in the international community.

Therefore, guaranteed employment days under NREGA need to be increased so that people can get better job opportunities. The state should focus on the working of the panchayat heads i.e., Sarpanch, whom most of the villagers complain of not being helpful, and that they keep their job cards with them and do not provide adequate and timely payments.

The performance of the public health delivery system in MP faces several constraints: vacancies of staff and infrastructural gaps, particularly in the poorest 10 districts and tribal areas; lack of drugs and other essential supplies at local levels; weak implementation and monitoring systems; poor accountability of staff and low staff motivation and management capacity. Poor quality and low funding of the public health system has resulted in the growth of an unregulated and poor quality private sector. The state of Madhya Pradesh needs to give emphasis on the day to day decline of the ration quota for the people of below poverty line. Farmers should not be forced to grow crops as in the case that the traditional cultivation of Kodo and Kutki has been replaced by soyabean, cotton and hybrid food crops in many districts which has its impact on the growing food insecurity and deteriorating health of tribes of the people living there. Also at present PDS card holders are receiving only 20 kg of ration instead of 35 kg. This amount is inadequate to meet the average food requirement of a household. There must be increase in this amount so as to ensure their minimum food rights.

The Anganwadi centres require of basic facilities like growth monitoring charts, growth registers, playing kits, utensils and medicine kits, facility of safe drinking water, proper toilets and proper space for cooking food. Moreover Anganwadi workers also need to be responsible for maintaining all this. Anganwadi centers do not have adequate weighing scales; these equipments should be made available immediately. Each and every Anganwadi Centre needs to provide hot cooked meal based on locally produced and procured food grain. Community involvement should be ensured in procurement of grain along with its monitoring.

The dismal functioning of Nutritional Rehabilitation Centre (NRC) has been a glaring example of negligence and inefficiency. Apart from this, there is a complete lack of coordination amongst Health Department, Women and Child Dept., ICDS, Anganwadi centre, Panchayati Raj Institutions and Social Welfare department. There is a need of proper coordination amongst these departments in addition to fixed accountability.

The state needs to ascertain the key areas of focus and develop a synchronized campaign with short term targets across the districts. The areas of focus are health, education, employment and reduction in caste and class conflicts. They need to be addressed and a technology based indicator of the performances of these areas may be developed. However the model above signifies limitations of the state machinery towards combating malnutrition. As it is the integrated failure of the system, therefore an integrated approach needs to be developed where the focus for addressing the malnutrition has to be a coordinated effort of all the government as well as non government machinery. In short we can conceptualize a public private venture for addressing the issue, the possibilities of which need to be explored.

CONCLUSION

Madhya Pradesh is the largest state (in terms of size) of one of the largest democracies of the world. The state has large varieties of tribal areas as well as the population that is below the poverty line. The dismal state of the poverty and the health is evident across all the reports as well as the evidences across the state. Whether it is district of Satna or Khandwa or Morena or Chatterpur, all are significantly ailing with the issues related to malnutrition. The state has the highest maternal mortality rate; infant mortality rate as well has highest number of undernourished children. The figures are much above the average all India figures. On the contrary the institutional delivery rate of the state is highly low as compared to the other states. The cases as discussed above and the gaps in the various schemes of the government do reflect the inconsistency in the planning and the implementation of the schemes across the state. It seems that the state has to work out for a model of consistent delivery of the health, employment as well as nutritious food for the people of Madhya Pradesh. Schemes better than PDS and Anganwadi, are required in the state. More and more participation of the people from the private sector and NGO's committed for the implementation of the schemes and the solutions may be explored in the state. The key areas that need immediate attention can be summarized as education, health, employment through agricultural development as well as industrialisation. However the requirement is to develop a composite indicator in a form of an index where the performance of all the above can be translated to the final accomplishment of the goal i.e. to combat and bring down malnutrition.

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ANNEXURE I:

Table 1—GDP per capita in relation to scores on the Global Hunger Index 2008

Country	GHI 2008	GDP per capita*
Nigeria	18.4	1,977
Cameroon	18.7	2,124
Kenya	19.9	535
Sudan	20.5	2,088
India	**23.7**	**2,753**

Source: World Bank 2007&Von Grebmered al.2008.

Table 2—The Indi a State Hunger Index and its underlying components Under-five

State	Prevalence of Calorie under-nourishment(%)	Proportion of underweight among children<5(%)	Under 5 mortality Rate(Deaths per 100)	India state hunger index score	India state hunger index rank
Punjab	11.1	24.6	5.2	13.6 3	1
Kerala	28.6	22.7	1.6	17.63	2
Andhra Pradesh	19.6	32.7	6.3	19.53	3
Assam	14.6	36.4	8.5	19.83	4
Haryana	15.1	39.7	5.2	20.00	5
Tamil Nadu	29.1	30.0	3.5	20.87	6
Rajasthan	14.0	40.4	8.5	20.97	7
West Bengal	18.5	38.5	5.9	20.97	8
Uttar Pradesh	14.5	42.3	9.6	22.13	9
Maharashtra	27.0	36.7	4.7	22.80	10
Karnataka	28.1	37.6	5.5	23.73	11
Orissa	21.4	40.9	9.1	23.80	12
Gujarat	23.3	44.7	6.1	24.70	13
Chhattisgarh	23.3	47.6	9.0	26.63	14
Bihar	17.3	56.1	8.5	27.30	15
Jharkhand	19.6	57.1	9.3	28.67	16
Madhya Pradesh	23.4	59.8	9.4	30.87	17
India	20.0	42.5	7.4	23.30	

Note: The India State Hunger Index represents the index calculated using a calorie undernourishment cutoff of 1,632 kcals per person per day to allow for comparison of the India State Hunger Index with the Global Hunger Index 2008. The ISHI score for India using this cut-off is 23.3 and corresponds more closely with the GHI 2008 score for India of 23.7 than any other calorie cut-off.

Sources: Calorie undernourishment: IIPS 2007; child underweight: IIPS 2007 and authors' calculations; under-five mortality rate: NSSO 2007

Table 3—Severity of India State Hunger Index, by state

<4.9 (low)	<5.00-9.9 (moderate)	10.00-19.9 (Sever)	20.00-20.9 (Alarming)	30 or more (External Alarming)
None	None	Punjab	Haryana	Madhya Pradesh
		Kerala	Tamil Nadu	
		Andhra Pradesh	Rajasthan	
		Assam	West Bengal	
			Uttar Pradesh	
			Maharashtra	
			Karnataka	
			Orissa	
			Gujarat	
			Chhattisgarh	
			Bihar	
			Jharkhand	

Note: The categorization of states is done using the same cutoffs for severity as the Global Hunger Index 2008. India's GHI 2008 score of **23.7** places it in the "alarming" category.
Sources: Table 2 and von Grebmer et al. 2008.

Table 4: Health Outcomes: Madhya Pradesh in Comparative Perspective

	Maternal Mortality (per 100,000)	Infant Mortality (per 1,000)	% of Institutional Deliveries	Undernourished children under 3
All India	300	57	41	46
MadhyaPradesh	**379**	**70**	30	60
Maharashtra	149	38	66	40
Kerala	110	14	100	29

(Source: Right to Food Campaign Madhya Pradesh Support Group And Vikas Samvad)

Table 5: Showing malnutrition deaths in different districts in Madhya Pradesh in the past eight months of children belonging to the age group 0-6.

S.No.	District	Village	No of Deaths	Cause of Deaths	Period
1	Badwani	Hingua	5	Malnutrition	October'04
2	Chatterpur	Jatasankar	8	Malnutrition and Measles	August.'04
3	Damoh	Bhaisatola	7	Malnutrition	August'04
4	Khandwa	Saidabad Mohalkheri	8	Malnutrition	March-Sept'04
5	Morena	Maanpur,Mara, Jaderu,Khora and Dhaundha	5	Malnutrition	June–August'04
6	Shivpuri	Different parts of Shivpuri	50	Malnutrition and Measles	March–May'04

(Source: Right to Food Campaign Madhya Pradesh Support Group And Vikas Samvad)

THE FINANCIAL CRITIQUE OF BANKING BUSINESS IN INDIA

A Comparative Study of Bank of Baroda and HDFC Bank

Dr. Sandeep Goel

ABSTRACT

Banking sector is the undoubtedly a crucial sector for any economy. Therefore, keeping in view what world economy has been experiencing over the last couple of years, it becomes imperative to look into the financial soundness of banking sector. The present article aims at evaluating the financial strength of the said sector in India on a comparative basis of Bank of Baroda and HDFC Bank. These two units have been deliberately chosen to appreciate better the financial performance in a public sector bank vis-à-vis private sector bank. In addition to the relevant issues of profitability and solvency, banking specific aspects of NPAs and CASA have been specially analyzed to highlight the trade-off that exists between economic efficiency and stability in the banking system. It is observed that a competitive banking system is important to growth of the country, but market strength is necessary for stability in the banking system.

Keywords: *Banking, capital, deposits, loans, interest*

1. INTRODUCTION

The banking and financial sector in India has undergone a significant change post liberalization and specialty during the last 15 years it has evolved at a tremendous pace. Commercial banks have become more financially sound with respect to their capital adequacy, profitability, asset quality and risk management. Deregulation policy has enabled these banks to increase their revenues by diversifying into activities like investment banking, insurance, depository services, securitization, etc.

1.1 Bank of Baroda

Bank of Baroda is the sixth largest bank in India with total assets over Rs. 1,780 bn. Presently, it has as large as 46.19% of public shareholding, which is held by Retail Investors, Employees, Banks and Financial Institutions, Insurance Companies and Others.

1.2 HDFC Bank

The Housing Development Finance Corporation Limited (HDFC) was the first institution to get an approval from the Reserve Bank of India (RBI) to set up a bank in the private sector. The bank was incorporated in August 1994 in the name of 'HDFC Bank Limited', with its registered office in Mumbai.

2. REVIEW OF LITERATURE

The role of banks in an economy has been stressed upon ever since the 18th century (see for example Smith (1776), Bagehot (1873) and Schumpeter (1912, 1934)). More recent works include Rousseau and Wachtel (1998), Beck et.al. (2000) and Levine (2003). Therefore, soundness of the banking sector is undoubtedly one of the most important parameters for the growth and development of any economy. In this context, La Porta et.al. (1998, 2000) examined the legal determinants of financial development namely shareholder and creditor rights indices for 49 countries. They concluded that better protection of creditor rights has a positive and significant effect on the financial development of the banks.

The banking sector globally, particularly the retail sector has to face huge competition from various sources. Customers have become more demanding (Accenture, 2008). Banking services are seen as commodities (Onufrey & Moskowitz, 2008; Genesys, 2008). This is the reason why there is a strong focus on financial efficiency of these banks.

The financial performance of banks and other financial institutions has been measured using financial ratios, performance budgeting or a combination of these methodologies. There have been numerous studies which have analyzed the efficiency of financial institutions. Among these, (Rangan N. and Grabowski, 1988) use data envelopment analysis to analyze technical efficiency in US banking. (Aly H., and Rangan 1990) extend this analysis to contain analysis of allocative efficiency, and (Field, 1990), (Dark, 1992), (Chu-Meiliu, 2001) have also conducted some studies into banking efficiency.

Many researchers have focused too much on asset and liability management in the banking sector, some of these studies are: (Richard, B., and Moloney, J., 2003), (Ruth, F., 2001), and (Ian Canddy, 2000).

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Based on the above literature, it can be easily inferred that there is a requirement to have an in depth study in Indian banking sector because of its increasing contribution to the Indian economy, and its growing impact on the global economy. The present research paper is an attempt to analyze the financial performance of HDFC Bank and Bank of Baroda on select basis, using the financial performance indicators in the banking industry.

3. OBJECTIVE OF THE STUDY

The present article analyzes the financing performance of two leading banking companies in the sector, viz. HDFC Bank and Bank of Baroda with regard to the impact on shareholders' return.

4. METHODOLGY OF THE STUDY

4.1 Data

The main data used in the study is secondary in nature. It has been gathered from the banks' published financial statements.

4.2 Sample of the Study

- 'Purposive Sampling' has been used to choose HDFC Bank and Bank of Baroda for the present study on comparative basis.
- They come from different sectors- public vs. private which is the ultimate objective of this study, i.e. to analyze the financials on comparative basis for shareholders' return.

4.3 Period of the Study

The time period chosen for the study is 2003-04 to 2007-08; the reason being is that during this period there have been significant changes in the financial performance of the units under study. 2007-08 has been the period of global recession. Therefore, it becomes altogether relevant to reveal the short-term and long-term fluctuations and permit the valid conclusions thereof.

4.4 Tools used

- *'Ratio analysis'* has been used to analyze the financial performance of the banks on the said parameters.
- *'Correlation analysis'* has been applied for finding out the relationship between return generation and market performance of the banks under study.

5. ANALYSIS AND DISCUSSION

1. Income Growth

Following is the Total Income of Bank of Baroda and HDFC Bank, for the last five years.

Table 1

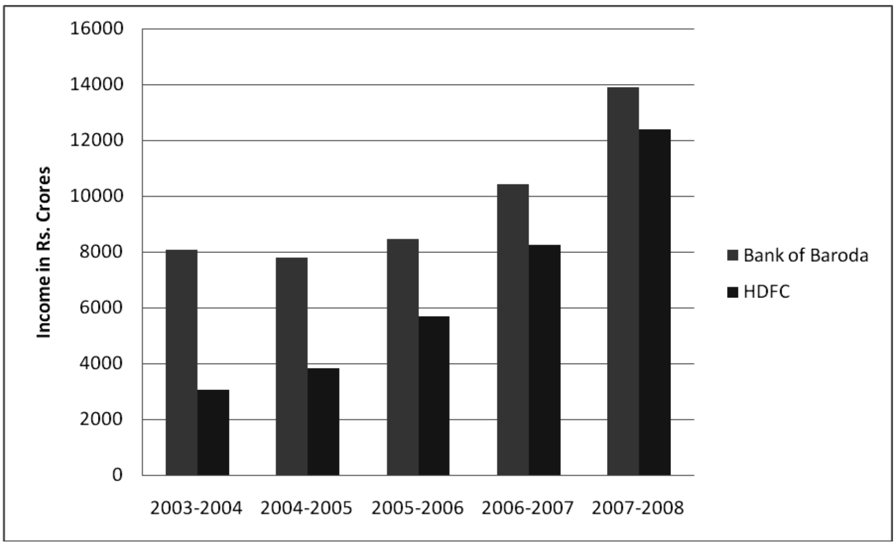
Income Performance (Rs. in cr.)

	2003-2004	2004-2005	2005-2006	2006-2007	2007-2008
Bank of Baroda	8,074.28	7,775.81	8,444	10,438.12	13,892.18
HDFC Bank	3,040.32	3,824.57	5,688.98	8,242.52	12,398.15

Source: **Compiled from Banks' Financial statements**

Figure 1

Income Trend



Both the banks have shown an increasing trend of income over the last few years, except Bank of Baroda which faced a slowdown in 2004-2005 where the total income has declined on account of decrease in other income (mainly in the gain from sale of investments).

2. *Expenditure outlay*

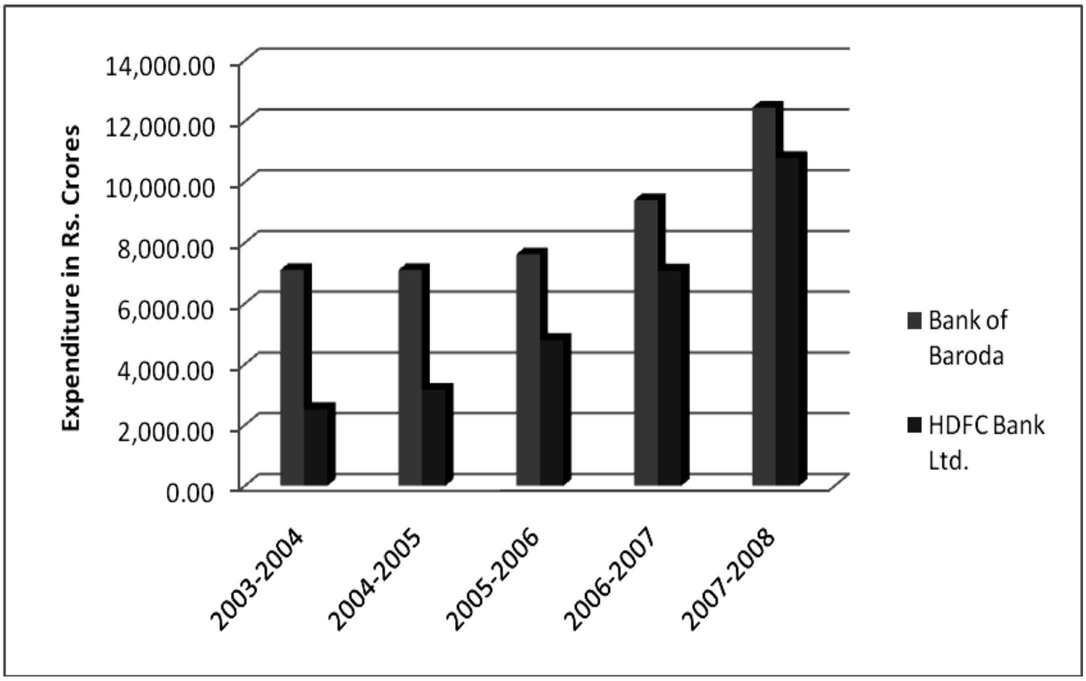
The expenditure of both Bank of Baroda and HDFC Bank has been on a continuous rise increasing during all the five years. The following table shows the expenditures in past 5 years.

Table 2
Expense Outlay (Rs. in cr.)

	2003-2004	2004-2005	2005-2006	2006-2007	2007-2008
Bank of Baroda	7,107.28	7,098.97	7,617.04	9,404.16	12,445.66
HDFC Bank	2,530.82	3,159.01	4,807.20	7,089.07	10,791.19

Source: **Compiled from Banks' Financial statements**

Figure 2
Expense Trend



The major increase in expenses is due to the increase in the interests paid by the bank to the account holders.

3. *Profitability analysis*

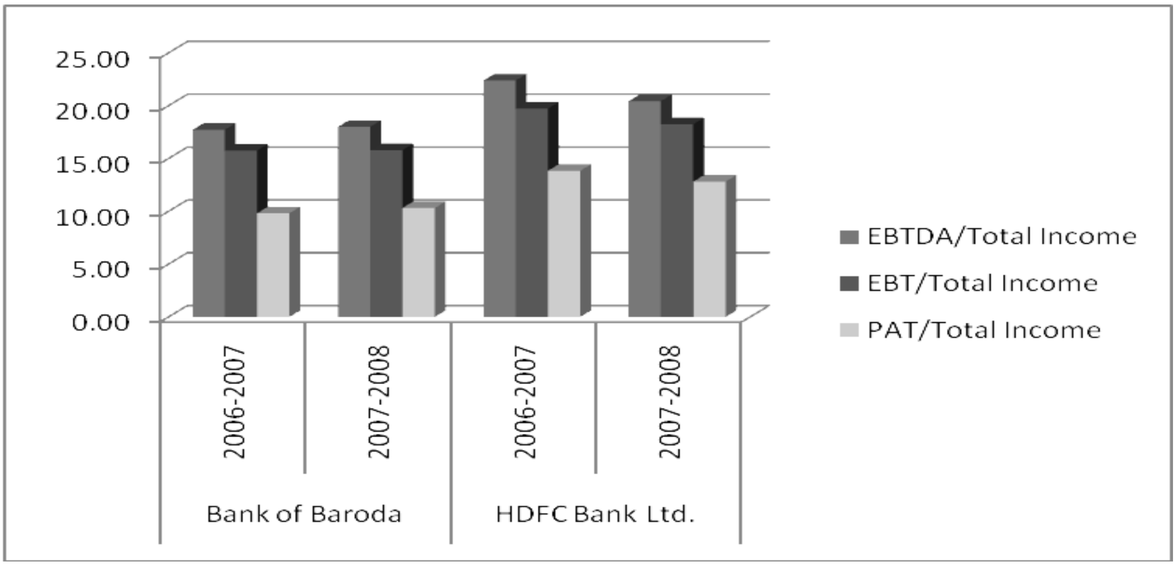
Profitability picture of the banks is analyzed as under:

Table 3
Profitability Growth

	Bank of Baroda		HDFC Bank	
	2006-2007	2007-2008	2006-2007	2007-2008
EBTDA/Total Income	17.74	18.02	22.40	20.45
EBT/Total Income	15.78	15.81	19.74	18.26
PAT/Total Income	9.83	10.33	13.85	12.83

Source: **Compiled and Computed from Banks' Financial statements**

Figure 3
Profit Trend



Though the total income of HDFC Bank has been lower than Bank of Baroda, but it's EBTDA and PAT performance has been slightly higher. The reason is that the interest paid by HDFC Bank has been lower than that of Bank of Baroda. Total deposits in Bank of Baroda are much more than that in HDFC Bank which implies that HDFC Bank manages to give more advances and loans despite lesser Deposits.

4. Return generation

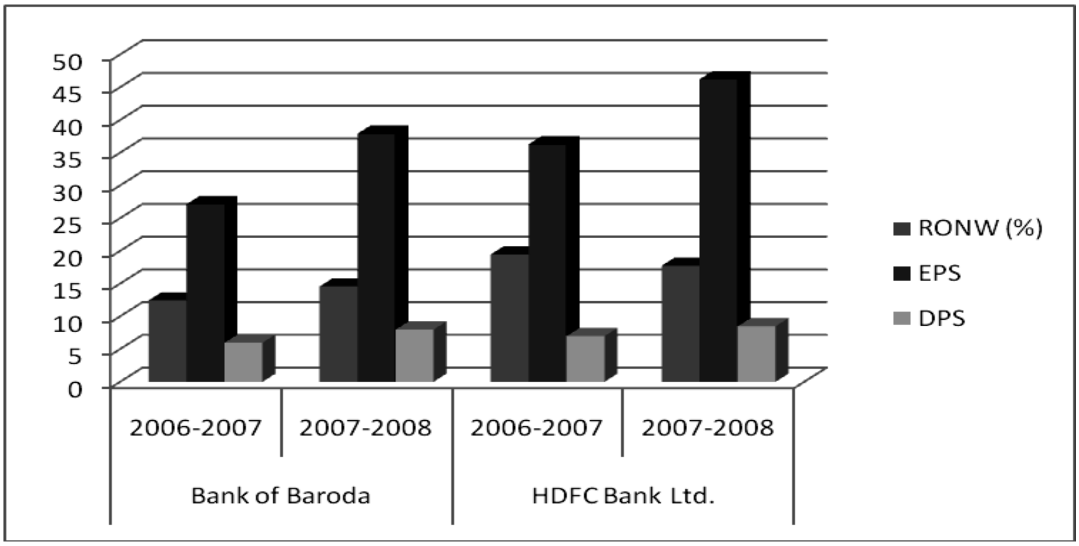
Following is the return generation by the banks under study. Return generation here has been expressed by Return on Net Worth, Earning per Share, and Dividend per Share ratios.

Table 4
Return scenario

	Bank of Baroda		HDFC Bank	
	2006-2007	**2007-2008**	**2006-2007**	**2007-2008**
RONW (%)	12.45	14.58	19.46	17.74
EPS	27.15	37.92	36.29	46.22
DPS	6.00	8.00	7.00	8.50
No. of Equity Shares	364266000	364266400	319389608	354432920

Source: **Compiled and computed from Banks' Financial statements**

Figure 4
Return Generated



Both EPS and DPS have increased for both the banks during the period except RONW which has shown a declining trend in HDFC Bank.

5. Market performance

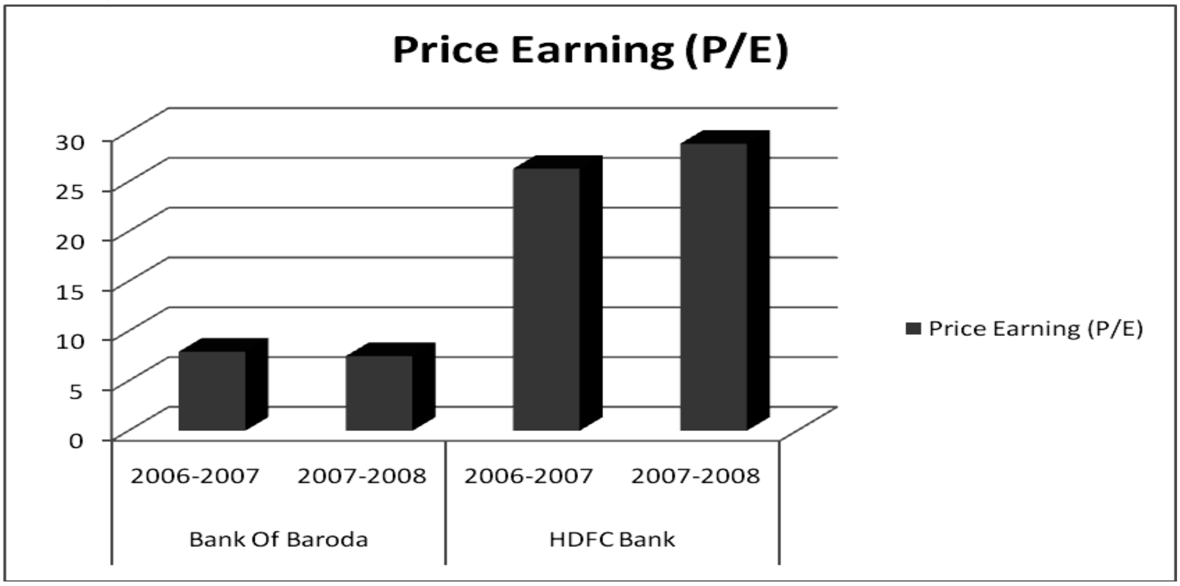
Market performance of the banks has been analyzed using P/E ratio.

Table 5
Market Scenario

	Bank of Baroda		HDFC Bank	
	2006-2007	2007-2008	2006-2007	2007-2008
Price Earning (P/E)	7.93	7.49	26.29	28.8

Source: **Compiled and computed from Banks' Financial statements**

Figure 5
Price-Earnings Ratio



The price to earnings ratio has increased for HDFC Bank as their Market price has gone up from Rs. 954.15 in last year to Rs. 1,331.25 in the present year, while the changes in the price of Bank of Baroda equity are marginal.

6. Banking performance

In this section, analysis has been done of the banks with respect to banking parameters. The relevant banking ratios and other parameters for banking sector have been given in the following Table.

Table 6
Banking Financial Highlights

	Bank of Baroda		HDFC Bank	
	2006-2007	**2007-2008**	**2006-2007**	**2007-2008**
Investment / Deposit (%)	32.05	28.46	47.51	47.29
Interest Expended / Interest Earned (%)	60.27	66.89	47.83	48.32
Interest Income / Total Funds (%)	7.02	7.32	8.06	9.01
Interest Expended / Total Funds (%)	4.23	4.9	3.86	4.35
Non Interest Income / Total Funds (%)	1.12	1.29	1.93	2.03
Net Profit / Total funds (%)	0.8	0.89	1.38	1.42

Source: **Compiled and computed from Banks' Financial statements**

The investements to deposits ratio shows how much part of deposits received by a bank is used in investing and earning interest. This ratio is higher for HDFC Bank as they are using almost half of their deposits in investing as compared to Bank of Baroda, which uses most of its deposits in giving advances.

Interest expended by interest earned shows how much interst the bank has to pay on deposits vis-à-vis how much interst bank is earning through advances and investments. This ratio is higher in Bank of baroda as they have high deposits on which they have to pay intersts. The interst income for both the banks is almost similar. The Net Profit/total Funds ratio depicts the net profit as compared to the total funds of the Bank. The ratio is higher for HDFC Bank as their PAT is more as compared to Bank of Baroda and their total funds are less.

Table 7
Deposit Position flow

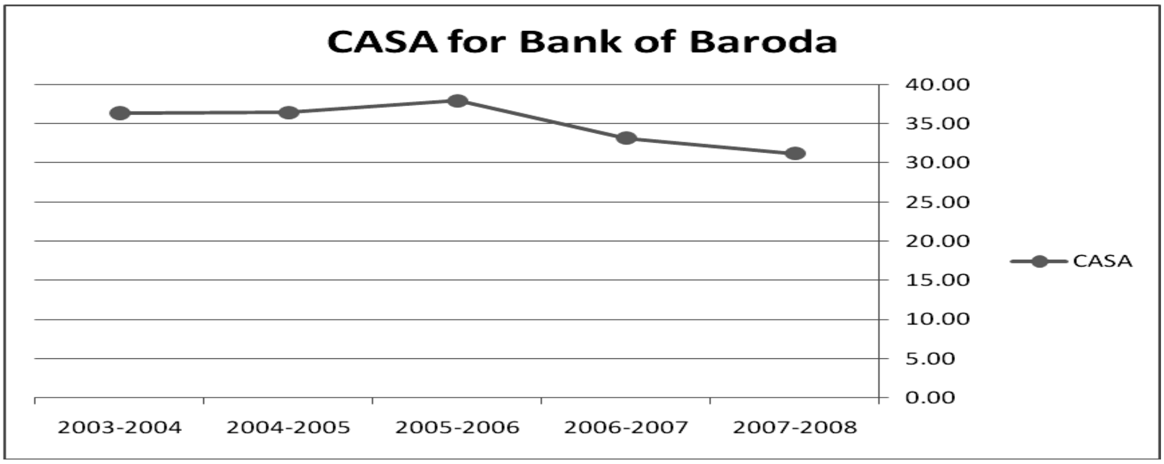
	Bank of Baroda		HDFC Bank	
	2007-2008	**2006-2007**	**2007-2008**	**2006-2007**
Demand Deposits	11,696.01	9,874.80	28,759.70	19,811.84
Savings Deposit	35,776.38	31,577.28	26,153.94	19,584.82
Term Deposits	104,561.74	83,463.90	45,854.96	28,901.28
Total Deposits	152,034.13	124,915.98	100,768.60	68,297.94

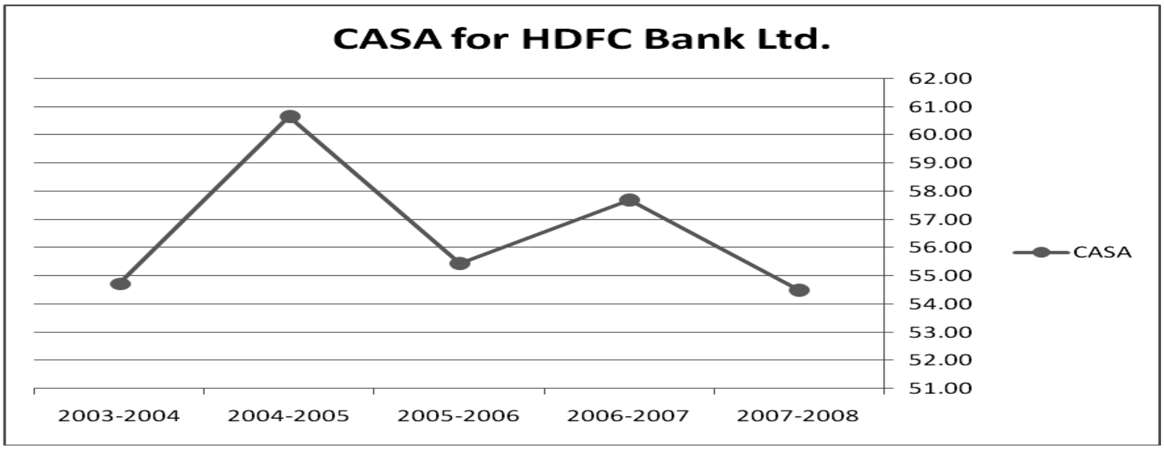
Source: **Compiled from Banks' Financial statements**

<u>CASA</u>

Deposits form a major part of the sources of funds. Here we can see that the deposits have increased for both the banks. But what we can see is that the major portion of the deposits of Bank of Baroda is term deposits, thus lowering the CASA (Current Accounts, Saving Accounts) ratio. Following are the CASA trends s for Bank of Baroda and HDFC Bank.

Figure 6
CASA Trend





As we can see that the CASA ratio for the HDFC Bank is much higher than that of Bank of Baroda as HDFC Bank has higher amount of deposits in savings and demand deposits than in the term deposits.

Capital Adequacy

Here, we have analyzed very relevant ratio for the banking sector, here, i.e. Capital Adequacy Ratio (CAR).

Table 8
Capital Adequacy Ratio

	Bank of Baroda		HDFC Bank	
	2006-2007	**2007-2008**	**2006-2007**	**2007-2008**
Tier 1	8.74%	7.63%	8.57%	10.30%
Tier 2	3.06%	5.28%	4.51%	3.30%
Total	11.80%	12.91%	13.08%	13.60%

Source: **Compiled and computed from Banks' Financial statements**

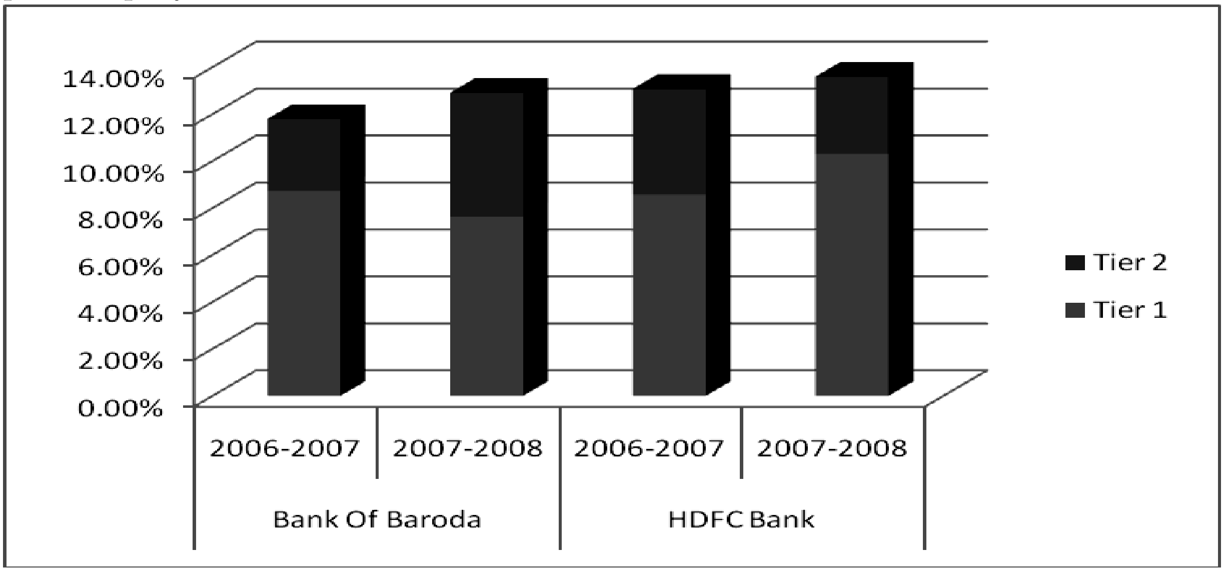
For Bank of Baroda

Capital Adequacy Ratio (CAR) as per Basel I stood at 12.91% & as per Basel II at 12.94%. During the year, the Bank strengthened its capital-base by raising Rs 2,703.62 crore through Tier –II bonds out of which Rs 1,203.62 crore were raised overseas. As per the Basel-II, Capital Adequacy Ratio works out to 12.94%.

For HDFC Bank

Bank's total Capital Adequacy Ratio (CAR) stood at a healthy 13.6%, well above the regulatory minimum of 9.0%. Of this, Tier I CAR was 10.3%.

Figure 7
Capital Adequacy trend



NPA (Non performing assets)

Howsoever, banks are efficient in their business operations, some NPAs are going to arise. A nonperforming asset (NPA) is a loan or an advance where interest and/ or installment of principal remain overdue for a period of more than 90 days in respect of a term loan, The margin of NPAs indicate future growth prospects. In this section, this said issue has been highlighted.

Table 9
NPAs picture (Rs. in cr.)

	Bank Of Baroda		HDFC Bank	
	2006-2007	**2007-2008**	**2006-2007**	**2007-2008**
Gross NPA	2092.14	1981.38	906.97	657.76
Provisions	991.45	894.22	608.45	454.87
Net NPA	501.67	493.55	298.52	202.89
Net NPAs to Net Advances (%)	0.6	0.47	0.47	0.43

Source: **Compiled and computed from Banks' Financial statements**

As evident above, the non performing assets have been going down for both Bank of Baroda and HDFC Bank

7. Relationship with market performance

Market is the ultimate determinant for publicly-held companies. In this section, correlation between return generation and market performance has been discussed. Return generated has been expressed as 'RONW' and 'Dividend Yield.'

Table 10

Market performance – HDFC Bank

Year	RONW	Market Price	ROMP
2002	20.81	236.6	3.61
2003	18.51	234.55	-0.87
2004	20.64	378.75	61.48
2005	18.46	573.64	51.46
2006	17.74	774.25	34.97
2007	19.46	954.15	23.24
2008	17.74	1,331.25	39.52

Source: **Complied and computed from Banks' Financial statements & BSE**

Return over Market Price = (Market Price of current year – Market price of last year)/ Market price of last year

The following result is found while doing the correlation analysis

	RONW	*ROMP*
RONW	1	
ROMP	0.143528	1

This shows that the relation between RONW and ROMP is not much, as RONW is not affecting the market price much.

Table 11

Market performance – Bank of Baroda

Year	RONW	Market Price	ROMP
2002	15.2	47.95	
2003	18.81	85.9	79.14
2004	20.32	242.7	182.54
2005	12.58	218.05	-10.16
2006	12.28	230.3	5.62
2007	12.45	215.4	-6.47
2008	14.58	283.9	31.80

Source: **Complied and computed from Banks' Financial statements & BSE**

The following result is found while doing the correlation analysis

	RONW	*ROMP*
RONW	1	
ROMP	0.943461	1

The correlation test shows that there is high correlation between ROMP and RONW.

6. CONCLUSION

It can be concluded that both the banks have performed more or less same on both income and expenditure front but the profitability of HDFC Bank has been slightly higher than Bank of Baroda. The CASA ratio for HDFC bank is much higher than that of Bank of Baroda as HDFC Bank has higher amount of deposits in savings and demand deposits than in the term deposits. Both have shown efficiency in managing their NPAs. Regarding market efficiency, which is the ultimate factor for any public company, HDFC Bank does not show much relationship between return generation and market price. But in case of Bank of Baroda, there is a high correlation between ROMP and RONW.

7. POLICY IMPLICATIONS: LESSONS FOR INDIAN BANKING SECTOR

The health of the banking sector is vital for the growth of an economy. The discussion in the preceding section showed that there is a wide gap in the key drivers for the soundness of the banking sector between two players, what to talk about two economies?. To increase the soundness of the banking sector, following strategies can be considered:

- Speeding up the electronic delivery systems in the financial sector;
- Streamlining the flow of information across all the stake-holders in the financial sector;
- Upgrading the legal architecture to meet the needs of the new economy;
- Strengthening the governance framework in the banking sector to stem out market failures and corruption; and
- Strategic linkages and partnerships within the banking sector to increase the soundness of the sector and to prevent market failures.

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CONSCIOUS CAPITALISM: LIBERATING THE HEROIC SPIRIT OF BUSINESS

By John Mackey, Rajendra S. Sisodia & Bill George
Source: Harvard Business Press Books

Publication date: Jan 15, 2013. Prod. #: 10845-HBK-ENG, 368 pages.

Conscious capitalism is not only a concept, it is an ideology strongly upheld, supported and nurtured in the form of a movement by both business practitioners as well as academic scholars. Highly obsessed with the core philosophy of promoting free trade practices with genuine concern for protecting stakeholder's interest, Mackey and Sisodia co-founded the Conscious Capitalism Movement to challenge business leaders to rethink why their organizations exist and to acknowledge their important roles in creating value for all of their stakeholders in the interdependent global marketplace. This new business paradigm holds the potential for enhancing corporate performance while also advancing the quality of life for billions of people. The book "Conscious Capitalism: Liberating the Heroic Spirit of Business" is a book to further substantiate the mission of Conscious Capitalism Inc., which is a non-profit organization.

Understanding of business in today's modern society says, "We believe that business is good because it creates value, it is ethical because it is based on voluntary exchange, it is noble because it can elevate our existence, and it is heroic because it lifts people out of poverty and creates prosperity. Free-enterprise capitalism is the most powerful system for social cooperation and human progress ever conceived. In this book, Whole Foods Market cofounder John Mackey and Conscious Capitalism, Inc. cofounder Raj Sisodia argue for the inherent good of both business and capitalism. Featuring some of today's best-known companies, they illustrate how these two forces can and do work most powerfully to create value for all stakeholders: including customers, employees, suppliers, investors, society, and the environment. These "Conscious Capitalism" companies include Whole Foods Market, Southwest Airlines, Costco, Google, Patagonia, The Container Store, UPS, and dozens of others. We know them; we buy their products or use their services. Now it's time to better understand how these organizations use four specific tenets--higher purpose, stakeholder integration, conscious leadership, and conscious culture and management--to build strong businesses and help advance capitalism further towards realizing its highest potential. As leaders of the Conscious Capitalism Movement, Mackey and Sisodia argue that aspiring leaders and business builders need to continue on this path of transformation--for the good of both business and society as a whole. At once a bold defense and reimagining of capitalism and a blueprint for a new system for doing business grounded in a more evolved ethical consciousness, this book provides a new lens for individuals and companies looking to build a more cooperative, humane, and positive future. For few very compelling reasons cited below:

- It is a book which not only advocates free enterprises with focus on profit but also encourage the readers to look into societal, cultural and environmental aspects of business decisions.
- One of the very few books co-authored by authorities from academia and industry, which offer a deep and systematic business insight from different perspectives.
- Provides a viewpoint where business is not seen simply as a mechanism to make money, but highlights the bigger purpose they serve by adding value to the lives of stakeholders.
- It shatters many myths usually held by young business students and entrepreneurs with small startups about the core purpose of business and gives them a more holistic viewpoint.
- It is full of practical examples on best practices picked from top American 'Fortune' companies like Whole Foods Market, Southwest Airlines, Costco, Google, Patagonia, The Container Store, UPS, and many more.

The old paradigm of maximizing profit and shareholder values as the sole purpose of business has created negative unintended consequences. Businesses and corporations are seen as greedy and evil. Business is seen as despoiling the environment and causing harm in the world. Business therefore has a very bad brand. The good news is that we can remove most the hostility toward business and capitalism if we change the way we think about it. Business needs to become holistic and integral with deeper more comprehensive purposes. Corporations must rethink why they exist. If business owners/entrepreneurs begin to view their business as a complex and evolving interdependent system and manage their business more consciously for the well-being of all their major stakeholders, while fulfilling their highest business purpose, then I believe that we would begin to see the hostility towards capitalism and business disappear.

In summation the book conveys how business is fundamentally a community of people working together to create value for other people, their customers, employees, investors, and the greater society. Business interacts within a harmony of interests. At the same time non-profit need to become economically sustainable and discover that money and profits are good, not evil, and necessary for them to fulfill their purposes. A holistic perspective is essential for non-profits. A new Conscious Capitalism paradigm will improve the effectiveness of each type of organization. But on a basic philosophical level, why try to "do well" in the world? Why isn't the pursuit of our own self-interest enough? Perhaps we need to look more closely again at what Adam Smith wrote. The Wealth of Nations was a tremendous achievement, but economists would also be well served to read Smith's other great book, The Theory of Moral Sentiments. There he explains that human nature is not just about self-interest. It also includes sympathy, empathy, friendship, love, and the desire for social approval. As motives for human behavior, these are at least as important as self-interest; for many people, they are more important.

When we are small children we are egocentric, concerned only about our own needs and desires. As we mature, we grow beyond this egocentrism and begin to care about others our families, friends, communities, and countries. Our capacity to love can expand even further, to loving people from different races, religions, and countries potentially to unlimited love for all people and even for other sentient creatures. This is our potential as human beings, to take joy in the flourishing of people and other living beings everywhere. Let us each realize our potential for deeper love and extend it out into the world – let us together create this new business paradigm of Conscious Capitalism.

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